



NORTHWESTERN
UNIVERSITY

SCHOOL OF CONTINUING STUDIES

PREDICT 475: Project Management Syllabus

WINTER 2014

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Office Hours: One evening per week, varies, see syllabus, and by appointment.

Course Description

This course introduces best practices in project management, with a focus on globally accepted standards and the full project life cycle. It reviews traditional methods, including: scope definition, estimating and scheduling, precedence diagramming, risk management, Delphi method, critical path analysis, project evaluation and review technique, portfolio and risk analysis, earned value analysis, control charts and Gantt charts, and indices of project cost and schedule performance. It shows how the project management maturity model, team development, and principles of negotiation apply to organizations of various types: hierarchical and matrix organizations, international teams, and virtual teams. Using methods and models from this course, predictive analytics managers should experience greater project definition and structure and be able to execute shorten project completion times.

Text

Larson, E. W., & Gray, C. F. (18 Oct 2013). *Project management: The managerial process with MS Project* (6th ed.). McGraw-Hill Higher Education.

[ISBN-13: 978-1259186400]

Software

We have a lot of MS Project (2010) exercises and tutorials every Session, all of which are optional. Participation will be considered as extra credit in the event of a border line Final Grade. I have two different approaches to learn the tool, one high level and then one pretty detailed. Both are comprehensive. Trial versions of the software are available from a number of sources.

Prerequisites

None.

Learning Goals

The goals of this course are to:

- Produce a complete project proposal.
- Understand considerations in organizational design for successful PM
- Chartering a Project using the Integrative approach
- Identify defining constraints of a project.
- Write a project scope statement and work breakdown structure (WBS).
- Produce a comprehensible, achievable estimate
- Develop a risk management plan.
- Schedule interdependent activities
- Establish project timelines, project resources, and costs.
- Develop a project plan.
- Develop project progress and performance measures.
- Explain factors involved in leading a successful project team.
- Design a project closure procedure.

Evaluation

The student's final grade will be determined as follows:

- 9 session assignments (100 pts. each/900 pts. total)
- 10 session discussion boards/participation (100 pts. each/1,000 pts. total)

- Final Project Plan (500 pts.)
 - Final Exam (600 pts.)
- Total Points: 3,000 pts.**

Grading Scale

A = 93%–100%
A- = 90%–92%
B+ = 87%–89%
B = 83%–86%
B- = 80%–82%
C+ = 77%–79%
C = 73%–76%
C- = 70%–72%
F = 0%–69%

Discussion Board Etiquette

The purpose of the discussion boards is to allow students to freely exchange ideas. It is imperative to remain respectful of all viewpoints and positions and, when necessary, agree to respectfully disagree. While active and frequent participation is encouraged, cluttering a discussion board with inappropriate, irrelevant, or insignificant material will not earn additional points and may result in receiving less than full credit. Frequency is not unimportant, but content and the quality of the message is paramount. Please remember to cite all sources—when relevant—in order to avoid plagiarism.

Proctored Assessment

There is a proctored assessment requirement in this course. For additional information, please go to the Assignments section in Blackboard and scroll to the Proctored Exam Approval Application item.

Attendance

This course will not meet at a particular time each week. All course goals, session learning objectives, and assessments are supported through classroom elements that can be accessed at any time. To measure class participation (or attendance), your participation in threaded discussion boards is required, graded, and paramount to your success in this class. Please note that any scheduled synchronous or “live” meetings are considered supplemental and optional. While your attendance is highly encouraged, it is not required and you will not be graded on your attendance or participation.

Late Work

Assignments will be accepted after the published due date only with the instructor’s prior permission. If the late assignment is submitted within the first week after the due date, the grade will be reduced by one letter grade. If the assignment is submitted within the second week after the due date, the grade will be reduced by two letter grades. **Late assignments will not be accepted after two full weeks have passed since the original due date and will receive a grade of zero.**

Learning Groups

Learning groups are available and encouraged to be used in this course. More information about learning groups is available via the Blackboard course site.

Technology

Virtual online learning is inherently a technology-rich environment. Understanding that much technology is not in our (your) control, everyone is strongly encouraged to have redundancy built into your personal technology back-up plan. Technology is not an acceptable reason to be late. Connectivity, telephony, file backups, etc are the responsibility of the student. NU systems/software challenges (yes, they will occur) will be accommodated as they are encountered.

That being said, things happen. If I am more than 15 minutes late for a scheduled commitment, we will reschedule to a mutually convenient alternative time and adjust accordingly.

Academic Integrity at Northwestern

Students are required to comply with University regulations regarding academic integrity. If you are in doubt about what constitutes academic dishonesty, speak with your instructor or graduate coordinator before the assignment is due and/or examine the University Web site. Academic dishonesty includes, but is not limited to,

cheating on an exam, obtaining an unfair advantage, and plagiarism (e.g., using material from readings without citing or copying another student's paper). Failure to maintain academic integrity will result in a grade sanction, possibly as severe as failing and being required to retake the course, and could lead to a suspension or expulsion from the program. Further penalties may apply. For more information, visit www.scs.northwestern.edu/student/issues/academic_integrity.cfm.

Plagiarism is one form of academic dishonesty. Students can familiarize themselves with the definition and examples of plagiarism, by visiting www.northwestern.edu/uacc/plagiar.html. A myriad of other sources can be found online.

Assignments in this course are required to be submitted through SafeAssign, a plagiarism detection and education tool. You can find an explanation of the tool at <http://wiki.safeassign.com/display/SAFE/How+Does+SafeAssign+Work>. In brief, SafeAssign compares the submitted assignment to millions of documents in large databases. It then generates a report showing the extent to which text within a paper is similar to pre-existing sources. The user can see how or whether the flagged text is appropriately cited. SafeAssign also returns a percentage score, indicating the percentage of the submitted paper that is similar or identical to pre-existing sources. High scores are not necessarily bad, nor do they necessarily indicate plagiarism, since the score does not take into account how or whether material is cited. If a paper consisted of one long quote that was cited appropriately, it would score 100%. This would not be plagiarism, due to the appropriate citation. However, submitting one long quote would probably be a poor paper. Low scores are not necessarily good, nor do they necessarily indicate a lack of plagiarism. If a 50-page paper contained all original material, except for one short quote that was not cited, it might score around 1%. But, not citing a quotation is still plagiarism.

SafeAssign includes an option in which the student can submit a paper and see the resultant report before submitting a final copy to the instructor. This ideally will help students better understand and avoid plagiarism.

Other Processes and Policies

Please refer to your SCS student handbook at www.scs.northwestern.edu/grad/information/handbook.cfm for additional course and program processes and policies.

Course Schedule

Important Note: Changes may occur to the syllabus at the instructor's discretion. When changes are made, students will be notified via an Announcement in Blackboard.

Session 1

Learning Objectives *

After this session, the student will be able to:

- To explain why project management is crucial in today's world
- To define a project and differentiate projects from routine operations
- To establish the importance of projects in implementing organization strategy
- To establish that managing projects is an act of balancing the technical and sociocultural sides of the project.
- To identify the significant role projects contribute to the strategic direction of the organization
- To stress the importance of establishing project priorities and top management support
- To describe the linkages of strategies and projects
- To write a set of hierarchical objectives for an organization
- To describe a scheme for prioritizing projects that ensures top management involvement and minimizes conflicts
- To apply an objective priority system to project selection.
- To recognize that today's world may require a shorter range strategic plan and scenario planning is necessary.
- To be able to identify different types of project management structures
- To understand the strengths and weaknesses of different project management structures
- To appreciate the significance that organizational culture plays in managing projects
- To be able to interpret the culture of an organization
- To understand the interaction between project management structure and the culture of an organization.

Course Content

Textbook Reading

Larson & Gray, Chapters 1, 2, and 3

Discussion Board

Each session you are required to participate in the session-specific discussion board forum. Your participation in both posting and responding to other students' comments is graded. For this session's discussion topic(s), visit the discussion board in Blackboard.

Assignments

Course Project Proposal is due Sunday, January 12, 2014 at 11:59p CST. For more information, click Assignments on the left navigation panel in Blackboard, and scroll to this assignment's item.

Sync Session/Office Hours

Sync Session: Each of Tuesday, Wednesday and Thursday evening January 7-9, 2014 (7p CST – however long it takes, usually about an hour, central time). You are encouraged to join the earliest Session you can. We need to accomplish a full week of progress in this first week of the term.

Office Hours: Each of Tuesday, Wednesday and Thursday evening January 7-9, 2014 (upon completion of the Sync Session – 9:30p CST, as required, central time).

* Larson & Gray *Project Management: The Managerial Process*, 6th Ed., McGraw-Hill, 2014

Session 2

Learning Objectives *

After this session, the student will be able to:

- To recognize the importance of a complete scope statement acceptable to your customer as a condition for project success
- To layout guidelines for creating a WBS for a project
- To demonstrate the importance of WBS to the management of projects and how it serves as a database for planning and control
- To demonstrate how the OBS establishes accountability to organizational units
- To apply a WBS to a case or suggested project
- To recognize the process for setting up a communication plan.
- To understand the utility of the Stakeholder Register.

Course Content

Textbook Reading

Larson & Gray, Chapter 4

Discussion Board

Each session you are required to participate in the session-specific discussion board forum. Your participation in both posting and responding to other students' comments is graded. For this session's discussion topic(s), visit the discussion board in Blackboard.

Assignments

Project Scope Statement, Priority Matrix, Communication Plan and Stakeholder Register is due Sunday, 19 January, 2014 at 11:59p CST. For more information, click Assignments on the left navigation panel in Blackboard, and scroll to this assignment's item.

Sync Session/Office Hours

Sync Session: none scheduled – available on request

Office Hours: Wednesday, 15 January, 2014 (7-9:30p CST).

* Larson & Gray *Project Management: The Managerial Process*, 6th Ed., McGraw-Hill, 2014 (except Stakeholder)

Session 3

Learning Objectives *

After this session, the student will be able to:

- To understand estimating project times and costs are the foundation for project planning and control
- To have an awareness of the methods, uses, and advantages and disadvantages of top-down and bottom-up estimating methods
- Be able to suggest estimating guidelines for time, cost, and resources
- To suggest a scheme for developing an estimating database for future projects.

Course Content

Textbook Reading

Larson & Gray, Chapter 5

Multimedia

Estimation

Variation in Task Duration and Six Methods for Estimating Task Duration

Resource Loading vs. Task Duration

Discussion Board

Each session you are required to participate in the session-specific discussion board forum. Your participation in both posting and responding to other students' comments is graded. For this session's discussion topic(s), visit the discussion board in Blackboard.

Assignments

Work Breakdown Structure (WBS) is due Sunday, 26 January, 2014 at 11:59p CST. For more information, click Assignments on the left navigation panel in Blackboard, and scroll to this assignment's item.

Sync Session/Office Hours

Sync Session: none scheduled – available on request

Office Hours: Thursday, 23 January, 2014 (7 - 9:30p CST).

* Larson & Gray *Project Management: The Managerial Process*, 6th Ed., McGraw-Hill, 2014

Session 4

Learning Objectives *

After this session, the student will be able to:

- To establish the linkage between the WBS and the project network
- To diagram a project network using AON methods
- To provide a process for computing early, late, and slack activity times and identify the critical path
- To demonstrate understanding and application of “lags” in compressing projects or constraining the start or finish of an activity
- To provide an overview framework for estimating times and costs
- To suggest the importance of slack in scheduling projects.

Course Content

Textbook Reading

Larson & Gray, Chapter 6

Discussion Board

Each session you are required to participate in the session-specific discussion board forum. Your participation in both posting and responding to other students' comments is graded. For this session's discussion topic(s), visit the discussion board in Blackboard.

Assignments

Arrow-on-Node Network Diagram is due Sunday, 2 February, 2014 at 11:59p CST. For more information, click Assignments on the left navigation panel in Blackboard, and scroll to this assignment's item.

Sync Session/Office Hours

Sync Session: none scheduled – available on request

Office Hours: Tuesday, 28 January, 2014 (7– 9:30p CST).

* Larson & Gray *Project Management: The Managerial Process*, 6th Ed., McGraw-Hill, 2014

Session 5

Learning Objectives *

After this session, the student will be able to:

- To describe the risk management process
- To identify different kinds of risks
- To illustrate approaches for risk identification, analysis, and assessment
- To suggest approaches for responding to project risks and opportunities
- To propose the use of contingency reserves to cover risk events
- To recognize the need for a change control process/system for any size project.

Course Content

Textbook Reading

Larson & Gray, Chapter 7

Online Reading

Kerdon, *10 golden rules of project management*

Kutsch, *Deliberate ignorance in project risk management*

Discussion Board

Each session you are required to participate in the session-specific discussion board forum. Your participation in both posting and responding to other students' comments is graded. For this session's discussion topic(s), visit the discussion board in Blackboard.

Assignments

Project Risk is due Sunday, 9 February, 2014 at 11:59p CST. For more information, click Assignments on the left navigation panel in Blackboard, and scroll to this assignment's item.

Sync Session/Office Hours

Sync Session: none scheduled – available on request

Office Hours: Wednesday, 5 February, 2014 (7– 9:30p CST).

* Larson & Gray *Project Management: The Managerial Process*, 6th Ed., McGraw-Hill, 2014

Session 6

Learning Objectives *

After this session, the student will be able to:

- To contrast the differences between time and resource constrained projects
- To explain the implications for managing time and resource constrained projects
- To demonstrate an understanding of one heuristic method for scheduling resource constrained projects
- To explain the potential for hidden critical paths
- To introduce multiproject resource scheduling
- To demonstrate the ability to create a project cost baseline
- To explain how costs are translated from an estimate to a time-phase baseline.
- To understand how to use the critical path to reduce project duration
- To explain alternative methods for crashing activities
- To explain the risks associated with compressing or crashing a project
- To recognize when a project manager should try for the optimum cost-duration.

Course Content

Textbook Reading

Larson & Gray, Chapters 8 and 9

Discussion Board

Each session you are required to participate in the session-specific discussion board forum. Your participation in both posting and responding to other students' comments is graded. For this session's discussion topic(s), visit the discussion board in Blackboard.

Assignments

Project Resource loaded, leveled baselines and schedule manipulation techniques is due Sunday, 16 February, 2014 at 11:59p CST. For more information, click Assignments on the left navigation panel in Blackboard, and scroll to this assignment's item.

Sync Session/Office Hours

Sync Session: none scheduled – available on request

Office Hours: Thursday, 13 February, 2014 (7.– 9:30p CST).

* Larson & Gray *Project Management: The Managerial Process*, 6th Ed., McGraw-Hill, 2014

Session 7

Learning Objectives *

After this session, the student will be able to:

- To create an awareness of the network of relationships that need to be managed to be a successful project manager
- To identify the “currencies” a project manager can use to influence others
- To encourage students to engage in MBWA
- To highlight the importance of maintaining positive relationships with project sponsors
- To understand and discuss the importance of building trust for project success
- To identify some of the qualities of an effective project manager.
- To identify key characteristics of a high-performance project team
- To appreciate the impact situational factors have on project team development
- To develop strategies for developing a high-performance project team
- To build skills that encourage functional conflict and discourage dysfunctional conflict
- To understand the challenges of managing virtual project teams
- To recognize the importance of the project manager’s behavior in shaping how a team performs.
- To identify factors typically considered in selecting a foreign location for a project
- To heighten an awareness that best practices in the US may not be best practices in a foreign environment
- To prepare students psychologically for the likelihood that they will work in a foreign environment as the economy becomes more globally integrated.
- To provide students with strategies for effectively working overseas.

Course Content

Textbook Reading

Larson & Gray, Chapters 10, 11, and 15

Online Reading

Heathfield, *Managing millennials: Eleven tips for managing millennials*

The Wall Street Journal, *How to manage different generations*

Siebart, *How to manage virtual teams*

Discussion Board

Each session you are required to participate in the session-specific discussion board forum. Your participation in both posting and responding to other students’ comments is graded. For this session’s discussion topic(s), visit the discussion board in Blackboard.

Assignments

Learning from Mistakes is due Sunday, 23 February, 2014 at 11:59p CST. For more information, click Assignments on the left navigation panel in Blackboard, and scroll to this assignment’s item.

Sync Session/Office Hours

Sync Session: none scheduled – available on request

Office Hours: Tuesday, 18 February, 2014 (7–9:30p CST).

* Larson & Gray *Project Management: The Managerial Process*, 6th Ed., McGraw-Hill, 2014

Session 8

Learning Objectives*

After this session, the student will be able to:

- To understand how organizations track project performance
- To understand and appreciate the significance of earned value
- To be able to calculate and interpret different project performance indexes
- To be able to develop a project reporting system that will ensure project control and progress
- To demonstrate how a project rollup can pinpoint problems in two dimensions.

Course Content

Textbook Reading

Larson & Gray, Chapter 13

Discussion Board

Each session you are required to participate in the session-specific discussion board forum. Your participation in both posting and responding to other students' comments is graded. For this session's discussion topic(s), visit the discussion board in Blackboard.

Assignments

Earned Value Analysis (EVA) is due Sunday, 2 March, 2014 at 11:59p CST. For more information, click Assignments on the left navigation panel in Blackboard, and scroll to this assignment's item.

Sync Session/Office Hours

Sync Session: none scheduled – available on request

Office Hours: Wednesday, 26 February, 2014 (7– 9:30p CST).

* Larson & Gray *Project Management: The Managerial Process*, 6th Ed., McGraw-Hill, 2014

Session 9

Learning Objectives *

After this session, the student will be able to:

- To appreciate the importance of engaging in project reviews
- To identify the major elements of a project review
- To understand key issues surrounding project closure
- To provide useful advice for conducting performance reviews of project members.
- To develop an appreciation for the value of lessons learned
- To provide a primer of retrospective methodology
- To understand the operational environment in which you execute your project
- To understand the need and role of oversight in managing projects

Course Content

Textbook Reading

Larson & Gray, Chapters 14 and 16

Online Reading

Ibbs, *Assessing project management maturity*

Pennypacker, *Project management maturity: An industry benchmark*

Discussion Board

Each session you are required to participate in the session-specific discussion board forum. Your participation in both posting and responding to other students' comments is graded. For this session's discussion topic(s), visit the discussion board in Blackboard.

Assignments

Recommendations are due Sunday, 9 March, 2014 at 11:59p CST. For more information, click Assignments on the left navigation panel in Blackboard, and scroll to this assignment's item.

Sync Session/Office Hours

Sync Session: none scheduled – available on request

Office Hours: Thursday, 6 March 2014 (7–9:30p CST).

* Larson & Gray *Project Management: The Managerial Process*, 6th Ed., McGraw-Hill, 2014

Session 10

Learning Objectives

After this session, the student will be able to:

- No new learning objectives will be introduced in this Session.

Course Content

None.

Discussion Board

Each session you are required to participate in the session-specific discussion board forum. Your participation in both posting and responding to other students' comments is graded. For this session's discussion topic(s), visit the discussion board in Blackboard.

Assignments

Putting it All Together: Project Plan Course is due Sunday, 16 March, 2014 at 11:55 p.m. (central time). For more information, click Assignments on the left navigation panel in Blackboard, and scroll to this assignment's item.

Final Proctored Exam is due Sunday, 16 March, 2014 at 11:59p CST. For more information, click Assignments on the left navigation panel in Blackboard, and scroll to this assignment's item.

Sync Session/Office Hours

Sync Session: none scheduled – available on request

Office Hours: Tuesday, 11 March, 2014 (7.– 9:30p CST).