# New Jersey Institute of Technology Digital Commons @ NJIT

Mechanical and Industrial Engineering Syllabi

NJIT Syllabi

Fall 2019

# EM 636-103: Project Management

Thomas Brodowski

Follow this and additional works at: https://digitalcommons.njit.edu/mie-syllabi

### **Recommended** Citation

Brodowski, Thomas, "EM 636-103: Project Management" (2019). *Mechanical and Industrial Engineering Syllabi*. 5. https://digitalcommons.njit.edu/mie-syllabi/5

This Syllabus is brought to you for free and open access by the NJIT Syllabi at Digital Commons @ NJIT. It has been accepted for inclusion in Mechanical and Industrial Engineering Syllabi by an authorized administrator of Digital Commons @ NJIT. For more information, please contact digitalcommons@njit.edu.

# New Jersey Institute of Technology

Project Management EM 636 – Section **103** (Fridays, 6:00PM – 9:00 PM) 2019 Fall Semester

Instructor: Professor Thomas Brodowski Email: <u>tab23@njit.edu</u> **Course Description:** Project Management (3 Credits)

Office hours – 5PM to 6PM prior to class session or after class

This course will utilize project management concepts and techniques for planning and controlling of resources to accomplish specific project goals. While the focus is on technically oriented projects, the principles discussed are applicable to the management of any project. Topics include scope of work, time, cost considerations, cash flow forecasting, financial and performance control, documentation, team concepts, project development/controls, communication and presentation skills.

# **Course Material:**

<u>Project Management - A Systems Approach to Planning, Scheduling, and Controlling</u> 11<sup>th</sup> or 12<sup>th</sup> Edition by Harold Kerzner, Ph.D.

#### Course Grading:

Total:	100 Points
Final Exam -Project CER/Presentation	30 Points
Term Paper	30 Points
Mid Term Exam	10 Points
Homework Assignments	20 Points
Class/Group Participation	10 Points
Class/Crown Dartisination	10 Dointo

# **Attendance Policy:**

Attendance will be taken for every class. Non-excused absences may result in a Class Participation grade adjustment.

#### **Computer Resources:**

Some knowledge of MS office (Word, Excel, Project, & PowerPoint). We will also gain an understanding of Microsoft Project and Visio. Internet access for utilization of Moodle and selected projects. Laptops are not required but use is recommended. We try to keep this course Green as possible.

#### **Homework Assignments:**

All assignments shall include the following information:

- 1. Course name (EM-636) and section number
- 2. Team name or number
- 3. Student names
- 4. Date
- 5. Assignment title

The assignments are to be stapled at the top left-hand corner before handing them in. **No cover folders. All meeting minutes and assignment should be turned in electronically.** 

# Course Schedule:

All reading assignments are to be completed prior to attending class for the week they are assigned. Homework assignments are due at the beginning of the class for which they are assigned.

#### Section 103 SCHEDULE

Class 1(Onsite) 09/06

**Class 2 (Onsite)** 09/13

Class 3 (Moodle / Team meeting) 09/20

Class 4 (Moodle / Team meeting) 09/27

Class 5(Onsite) 10/04

Class 6 (Moodle / Team meeting) 10/11

**Class 7 (Onsite)** 10/18

Class 8 (Moodle / Team meeting) 10/25

Class 9 (Onsite) 11/01

Class 10 (Moodle / Team meeting) 11/08

Class 11 (Onsite) 11/15

Class 12 (Onsite) 11/22

# 11/28 - 12/01

Class 13 12/06 (Moodle / Team meeting)

Class 14 (Onsite) 12/13 Presentations

#### **INTRODUCTION**

**Reading Assignment:** Chapter 1 & 6– Overview-Project Teams – Communication Management

**Reading Assignment:** Chapter 2 – Project Management Growth

Reading Assignment: Chapters 3 & 4 – Organizational Structures and Staffing Assignment #1 due

**Reading Assignment:** Chapters 5 – Management Functions

**Reading Assignment:** Chapter 21 - Modern Development and Project Office **Assignment #2 due** 

**Reading Assignment:** Chapter 11 – Planning

**Reading Assignment:** Chapter 11 – Planning (continued)

**Reading Assignment:** Chapters 12 – Network Scheduling Techniques and Critical Chain

Reading Assignment: Chapters 13, 14, 15 & 19 – Graphics & Estimating - Cost Control, Contracts & Procurement MID TERM EXAM

**Reading Assignment:** Chapter 16 – Trade-off Analysis

Reading Assignment: Chapters 7 & 8 – Conflicts and Special topics Assignment #3 due

**Reading Assignment:** Chapters 9 & 10 – Success and Working with Executives **Assignment #4 due** 

#### Thanksgiving Recess – No Class Scheduled

**Reading Assignment:** Chapters 17, 18 & 20 – Quality/Risk Management, Learning Curves & Projects Post Mortems

Term Paper due Final Exam - Project Presentations

# FINAL EXAM - GROUP PROJECT / PRESENTATION (30% of Final Grade)

Teams will be made up with five or more members and each student is responsible for full team participation and sharing all work equally!

The **Team Presentation** is graded on the CER submission and your individual performances when presenting to the class, the creativity shown by the group in what and how the concepts are presented, the understanding of the class concepts illustrated as shown in the presentation and your peers' analysis of your presentation. Each team must:

- Form and tell the class who is on the team and pick a team name.
- Agree on a project (see below) to present to the Capital approval board members (other teams)
- Report Team's status to the instructor periodically
- Give presentation during final exam period
- Provide feedback and questions to the group after presentation.

Teams choose their topic based on the experience, interests and knowledge of the group members.

The Team project will be to develop a capital expenditure request (CER) for a specific project of your choosing. You should consider the makeup of your group in selecting the type of project. Along with the CER, you will be required to present the project (on Power-point) to the instructor and class for review and approval.

#### Topics should be chosen as soon as possible.

Each Presentation should include an introduction that will explain the issue or problem your team chose to present and reflect an organized approach to the project. Creativity is very important and will make your experience more enjoyable. Have fun with this Team Project!

**TERM PAPER** (30% of Final Grade) - at least 8 type written pages, 1.5 spaced, 12pt, Times New Roman Note: Must be submitted in Microsoft word format & referenced properly.

Term paper topic will be handed out in class.