



Stevens Institute of Technology
Howe School of Technology Management
Syllabus

MGT 611: Project Analytics

General Information

Instructor Name & Contact Information:

Tal Ben-Zvi

Babbio Center - Office 629

tbenzvi@stevens.edu

Office Hours: By Appointment

Class Website: <http://moodle.stevens.edu>

Overview

This course is designed to deepen the student's ability to use various project management tools for planning, controlling and monitoring a project. DecisionTools, a set of instruments for risk analysis and decision making under uncertainty, and @RISK for Project, a simulation program for managing projects, are used throughout the course, allowing students to get familiar with industry tools for managing project risk. The course focuses on quantitative project management aspects of planning, monitoring and controlling projects.

Prerequisites: MGT609

Relationship of Course to Rest of Curriculum

This is a required course for students obtaining a Masters degree in Project Management.

Learning Goals

After taking this course, the student will be able to:

1. Build project portfolio selection models.
2. Identify and analyze project risks and develop contingency plans for those risks.
3. Analyze the impact of variability in project tasks and plans.

4. Choose the most appropriate resources to maintain the schedule and budget of a project.
5. Apply quantitative measures of project progress.

Pedagogy

The course will employ lectures, class discussion, individual assignments, and a final exam. The assignments will help the student learn to use various planning and monitoring tools that are used in project management.

Required Text(s)

DecisionTools Suite by Palisade (<http://www.palisade.com>)

@RISK for Project by Palisade (<http://www.palisade.com>)

Purchase both directly from <http://www.palisade.com/academic/order/SuiteRPJ/>

Lecture notes and assignments can be found at www.stevens.edu/moodle

Additional Readings

Winston, W.L., Albright, S.C. "Practical Management Science", South-Western College Pub.
The Basic Practice of Statistics. David S. Moore. New York: W. H. Freeman.

Assignments

Assignment	Grade Percent
Individual Assignments	30%
Project Assignment	20%
Final Exam	50%
Total Grade	100%

Late assignments will be downgraded by 10 points per day.

Ethical Conduct

The following statement is printed in the Stevens Graduate Catalog and applies to all students taking Stevens courses, on and off campus.

“Cheating during in-class tests or take-home examinations or homework is, of course, illegal and immoral. A Graduate Academic Evaluation Board exists to investigate academic improprieties, conduct hearings, and determine any necessary actions. The term ‘academic impropriety’ is meant to include, but is not limited to, cheating on homework, during in-class or take home examinations and plagiarism.”

Consequences of academic impropriety are severe, ranging from receiving an “F” in a course, to a warning from the Dean of the Graduate School, which becomes a part of the permanent student record, to expulsion.

Reference: The Graduate Student Handbook, Academic Year 2003-2004 Stevens Institute of Technology, page 10.

Consistent with the above statements, all homework exercises, tests and exams that are designated as individual assignments MUST contain the following signed statement before they can be accepted for grading:

I pledge on my honor that I have not given or received any unauthorized assistance on this assignment/examination. I further pledge that I have not copied any material from a book, article, the Internet or any other source except where I have expressly cited the source.

Signature _____ Date: _____

Please note that assignments in this class may be submitted to www.turnitin.com, a web-based anti-plagiarism system, for an evaluation of their originality.

Grading

Each deliverable will be typically graded on a scale from 0-100, with the following resolution:

Points	Grade
95-100	A
90-94	A-
85-89	B+
80-84	B
75-79	B-
70-74	C+
65-69	C
60-64	C-
55-59	D+
50-54	D
0-49	F

Course/Teacher Evaluation

Continuous improvement can only occur with feedback based on comprehensive and appropriate surveys. Your feedback is an important contributor to decisions to modify course content/pedagogy which is why we strive for 100% class participation in the survey.

All course teacher evaluations are conducted on-line. You will receive an e-mail one week prior to the end of the course informing you that the survey site (<https://www.stevens.edu/assess>) is open along with instructions for accessing the site. Login using your Campus Pipeline (email) 'CPIPE' username and password. This is the same username and password you use for WebCT. Simply click on the course that you wish to evaluate and enter the information. All responses are strictly anonymous. We especially encourage you to clarify your position on any of the questions and give explicit feedbacks on your overall evaluations in the section at the end of the formal survey which allows for written comments. We ask that you submit your survey prior to the last class.

Course Topics

- Review of basic concepts
- Decision tools
- Project selection: EMV, Precision Tree
- Portfolio optimization
- Schedule risk
- Cost risk
- Cost management: time/cost trade-off
- Simulation optimization
- Resource management: resource allocation, resource leveling