Op Mgt 550AB  
PROJECT MANAGEMENT  
Spring Quarter, 2018

Instructor:  Ted Klastorin  
Office:  551 Paccar Hall  
Office Hours:  MTWTh 12:30 – 1:30 pm  
And by appointment  
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Email:  tedk@u.washington.edu

Course Location & Schedule:  
Tuesday/Thursday  10:30 – 12:20 pm  
Paccar 293

Course textbook:  

Course Description:  
In recent years, there has been a rapidly increasing emphasis on project management concepts and expertise. Organizations increasingly recognize that introducing new products, processes, or programs in a timely and cost effective manner requires professional project management (PM). This is especially important given recent research indicating that companies that miss visible milestones (e.g., the announced introduction of a new product) are likely to suffer significant loss in market value for a considerable period following the delay. In addition, an increasing number of managers recognize that project management offers powerful tools to help them change and redirect an organization's strategic direction(s) and redefine core competencies.

This course examines the management of complex projects and methodologies that can help managers increase the likelihood of successfully completing these projects. Throughout the course, we will emphasize the two most important parts of a project manager’s job: (1) planning a project, and (2) managing project risk. Other topics will include project initiation and selection (and timing), requirements and scope planning, scheduling, budgeting, forming and managing project teams, and monitoring and control. In addition, we will discuss commercial PM software products, and the relationship between these products and the requirements of managing risky complex projects in today’s economic environment.

Course Prerequisites:  MBA core or equivalent.
**Course communication:** All course materials (e.g., problem sets, mid-quarter exam, Excel spreadsheets, powerpoint slides, and the textbook) will be available on Canvas. Please check the Canvas site frequently as I will post notes, comments, and updates on a regular basis. All assignments will be submitted via Canvas.

**Project Management Software**
All students enrolled in ISOM courses are eligible to access Microsoft’s “Imagine” site and download software from that site at no cost. You should receive an email from Bill Burrows indicating how to register and activate your account. Once your account is active, you will be able to download *Project 2013* and *Project 2016* as well as other Microsoft software.

In addition, we will be using numerous Excel spreadsheets throughout the course to illustrate the types of decisions and trade-offs that are faced by project managers. All Excel spreadsheets will be posted on Canvas.

**Problem Sets:** There will be three problem sets. Each problem set will be posted on Canvas. *Each problem set is to be completed and submitted individually.* No late problem sets will be accepted. Solutions to problem sets will be posted on Canvas following their due date.

**Case Studies:** Each study group should prepare a written analysis that responds to the discussion questions that accompany each case; this document must be submitted prior to the scheduled class discussion. While study groups will submit a single written analysis for this case, every class member is responsible for understanding the issues in the case and should be prepared to contribute to the class discussion.

**C. Columbus, Inc. Case Study:** The Columbus case study is the capstone project for this course. Each study team will prepare and present a proposal that responds to the RFP (Request for Proposal) described in the C. Columbus, Inc. case study posted on Canvas. In addition to an oral presentation to the project’s clients (the king and queen of Spain), each team should submit a written document with supporting details and analysis. Oral presentations will be strictly limited to a maximum of twelve (12) minutes. This case will be graded on several dimensions, including how well you integrate the course concepts into your analysis and proposal.

**Attendance:** If you miss a class, please let me know so that I can help you with any missed materials. Remember that you are responsible for everything discussed in class (whether mentioned in the text or not).

**Incompletes:** Incompletes will only be considered in highly unusual conditions (such as serious illness). Any request for an Incomplete must be stated in writing and submitted before the last day in class. The statement should include a statement of class progress and reasons why the Incomplete is being requested.
Mid-quarter Exam: The mid-quarter exam is an “out of class” experience. The exam is open book, open notes; it will be posted on Canvas on May 17; you will have 24 hours to complete the exam. No makeup exam will be given for any reason.

Final Average and Grade: Your course grade will be determined from performance on the mid-quarter exam, analyses of case studies, problem sets, and class participation (where quality--not quantity--counts). At the end of the course, I will ask you to confidentially rate the other members of your study group (to discourage the free rider problem); I will use these peer evaluations to adjust case study scores for individuals.

Your final grade will be based on the number of points you earn (from a maximum of 500 points as indicated in the following table).

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PMP Certification: This course satisfies the 35 hours of PM coursework that is required to take the PMP (Professional Project Manager) certification examination offered by PMI (Project Management Institute). You must also complete an application demonstrating your experience in the project management field. I will be happy to assist with your application and will briefly discuss PMI and the certification exam in class. (Disclaimer: This class is not a PMP preparation course…)
Op Mgt 550AB Course Outline (Revised)
Spring, 2018

Week 1

Tues, Mar 27  Intro to Project Management (PM).
Topics: Why course is important; definition of projects; success/failure metrics; program versus project management; PMI
Reading: K&M: Chapter 1
Reading: Dubner, Stephen. “Here’s Why All Your Projects Are Always Late—And What to Do About It” Freakonomics Radio Podcast (March 7, 2018)
http://freakonomics.com/podcast/project-management/

Thur, Mar 29  Project initiation and selection (1).
Topics: aligning project selection and organizational strategy; simple numerical metrics; risk adjusted discount rates; the need for options thinking
Reading: K&M: Chapter 2

Week 2

Tues, Apr 3  Project initiation and selection (2).
Topics: How to time project initiation; ranking/scoring methods for evaluating project proposals; project portfolios

Thurs, Apr 5  Defining a Project Plan
Topics: elements of a project plan; identifying project requirements; planning to manage risks; Agile PM
Reading: K&M: Chapter 3
Week 3
Tues, Apr 10  Defining the Project
Topics: Defining project costs; defining tasks and estimating task
durations and resource costs; work breakdown structures (WBS); Gantt
charts
Reading: K&M: Chapter 4
Assignment Due: Problem Set #1

Thurs, Apr 12  Scheduling a Deterministic Project (1)
Topics: precedence networks; CPM; slacks (floats) defined; CPM linear
programming model
Reading: K&M: Chapter 5

Week 4
Tues, Apr 17  Scheduling a Deterministic Project (2)
Scheduling to max NPV; MS Project demonstrated

Thurs, Apr 19  Optimizing Project Trade-offs
Topics: Project budgets and non-critical tasks; time-cost trade-off
concepts and models; IT project example
Reading: K&M: Chapter 6
Assignment Due: Problem Set #2

Week 5
Tues, Apr 24  Using Project Trade-offs as a Risk Mitigation Tool
Topics: Project planning under the threat of a disruptive event; Brook’s
Law in IT projects; Parallel versus sequential processing
Reading: Pryne, E. “Strike slows downtown construction projects”
Case Study Due: Applied Materials

Thurs, Apr 26  Planning Stochastic Projects (1)
Topics: Proactive versus reactive scheduling; Classic PERT model
defined; Monte-Carlo simulation; cycles in projects
Reading: K&M: Chapter 7
**Week 6**

**Tues, May 1**  
**Stochastic Projects (2)**  
Topics: Monte-Carlo simulation; cycles in projects and probabilistic branching; risk pooling

**Thurs, May 3**  
**Resource Management (1).**  
Topics: introduction to resource leveling and resource allocation; renewable resource allocation  
*Reading:* K&M: Chapter 8 (Managing Resources)  
*Assignment Due:* Problem Set #3

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**Week 7**

**Tues, May 8**  
**Resource Management (2)**  
Topics: Critical chain methodology introduced  
*Case Study Due:* AirShip Technologies

**Thurs, May 10**  
**Project Teams:** worker behavior and project performance; team size  
*Reading:* K&M: Chapter 9 (Project Teams)  

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**Week 8**

**Tues, May 15**  
**Assessing project progress**  
Topics: Earned value analysis; quality control  
*Reading:* K&M: Chapter 11

**Thurs, May 17**  
Mid-Quarter Exam
**Week 9**

**Tues, May 22**  Managing decentralized projects

Topics: Subcontracting parts of a project; contract types; defining an optimal contract

*Reading:* K&M: Chapter 10


**Thurs, May 24**  Guest speaker (TBA)

**Week 10**

**Tues, May 29**  Preparing and Presenting Project Proposals and Bids

*Case study due:* *Christopher Columbus, Inc.*

(in-class presentation required by all study groups)

**Thurs, May 31**  Managing multiple projects; maturity models

Topics: Columbus case completion; managing multiple projects; conclusion and review

*Reading:* K&M: Chapter 12