

ITT Technical Institute
PM4620
Project Risk Management
Onsite Course

SYLLABUS

Credit hours: 4.5

Contact/Instructional hours: 45 (45 Theory Hours)

Prerequisite(s) and/or Corequisite(s):

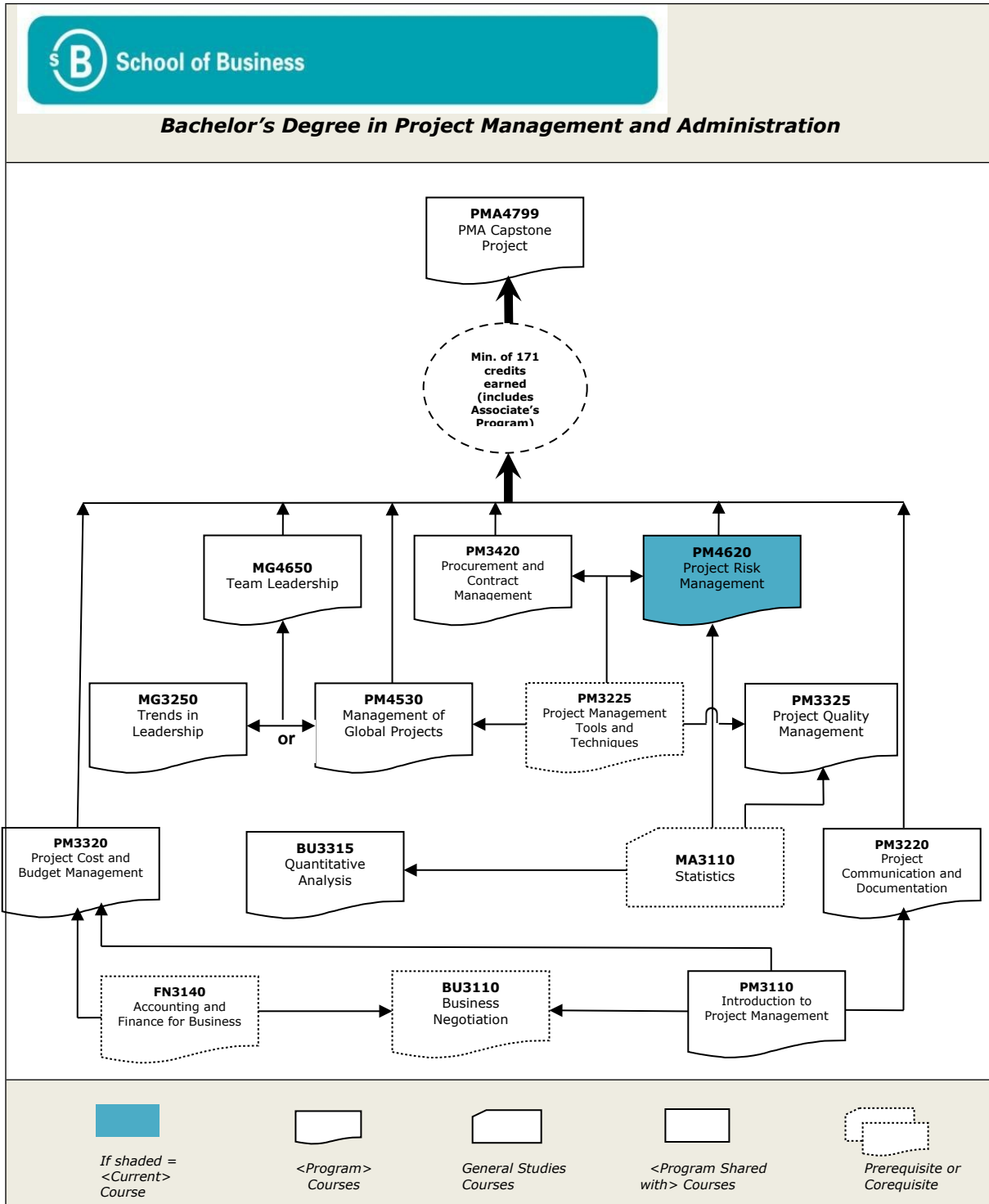
Prerequisites: MA3110 Statistics or equivalent, PM3225 Project Management Tools and Techniques or equivalent

Course Description:

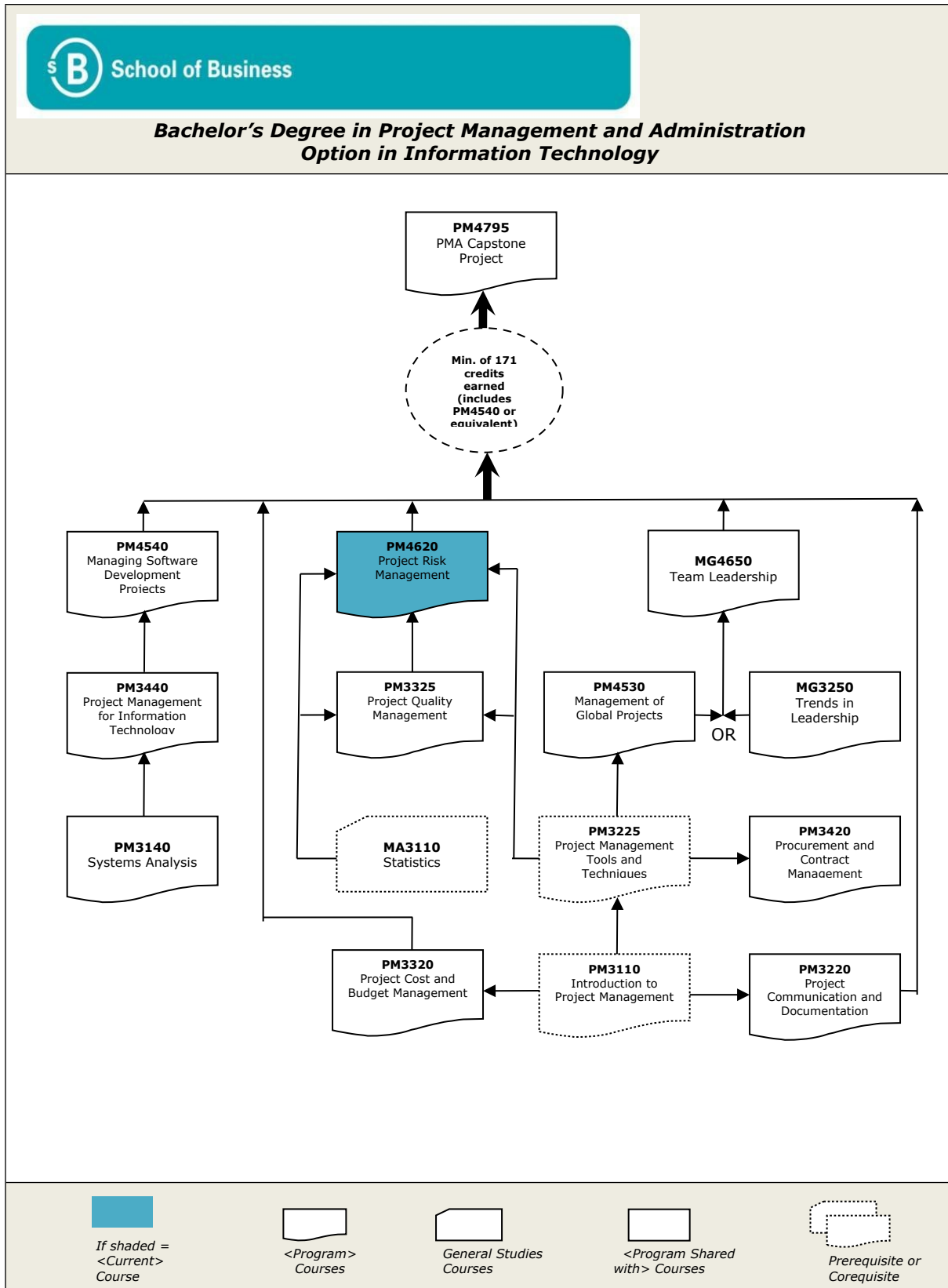
This course examines the process of assessing and managing risk in a project. Topics include developing a project risk management plan, identifying and documenting risk in a project, performing qualitative and quantitative risk analyses, planning risk responses and applying PMBOK® and PMI® standards to a project.

Where Does This Course Belong?

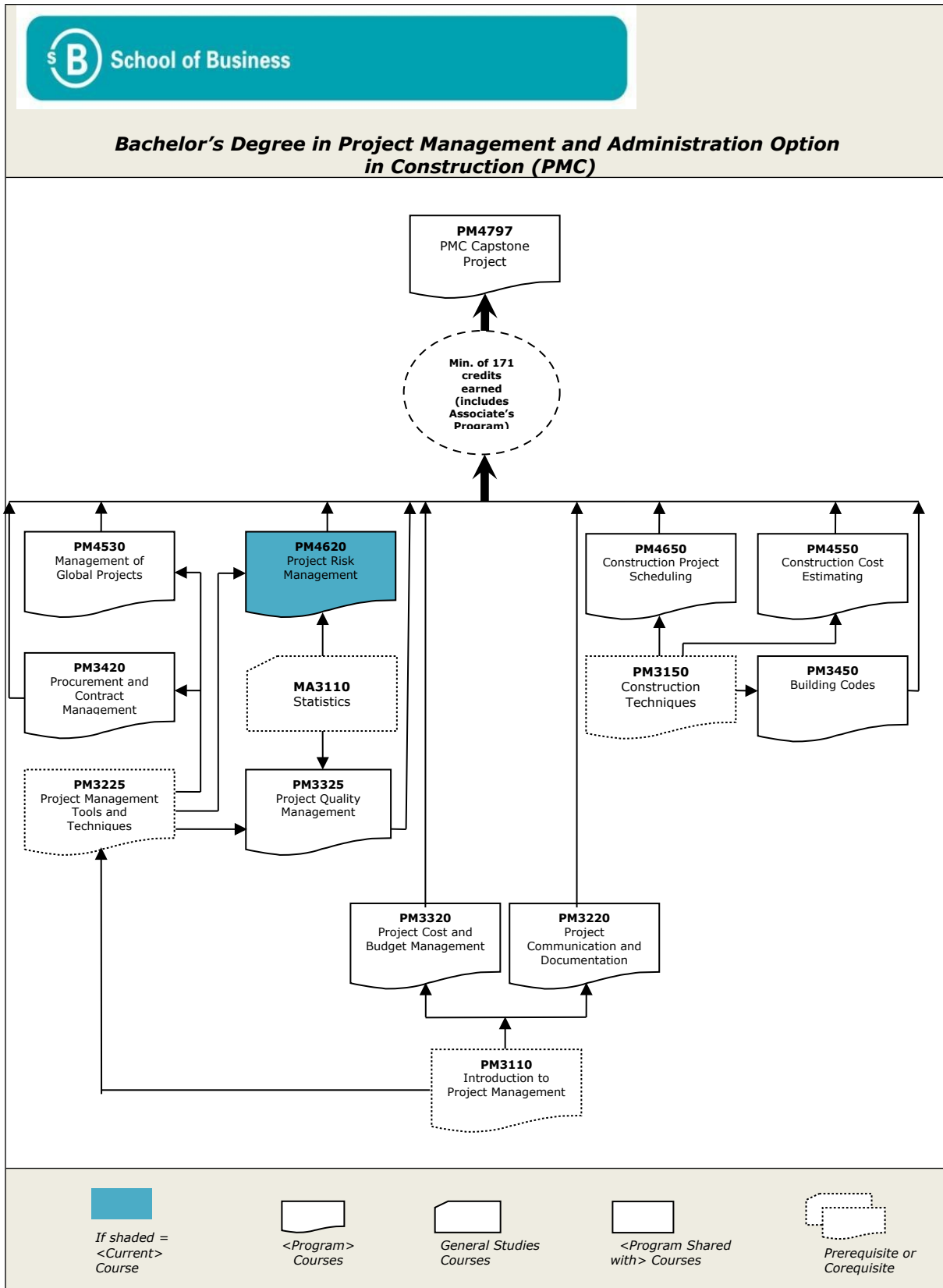
The following diagrams demonstrate how this course fits in the standard programs:



NOTE: Refer to the catalog for the state-specific course and program information, if applicable.



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This course is a required core course in the Project Management and Administration Bachelor degree program for all options.

Program Information

Program Scope and Core Content Areas

This program exposes students to fundamental knowledge and skills utilized in entry-level project management and administration positions. Students will be exposed to a variety of skills relating to planning, organizing, implementing, leading and controlling the work of a project to meet the goals and objectives of the organization. The program explores various areas of the Project Management Body of Knowledge (PMBOK®).

Project Management and Administration Option

This program option offers students a business view of project management and administration through the study of quantitative analysis and leadership in an organization.

Information Technology Option

This program option helps students understand how to apply principles of information technology, computer systems management and business operations to the planning, management and evaluation of information technology in organizations.

Construction Option

This program option exposes students to a variety of techniques utilized to manage, coordinate and supervise the construction process from concept development through project completion on timely and economic bases.

Course Summary

Major Instructional Areas

1. Risk Management Planning
2. Risk Identification
3. Risk Analysis
4. Risk Response Planning
5. Risk Monitoring and Control

Course Objectives

1. Create a risk management plan that outlines the approach for managing risks in a project.
2. Apply risk identification techniques to document positive and negative risks in a project.
3. Analyze the impact of positive and negative risks on a project.
4. Develop options and actions to enhance opportunities and reduce threats to project objectives.
5. Evaluate the impact of program changes on the risk of a project.
6. Apply the Project Management Body of Knowledge (PMBOK) and Project Management Institute (PMI) standards in managing project risks.

Learning Materials and References

Required Resources

Complete Textbook Package	New to this Course	Carried over from Previous Course(s)	Required for Subsequent Course(s)
Cooper, D., Grey, S., Raymond, G. and Walker, P. (2012). <i>Project risk management guidelines: Managing risk in large projects and complex procurements</i> . Chichester, England: John Wiley & Sons Ltd. [Custom Update Edition]	■		
Project Management Institute (2013). <i>A guide to the project management body of knowledge (PMBOK guide)</i> . (5 th ed.). Project Management Institute, Inc., Newtown Square, PA Note: To access “A Guide to the Project Management Body of Knowledge (PMBOK® Guide), Fifth Edition”, log on to ITT Tech Virtual Library, navigate to Books 24x7, and search with the keywords “PMBOK 5th edition”.		■	■

Recommended Resources

Periodicals

- PM Network: <http://www.pmi.org/Knowledge-Center/Publications-PM-Network.aspx>
- Project Management Journal: <http://www.pmi.org/Knowledge-Center/Publications-Project-Management-Journal.aspx>
- Project Manager Today: <http://www.pmtoday.co.uk/content/en/default.aspx>
- Project Magazine: <http://projectmagazine.com/>
- Projects At Work: <http://www.projectsatwork.com/>

Professional Associations

- American Society for the Advancement of Project Management: <http://www.asapm.org/>
- International Association of Project and Program Management: <http://www.iappm.org/>
- International Project Management Association: <http://ipma.ch/>
- International Research Network on Organizing by Projects: <http://www.irnop.org/>
- National Management Association: <http://nma1.org/>
- Project Management Institute: <http://www.pmi.org/>

ITT Tech Virtual Library (accessed via Student Portal (<http://myportal.itt-tech.edu/library/Pages/HomePage.aspx>))

Books > Books 24x7

- Apgar, D. (2006). *Risk intelligence: Learning to manage what we don't know*. Boston, MA: Harvard Business School Publishing.
- Heldman, K. (2005). *Project manager's spotlight on risk management*. San Francisco, CA: Jossey-Bass.
- Hiles, A. (2002). *Enterprise risk assessment and business impact analysis: Best practices*. Brookfield, CT: Rothstein Associates.
- Kendrick, Tom. *The Project Management Tool Kit: 100 Tips and Techniques for Getting the Job Done Right*. AMACOM, 2004.
- Labbi, A. (2005). *Handbook of integrated risk management for e-business: Measuring, modeling, and managing risk*. FL: J. Ross Publishing, Inc.
- Marrison, C. (2002). *The Fundamentals of risk measurement*. New York, NY: The McGraw-Hill Companies, Inc.
- Martin, D. (2008). *Managing risk in extreme environments: Front-line business lessons for corporates and financial institutions*. Philadelphia, PA: Kogan Page.
- Pandian, R. (2007). *Applied software risk management: A guide for software project managers*. NY: Auerbach Publications Taylor & Francis Group.
- Parrett, William G. (2007). *The sentinel CEO: Perspectives on security, risk, and leadership in a post-9/11 world*. Hoboken, NY: John Wiley & Sons.
- Waters, Donald. *Supply chain risk management: Vulnerability and resilience in logistics*. PA: Kogan Page, 2007.

Books > Ebrary

- Kliem, R. L. (2004). *Leading High Performance Projects*. Boca Raton, FL: J. Ross Publishing, Inc.

Periodicals > EbscoHost

- Flyvbjerg, B., & Budzier, A. (2011). Why Your IT Project May Be Riskier Than You Think. *Harvard Business Review*, 89(9/10), 23–25.

NOTE: All links are subject to change without prior notice.

Information Search

Use the following keywords to search for additional online resources that may be used for supporting your work on the course assignments:

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- Risk Management
- Project Lifecycle
- Project Uncertainty
- Risk Planning
- Risk Analysis
- Risk Response Planning
- Risk Monitoring
- Risk Control
- Risk Tolerance

Suggested Learning Approach

In this course, you will be studying individually and within a group of your peers. As you work on the course deliverables, you are encouraged to share ideas with your peers and instructor, work collaboratively on projects and team assignments, raise critical questions, and provide constructive feedback.

Use the following advice to receive maximum learning benefits from your participation in this course:

DO	DON'T
<ul style="list-style-type: none">▪ Do take a proactive learning approach▪ Do share your thoughts on critical issues and potential problem solutions▪ Do plan your course work in advance▪ Do explore a variety of learning resources in addition to the textbook▪ Do offer relevant examples from your experience▪ Do make an effort to understand different points of view▪ Do connect concepts explored in this course to real-life professional situations and your own experiences	<ul style="list-style-type: none">▪ Don't assume there is only one correct answer to a question▪ Don't be afraid to share your perspective on the issues analyzed in the course▪ Don't be negative about the points of view that are different from yours▪ Don't underestimate the impact of collaboration on your learning▪ Don't limit your course experience to reading the textbook▪ Don't postpone your work on the course deliverables – work on small assignment components every day

Course Outline

<p>Unit 1: Key Concepts in Project Management</p> <p>Upon completion of this unit, students are expected to:</p> <ul style="list-style-type: none"> • Define a project and project management. • Explain the 5 process groups in the project lifecycle. • Describe the relationships between program, portfolios and projects. • Describe the benefits of embracing uncertainty. • Analyze the critical factors in project risk management. • Identify assumptions. <p style="text-align: right;">Out-of-class work: 9 hours</p>			
READING ASSIGNMENT	GRADED ACTIVITIES/DELIVERABLES		
	Grading Category	Activity/Deliverable Title	Grade Allocation (% of all graded work)
<ul style="list-style-type: none"> • PMBOK, Chapters 1-3 	Assignment	Unit 1 Assignment 1: Organization Description	3%
	Exercise	Unit 1 Exercise 1: Assumptions	3%

<p>Unit 2: Key Concepts in Project Risk Management</p> <p>Upon completion of this unit, students are expected to:</p> <ul style="list-style-type: none"> • Identify the shortcomings of informal risk management techniques. • Differentiate risk, issues, and variances. • Evaluate the importance of using formal project risk management techniques. • Describe the role of probability and impact in risk evaluation. • Develop rating scales for probability and impact. • Identify key factors in project failure. <p style="text-align: right;">Out-of-class work: 9 hours</p>			
READING ASSIGNMENT	GRADED ACTIVITIES/DELIVERABLES		
	Grading Category	Activity/Deliverable Title	Grade Allocation (% of all graded work)
<p>PMBOK, Chapter 11 Introduction</p> <ul style="list-style-type: none"> • Flyvbjerg, B., & Budzier, A. (2011). Why Your IT Project May Be Riskier Than You Think. <i>Harvard Business Review</i>, 89(9/10), 23–25. <p>Search the ITT Tech Virtual Library> Periodicals> EbscoHost to find this article.</p>	Exercise	Unit 2 Exercise 1: Identifying Project Risks	3%
	Assignment	Unit 2 Assignment 1: Project Failure	3%

Unit 3: Plan Risk Management

Upon completion of this unit, students are expected to: <ul style="list-style-type: none"> Identify and sequence the five PMBOK Risk planning processes. Evaluate the importance of assessing inputs to risk management such as Lesson Learned. Distinguish between enterprise environmental factors (EEF) and organizational process assets (OPA). Use various methods to collect inputs to managing project risks. Develop a risk management plan that includes the key PMBOK components tailored to the size and complexity of the project. Identify project documents that are prerequisites to plan risk management. 		Out-of-class work: 9 hours
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READING ASSIGNMENT	GRADED ACTIVITIES/DELIVERABLES		
	Grading Category	Activity/Deliverable Title	Grade Allocation (% of all graded work)
<ul style="list-style-type: none"> PMBOK, Section 11.1 Cooper, Chapters 1-2 	Project	Unit 3 Project Part 1: Charter/WBS/Stakeholder Documents for Team Scenario	7%
	Quiz	Unit 3 Quiz 1	4%

Unit 4: Identify Risks Upon completion of this unit, students are expected to: <ul style="list-style-type: none"> Apply information-gathering techniques to identifying risks. Differentiate between negative and positive risk events (threats and opportunities). Choose among various analysis tools to select effective methods to identify risks. Apply tools or techniques to generate a list of risks. Differentiate between the root cause, symptoms, and effects of the risk. Develop a risk register of identified risks, their causes and effects, and a list of potential risk responses for each risk. 		Out-of-class work: 9 hours
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READING ASSIGNMENT	GRADED ACTIVITIES/DELIVERABLES		
	Grading Category	Activity/Deliverable Title	Grade Allocation (% of all graded work)
<ul style="list-style-type: none"> PMBOK, Section 11.2 Cooper Chapter 3 (pp. 42–44) and Chapter 11 (pp. 126–127) 	Project	Unit 4 Project Part 2: Risk Management Plan	7%
	Assignment	Unit 4 Assignment 1: Risk Identification Tool or Technique	3%

Unit 5: Perform Qualitative Risk Analysis Upon completion of this unit, students are expected to: <ul style="list-style-type: none"> Select an approach for evaluating qualitative risk characteristics. Develop a P&I Matrix. Choose among tools to effectively prioritize and evaluate risks. Apply risk categories to organize risks into a Risk Breakdown Structure. Generate a risk report and communications. Develop an updated risk register that ranks risk by priority and recommended actions. 		Out-of-class work: 9 hours
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READING	GRADED ACTIVITIES/DELIVERABLES
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ASSIGNMENT	Grading Category	Activity/Deliverable Title	Grade Allocation (% of all graded work)
•PMBOK, Section 11.3	Exercise	Unit 5 Exercise 1: Perform Qualitative Risk Analysis	3%
•Cooper, Chapters 4, 8, 25	Assignment	Unit 5 Assignment 1: Risk Reports and Communications	3%

Unit 6: Perform Quantitative Risk Analysis

Upon completion of this unit, the students are expected to:

- Identify appropriate uses for data gathering and representation techniques.
- Apply the Expected Monetary Value technique to estimate contingency funds.
- Apply PERT Analysis to quantify risk events.
- Describe the role of simulations.
- Describe the outputs of performing quantitative risk analysis.

Out-of-class work:
9 hours

READING ASSIGNMENT	GRADED ACTIVITIES/DELIVERABLES		
	Grading Category	Activity/Deliverable Title	Grade Allocation (% of all graded work)
•PMBOK, Section 11.4 •Cooper, Chapter 5	Assignment	Unit 6 Assignment 1: Apply PERT Analysis	3%
	Quiz	Unit 6 Quiz 2	4%
	Project	Unit 6 Project Part 3: First Draft	7%

Unit 7: Plan Risk Responses

Upon completion of this unit, students are expected to:

- Compare and contrast strategies for responding to threats (negative risks).
- Compare and contrast strategies for responding to opportunities (positive risks).
- Choose among contingent response strategies.
- Analyze the need to revise and update project plans and project documents as a result of planning risk responses.
- Describe the impact of contract type on risk sharing between buyer and seller.
- Evaluate interpersonal skills needed in risk response planning.

Out-of-class work:
9 hours

READING ASSIGNMENT	GRADED ACTIVITIES/DELIVERABLES		
	Grading Category	Activity/Deliverable Title	Grade Allocation (% of all graded work)
• PMBOK, Section 11.5, Section 12.1	Exercise	Unit 7 Exercise 1: Risk Response Vocabulary	3%
• Cooper, Chapters 6, 14, 27 • Heldman, K. (2005). <i>Project manager's spotlight on risk management</i> . San Francisco, CA: Jossey-Bass, Chapter 6 Search the ITT Tech Virtual Library> Books> Books 24x7 to find the text.	Assignment	Unit 7 Assignment 1: Integrating Risk Responses	3%

<p>Unit 8: Risk Response Planning</p> <p>Upon completion of this unit, students are expected to:</p> <ul style="list-style-type: none"> Evaluate interpersonal skills needed in risk response planning. Develop a risk card that demonstrates complete analysis of a newly identified risk. Identify sources of resource risk and describe appropriate risk response strategies. Identify sources of schedule and activity risk and apply appropriate risk response strategies. Describe good practice for risk monitoring and control throughout the project. <p style="text-align: right;">Out-of-class work: 9 hours</p>			
READING ASSIGNMENT	GRADED ACTIVITIES/DELIVERABLES		
	Grading Category	Activity/Deliverable Title	Grade Allocation (% of all graded work)
• PMBOK Section 11.6 and Appendix X3	Exercise	Unit 8 Exercise 1: Student Risk Management	3%
		Unit 8 Exercise 2: Risk Card	3%
• Cooper, Chapter 7	Quiz	Unit 8 Quiz 3	4%

<p>Unit 9: Aggregated Program Risks</p> <p>Upon completion of this unit, students are expected to:</p> <ul style="list-style-type: none"> Develop a risk card that demonstrates complete analysis of a newly identified risk. Identify sources of resource risk and describe appropriate risk response strategies. Identify sources of schedule and activity risk and apply appropriate risk response strategies. Identify project assumptions and constraints and evaluate their potential impact. Aggregate risk across projects. <p style="text-align: right;">Out-of-class work: 9 hours</p>			
READING ASSIGNMENT	GRADED ACTIVITIES/DELIVERABLES		
	Grading Category	Activity/Deliverable Title	Grade Allocation (% of all graded work)
• PMBOK Section 11.4	Assignment	Unit 9 Assignment 1: Trends in Program Risk	3%
• Cooper, Chapter 5	Exercise	Unit 9 Exercise 1: Reflection on the Team Process	3%
	Project	Unit 9 Project Part 4: Final Project and Presentation (PORTFOLIO)	7%

<p>Unit 10: Program and Portfolio Risk Management</p> <p>Upon completion of this unit, students are expected to:</p> <ul style="list-style-type: none"> Describe the focus of risk management in program management. Describe the role of the PMO. Identify portfolio and program risk management techniques. Evaluate the impacts of risk inter-dependencies. <p style="text-align: right;">Out-of-class work: 9 hours</p>			
READING ASSIGNMENT	GRADED ACTIVITIES / DELIVERABLES		
	Grading Category	Activity/Deliverable Title	Grade Allocation (% of all graded work)
<ul style="list-style-type: none"> Kendrick, Tom. <i>The Project Management Tool Kit: 100 Tips and Techniques for Getting the Job Done Right</i>. AMACOM, 2004. Chapter 13 <p>Search the ITT Tech Virtual Library> Books> Books 24x7 to find the text.</p>	Exercise	Unit 10 Exercise 1: Program Risk	3%

<p>Unit 11: Final Class Session</p> <p>Upon completion of this unit, students are expected to:</p> <ul style="list-style-type: none"> Review the course material Take the Final Exam <p style="text-align: right;">Out-of-class work: 9 hours</p>			
READING ASSIGNMENT	GRADED ACTIVITIES / DELIVERABLES		
	Grading Category	Activity/Deliverable Title	Grade Allocation (% of all graded work)
Review All Chapters	Exam	Final Examination	15%

Evaluation and Grading

Evaluation Criteria

The graded assignments will be evaluated using the following weighted categories:

Category	Weight
Assignment	21%
Exercise	24%
Project	28%
Quiz	12%
Exam	15%
TOTAL	100%

Grade Conversion

The final grades will be calculated from the percentages earned in the course, as follows:

Grade	Percentage	Grade Points
A	90–100%	4.0
B+	85–89%	3.5
B	80–84%	3.0
C+	75–79%	2.5
C	70–74%	2.0
D+	65–69%	1.5
D	60–64%	1.0
F	<60%	0.0

Academic Integrity

All students must comply with the policies that regulate all forms of academic dishonesty, or academic misconduct, including plagiarism, self-plagiarism, fabrication, deception, cheating, and sabotage. For more information on the academic honesty policies, refer to the Student Handbook and the Course Catalog.

(End of Syllabus)