# CS632 IT Project Management

## CS432 Introduction to IT Project Management

### Instructor: Pamela Campbell

### **Contact Information**

Office Location: Virtual Office

Office Hours: Wed, 1:00 to 4:00 pm EDT via telephone by appointment

Office Phone: 978-884-1157

E-Mail: pdc@bu.edu Pamela Campbell

### Biography

Pamela Campbell is a lecturer at Boston University. She has been working and teaching in the area of Project Management, Education, and software development for 20 years in organizations such as MITRE, Synetics, and BEA Systems, Inc. She holds a Masters degree from Bentley College in Computer Information Systems and has designed and implemented systems that include large databases.

One of her most rewarding assignments was to manage the project to upgrade the Amver system (amver.com). Amver, sponsored by the United States Coast Guard, is a unique, computer-based, and voluntary global ship reporting system used worldwide by search and rescue authorities to arrange for assistance to persons in distress at sea. Ms. Campbell has been teaching for Boston University for more than 10 years. She is currently the Director of Elder and Human Services for the town of Littleton, Massachusetts.

# IT Project Management

### **Course description**

This course provides students with a comprehensive overview of the principles, processes, and practices of software project management. Students learn techniques for planning, organizing, scheduling, and controlling software projects. There is substantial focus on software cost estimation and software risk management. Students will obtain practical project management skills and competencies related to the definition of a software project, establishment of project communications, managing project changes and managing distributed software teams and projects. We also focus on the Project Management Body of Knowledge (PMBOK) as a framework in this course. This is now a world-wide defacto standard for project management.

# Learning Goals and Objectives

Upon successful completion of this course, you will be able to:

- 1. Demonstrate knowledge of IT project management terms and techniques, such as:
  - The triple constraint of project management
  - The project management knowledge areas and process groups
  - The project life cycle
  - Tools and techniques of project management, such as:
    - Work breakdown structures
    - Network diagrams
    - Critical path analysis
    - Critical chain scheduling
  - Cost estimation and Risk Management
  - Earned Value Management (EVM)
  - Motivation theory and team building
  - Conflict Management
  - Project Quality Management
- 2. Understand advanced topics in the domain of software project management.
  - This course focuses on Software Cost Estimation and Software Risk Management
  - Project planning, organization and control both theory and practice
- 3. Apply project management concepts by working on a group project as an active team member.
  - Students will complete all parts of the Planning for a software Project
  - Students will produce a comprehensive software project management repository for the above project
  - Students will produce a quality research abstract paper to encourage original thinking in this field
  - Using skills developed in this and other computer science courses and previous work experience, students will develop an appreciation of the many skills required to do good systems analysis and design.
  - Students will create a Web-based site working in small teams in a collaborative manner. The purpose of the site is to inform end users about the software project for which the planning is being done. They are encouraged to apply the skills they are learning in the course to the construction of this site.
- 4. Team members will develop good documentation/technical writing skills, engage in virtual teamwork, and build virtual communication skills. They will develop good project management skills.

Note: (If you plan to become a certified Project Management Professional this comment applies to you.) This course counts to PMP educational requirements and the project produced counts towards experience.

# **Course Outline and Class Schedule**

See the Assignments posted on Blackboard for Homework and Reading Assignments. Dates for Virtual Classes are deadline dates for homework and assignments. Class sessions are 6 - 9 PM. All lectures are recorded and available for playback on the Echo site.

### 1. Sept 3 – Introduction to Project Management Face-to-Face Room FLR

- Assignments: no assignments due
- Reading: CH 1, Warburton and Kanabar (W&K)

### 2. Sept 10 – Project Charter, Scope and Milestones -

- Project group assignments are made
- 3. Sept 17 Work Breakdown Structure (WBS) -
- 4. Sept 24 -- Cost Estimation and Earned Value Management Face-to-Face Room FLR
  - Research Topics Approved
- 5. Oct 1 Networks and Critical Path VIRTUAL

6. Oct 8 – MIDTERM EXAM – **VIRTUAL** -- includes all readings, all classroom presentations and discussions

### 7. Oct 15 - Cost Management and Human Resource Management-

• Research Paragraph Due

### 8. Oct 22 – Project Communications Management Face-to-Face Room FLR

9. Oct 29 — Project Quality - VIRTUAL

### 10. Nov 5 – Risk Management

- 11. Nov 12 Procurement and Contracts -- Research Abstract Presentations Begin
  - Research Abstract Due (3 pages)

# 12. Nov 19 – Research Abstract Presentations End – Final Project Presentations Begin - Face-to-Face Room FLR

13. Dec 3 – Presentations End - Face-to-Face Room FLR

- Final Project Report due
- Peer Evaluations Due
- 14. Dec 10 FINAL EXAM covers all material in course VIRTUAL

### FLR – Fuller Building, 808 Comm Ave.

# ECHO site for course recordings:

https://echo360.bu.edu:8443/ess/portal/section/3981e311-48f9-495b-8c52-b49d296e36f6

# Differences between 632 and 432 Sections:

Regarding the difference between CS 432 andCS632: The Assignments for both section are the same, as the Assignments closely track the components which are required for successful IT Project Management. Distinctions are made in grading components of the course based on the section into which the student has been enrolled.

Research Abstract: It is expected that CS432 students may be less familiar with APA format requirements and with accessing rigorous sources. They may also exhibit a lower level of organizational skill and be less cogent in developing argument support and conclusions. These factors are all considered when assigning a grade on the Research Abstract Paper. Allowance is also made for the lesser experience of CS432 students as may be reflected during the Research Abstract Presentation.

Midterm and Final Tests: on the Essay questions and Short Answer questions, consideration will be provided to theCS 432 students on the scoring by applying a less stringent standard for the articulateness of responses and the general level of content. It is recognized that undergraduate students may not have the life-experience of graduate students on which to draw for responses

Final Project: Allowances are made for the lesser experience of CS432 students on their presentations and in the peer reviews.

# Course Resources



### **Required Texts**

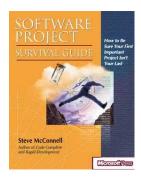
The Art and Science of Project Management 2<sup>nd</sup> Edition

Warburton, Roger & Kanabar, Vijay

Publisher: RW-Press; (2013) ISBN: 9780983178842

Paperback:

### Available through Dreamspark link



Software Project Survival Guide and is available as free download to Boston University MET students via a download MELL e-learning library from Dreamspark (formerly MSDNAA). If you don't have access to it please click the following URL and request access: <u>http://msdn04.e-academy.com/bu\_mccs/index.cfm?loc=main</u>

Microsoft Project (2007or 2010) Available from Dreamspark.

**Reference:** Students are encouraged to acquire the Project Management Institute's Project Management Book of Knowledge (PMBOK). If you become a member of PMI you will have electronic access to the completed PMBOK 5th edition. If you are a full-time student you pay a member ship fee of only \$32 to obtain the reduced price membership.

### **Grading Structure**

All students will be expected to demonstrate knowledge of IT Project Management and relevant techniques. To obtain an exceptional grade you have to exceed expectations in your projects and weekly assignments.

### **Grading Structure and Distribution**

The course consists of homework, a midterm, a 3-page research abstract paper, a final exam and a final (group) project, weighted as follows:

#### Homework, Quizzes, and Class Participation: 25%

Homework includes all assignments, group and individual. Participation in on-line discussions is expected. Students are expected to attend face-to-face sessions and to participate in discussions and exercises.

#### **Research Abstract + Midterm: 25%**

The Research Abstract has three deliverables: Topic Selection (must be approved by the Instructor), the Research Paragraph + References-to-date, and the final 3-page Abstract paper. The Midterm is open book and will include short-answer questions and calculations.

### Project: 25%

Project will be in 2 phases: Planning Phase Deliverables and Final. The project will be a team assignment.

Final Exam:25%The final exam will be an open book exam consisting of essay questions and<br/>calculations.

### **Expectations**

Homework assignments will be assigned each week and are expected to be submitted at the deadline.

Participation in discussions is expected to be substantive – you should be contributing to the knowledge. Quality is more important than quantity.

The Peer Evaluation provides input into your participation in your Group. Group members who do not contribute to the work of the group will find their grade decreased.

### Midterm Exam

The Midterm Exam includes all readings, all classroom presentations and discussions. It will consist of multiple-choice and true/false questions. You may be asked to provide bullet points to illustrate your answers to some questions. Bring a calculator.

### **Research Abstract**

This is a graduate course and since almost all of you are experienced IT practitioners you are expected to produce a quality research abstract on a topic approved by your Instructor. This course is demanding, so a complete research paper is not required, only a 3 page abstract summarizing the topic.

The Abstract is to be completed using the APA writing style and guidelines for citations and references. The student style guide can be downloaded from the American Psychological Association website or the guide can be purchased from the book store. Points will be deducted for style deviations. The latest version of Microsoft Word has APA formatting built in.

**Your topic must be approved by your instructor.** You are required to submit a topic for the abstract by Session 4, a paragraph+ references to date by Session 7 and the complete 3 page abstract by Session 11.

Your topic is to be **approved by your instructor** and these should be real **RESEARCH PAPERS**. Work that you use from other authors MUST be referenced. Since it is assumed that you know little about the topic that you are writing on, it is expected that your papers contain information from many different sources. These must be attributed to the author using the American Psychological Association citation and reference format. This is *your* paper and not the cut and paste if someone else's work.

The Internet has led to a false sense of what research is all about. Those new to research tend to think that it means spending an afternoon surfing the Internet and then cutting and pasting from material available. Wikipedia is a fine first step, but is not to be quoted as a research-quality source. Keep in mind the Internet is:

- 1. Not quality oriented.
- 2. The Internet has both good stuff and bad stuff, but does not know the difference.
- 3. I expect to see materials from a wide variety of sources, attributed as to source

The paper is due in three parts. First the *topic* must be approved by the instructor; second a *paragraph* is due summarizing the abstract + references-to-date; third is the *3-page abstract*, with references.

### **Final Project**

There is a major group Final Project due in the next to last class that will require the use of Microsoft Project. Students will be required to demonstrate their understanding of the key features of project management, as well as the practical application of MS Project. Deliverables on this Final Project will be due periodically throughout the course. A Final Project Report and PowerPoint presentation will be presented by each group at the end of the course.

The Final Project Report (see detailed separate Deliverables list) will be delivered as a hardcopy, with the exception of the MS Project portions. There is also a slide presentation that will be made to the class. This is a group project. Each student will also submit a Peer Review that evaluates the participation of other members of their group.

### **Final Exam**

This exam will be two hours in length and will cover material from the entire course.

The final exam will consist of multiple-choice and true/false questions. The type and nature of questions in the final exam will be similar to the Midterm Exam. You may be asked to provide bullet points to illustrate your answers to some questions. Bring a calculator.

### **Deadline Expectations**

Due dates must be respected for assignments. It is unfair to other students to allow extensions for some. Issues that interfere with coursework such as work travel, home demands and vacations can all be anticipated. These pressures face everyone and are

not sufficient reason for extensions to be offered. Extensions can only be granted under truly extenuating circumstances.

### **Grading Standards**

Grade inflation is not in the best interests of BU students or the reputation of the institution. I have a responsibility to differentiate the performance of my students, and to reward with high grades only those who do exceptionally well. A Grade of 'A' or 'A minus' will be limited only to those students truly distinguishing themselves in the course. The Academic Policy Committee of Metropolitan College recommends the following guidelines for distinguishing grades.

A, A-	20%
B+, B, B-	80%
Other	As merited

### While there are strict policies for grades at MET, I do NOT impose a grading curve.

You can expect to be challenged in this course, and excellent, high-quality work will be rewarded with an 'A'. If everyone submits high quality work, then everyone will get an 'A'. An 'A' grade requires high quality excellence in <u>all</u> aspects of the course: homework, discussions, final project and exams.

### **Timely Presentation of Materials Due**

All assignments (papers, homework, etc.) have due dates. These are the LAST DATES that stated material is due. I maintain the right to refuse, or downgrade, any materials presented after due dates. **This is not a subject for discussion**.

Organize your time and work to turn in the paper before the due date. To be absolutely clear, this means that the final paper will be accepted anytime up to that date but not after. Set a time schedule that has the work for the paper built around your personal needs and schedule a "hand in time" well before the last minute. This way, should some unforeseen problem arise, the timely presentation of your paper and its usefulness to the project is not in jeopardy.

### **Requests For Make-Up Examinations**

The General position is that make up exams are not given.

There is no guarantee that a make-up would be permitted, and any request needs to be in writing and a written verification of the incident will be expected. I recognize that infrequently unfortunate situations do occur that make fulfilling requirements impossible and, as such, I review requests for make-up exams on a case-by-case basis.

I hope that you will appreciate that I do not do this to penalize any individual student but to attempt to assure that there is a level playing field and the total class feels confident that no one has an advantage.

### Delays

If, for any reason, you are unable to meet any assignment deadline, contact me immediately, and preferably in advance. All assignments must be completed to receive full credit for the course.

### 6. Academic Conduct Policy

The academic conduct policy is summarized below. For the full text of the academic conduct code, please go to:

http://www.bu.edu/met/metropolitan\_college\_people/student/resources/conduct/code.html

# Academy Conduct Policy

For the full text of the academic conduct code, please go to <u>http://www.bu.edu/met/metropolitan\_college\_people/student/resources/conduct/co</u> <u>de.html</u>

### A Definition of Plagiarism

"The academic counterpart of the bank embezzler and of the manufacturer who mislabels products is the plagiarist: the student or scholar who leads readers to believe that what they are reading is the original work of the writer when it is not. If it could be assumed that the distinction between plagiarism and honest use of sources is perfectly clear in everyone's mind, there would be no need for the explanation that follows; merely the warning with which this definition concludes would be enough. But it is apparent that sometimes people of goodwill draw the suspicion of guilt upon themselves (and, indeed, are guilty) simply because they are not aware of the illegitimacy of certain kinds of "borrowing" and of the procedures for correct identification of materials other than those gained through independent research and reflection."

"The spectrum is a wide one. At one end there is a word-for-word copying of another's writing without enclosing the copied passage in quotation marks and identifying it in a footnote, both of which are necessary. (This includes, of course, the copying of all or any part of another student's paper.) It hardly seems possible that anyone of college age or more could do that without clear intent to deceive. At the other end there is the almost casual slipping in of a particularly apt term which one has come across in reading and which so aptly expresses one's opinion that one is tempted to make it personal property.

Between these poles there are degrees and degrees, but they may be roughly placed in two groups. Close to outright and blatant deceit-but more the result, perhaps, of laziness than of bad intent-is the patching together of random jottings made in the course of reading, generally without careful identification of their source, and then woven into the text, so that the result is a mosaic of other people's ideas and words, the writer's sole contribution being the cement to hold the pieces together. Indicative of more effort and, for that reason, somewhat closer to honest, though still dishonest, is the paraphrase, and abbreviated (and often skillfully prepared) restatement of someone else's analysis or conclusion, without acknowledgment that another person's text has been the basis for the recapitulation."

{The two paragraphs above are from H. Martin and R. Ohmann, The Logic and Rhetoric of Exposition, Revised Edition. Copyright 1963, Holt, Rinehart & Winston.