Op Mgt 550AB
PROJECT MANAGEMENT
Winter Quarter, 2015

Instructor: Ted Klastorin
Office: 551 Paccar Hall
Office Hours: Monday & Wednesday 12:30-1:30 pm
By appointment
Phone: (206) 543-1833
Email: tedk@u.washington.edu

Course Location & Schedule:
Monday/Wednesday 10:30 – 12:20 pm
Paccar 394

Required Text:

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 the tools that are available to assist managers with such projects. Some of the specific topics we will discuss include life cycle models (including those used by software engineers), project teams, project selection, organizational issues, scheduling and budgeting, project risk, 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. We will also discuss PMP certification requirements (PM certification from the Project Management Institute).

Course Prerequisites: Successful completion of MBA core courses (or equivalent), including statistics, quantitative methods, operations management, finance, marketing, and managerial accounting.
Course Website: Most of the materials (e.g., problem sets, most case studies, final exam, announcements) for this course will be posted on Canvas. Please check the Canvas site frequently as I will post notes and comments on a regular basis.

Project Management Software
A 60-day trial version of Microsoft Project Professional 2013 is available for free download at http://www.microsoft.com/en-us/evalcenter/evaluate-project-professional-2013. Microsoft Project 2010 is available in the Foster computer labs.

In addition, we will be using a number of 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 and Case Studies: There will be four problem sets and five case studies throughout the quarter (approximately one homework assignment per week).

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.

A written analysis for each case study should be prepared by each study group prior to class discussion; the written analysis for each case should respond to the study questions that accompany each case. While study groups will submit a single written analysis for each case study, every class member is responsible for understanding the issues in the case and should be prepared to contribute to the class discussion.

Assignment Submission: You can submit completed assignments (including the final exam) by hard copy or via Canvas (preferred).

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.

Final Exam: The final exam will be an “out-of-class” experience; it will be posed on Canvas on March 11 and will be due on Monday, March 16. No makeup exam will be given for any reason.

Final Average and Grade: Your course grade will be determined from performance on the final 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 intra-
group 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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<th>No. of Items</th>
<th>Max Points/Item</th>
<th>Max Total Points</th>
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|                      |              |                | 500              | 100.0%  |

**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.
Op Mgt 550 Course Outline

Week 1
Mon, Jan 5
Intro to Project Management (PM); defining projects; measuring success/failure; project life cycle; organizational design & project success/failure; project taxonomies

Reading: TDK: Chapter 1; Chapter 3 (pp 72-76)
Reading: Lindblom, Mike. “Stalled Bertha’s tunnel project 70% done? Seattle Times” (Dec 27, 2014)

Wed, Jan 7
Project initiation and selection; aligning project selection and organizational strategy; simple numerical metrics; risk adjusted discount rates

Reading: TDK; Chapter 2 (pp 23-41)

Week 2
Mon, Jan 12
Using real options to value projects; project portfolios; scoring and ranking methods; Analytic hierarchy procedure (AHP)

Reading: “Analytic Hierarchy Process (AHP)”

Wed, Jan 14
Project planning: work breakdown structures (WBS), estimating task durations; precedence networks; Gantt charts; Critical Path Method (CPM) defined

Reading: TDK: Chapter 2 (pp 41-54)
Assignment Due: Problem Set #1

Week 3
Mon, Jan 19
No Class: Martin Luther King holiday

Wed, Jan 21
Slacks (floats) defined; CPM linear programming model; budgeting

Reading: TDK: Chapter 4 (pp 83-97); Chapter 5 (pp 107-112)
Assignment Due: Problem Set #2
**Week 4**

**Mon, Jan 26**  
Managing cash flows to maximize project NPV; Task sequencing to maximize NPV; MS Project demonstrated  
*Reading*: TDK: Chapter 5 (pp 112-126)

**Wed, Jan 28**  
RFP (Request for Proposal) preparation; bid evaluation  
*Case due*: Christopher Columbus, Inc.  
(in-class presentation required by all study groups)

**Week 5**

**Mon, Feb 2**  
Optimizing time-cost-scope trade-offs to maximize expected profit; concurrent engineering

**Wed, Feb 4**  
Project learning & knowledge management; project definition; project compression and time-cost trade-offs  
*Reading*: TDK: Chapter 3  
*Case due*: Managing Knowledge and Learning at NASA and the Jet Propulsion Laboratory (JPL)

**Week 6**

**Mon, Feb 9**  
Task duration uncertainty and “Classic” PERT; Monte-Carlo simulation  
*Reading*: TDK: Chapter 6 (pp 135-149)

**Wed, Feb 11**  
New product development projects; cycles in networks; implications of uncertainty  
*Reading*: TDK: Chapter 6 (pp 149-156)  
*Assignment due*: Problem Set #3

**Week 7**

**Mon, Feb 16**  
*No Class*: Presidents’ Day holiday

**Wed, Feb 18**  
Risk management; PMO’s; flexibility and agility PM; van Allen case; contracts to manage risk  
*Reading*: TDK: Chapter 7  
*Reading*: Pryne, E. “Strike slows downtown construction projects”  
*Case due*: Hummingbird Project
**Week 8**

Mon, Feb 23  Resource management; Resource allocation and leveling  
*Reading:* TDK: Chapter 8 (pp 175-198)

Wed, Feb 25  Theory of constraints and critical chain; Line of balancing scheduling  
*Assignment due:* Problem Set #4

**Week 9**

Mon, Mar 2  Monitoring and controlling projects; Earned value analysis  
*Reading:* TDK: Chapter 9

Wed, Mar 4  Managing multiple projects  
*Reading:* TDK: Chapter 10  
*Case due:* Pete Moss Tax Accountant

**Week 10**

Mon, Mar 9  Guest speaker (TBA)

Wed, Mar 11  Managing new product development projects; PM maturity models; conclusion and review  
*Case due:* Applied Materials