

ITT Technical Institute
PM469
Project Management Integration II
(Capstone Project)
Onsite Course

SYLLABUS

Credit hours: 4

Contact/Instructional hours: 50 (30 Theory Hours, 20 Lab Hours)

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

Prerequisites: Completion of a minimum of 168 credits earned in the program of study including PM468 Project Management Integration I (Capstone Project) or equivalent;

Prerequisite or Corequisite: PM454 Leadership and Project Team Management or equivalent

Course Description:

This course is the second in a two-course series focused on the complete project management cycle. Students will execute, monitor and close their capstone project. The outcome of the course will require a demonstration of the knowledge and skills acquired through the earlier courses.

Syllabus: Project Management Integration II (Capstone Project)

Instructor:	_____
Office hours:	_____
Class hours:	_____

Major Instructional Areas

1. Integration of Executing, Monitoring and Controlling, and Closing Process Groups
2. Activities in capstone execution
3. Activities in capstone monitoring and controlling
4. Activities in capstone closing

Course Objectives

1. Plan the execution of the project proposal finalized in Project Management Integration I (Capstone Project).
2. Implement the project plan created in Project Management Integration I (Capstone Project).
3. Monitor the capstone project activities to ensure that the project follows the project plan.
4. Apply tools and techniques defined by *A Guide to the Project Management Body of Knowledge (PMBOK® Guide)* for processing inputs and generating outputs in the form of various project management documents for the Executing, Monitoring and Controlling, and Closing Process Groups.
5. Close the capstone project successfully.

SCANS Objectives

SCANS is an acronym for Secretary's Commission on Achieving Necessary Skills. The committee, created by the National Secretary of Labor in the early 1990s, created a list of skills and competencies that the committee feels are necessary for employees to function in a high-tech job market.

1. Analyze the given documents to derive implications.
2. Analyze information and communicate results in a written format.
3. Identify requirements to articulate clear and achievable objectives.
4. Demonstrate ability to recognize job tasks and delegate roles and responsibilities.
5. Interpret information and prepare various reports.
6. Plan to meet competing demands for quality, scope, time, and cost for a given situation.

Course Outline

Note: All graded activities, except the course project, are listed below in the pattern of <Unit Number>.<Assignment Number>. For example, Lab 2.1 refers to the 1st lab activity in Unit 2.

Unit	Activities
1—Planning for Project Execution	<ul style="list-style-type: none"> • Content Covered: <ul style="list-style-type: none"> <i>Effective Project Management:</i> <ul style="list-style-type: none"> ○ Chapter 6, "How to Monitor and Control a Project," section titled "Managing Project Status Meetings," pp. 275-278

Unit	Activities
	<p><i>A Guide to the Project Management Body of Knowledge:</i></p> <ul style="list-style-type: none"> ○ Chapter 3, "Project Management Processes for a Project," Section 3.5, "Executing Process Group" ○ Chapter 6, "Project Time Management," Section 6.5, "Schedule Development" <ul style="list-style-type: none"> ● Labs: 1.1
2—Project Implementation, Monitoring, and Controlling I	<ul style="list-style-type: none"> ● Read from <i>Effective Project Management:</i> <ul style="list-style-type: none"> ○ Chapter 6, "How to Monitor and Control a Project," sections titled "Types of Project Status Reports" and "How and What Information to Update," pp. 253-259 ● Read from <i>A Guide to the Project Management Body of Knowledge:</i> <ul style="list-style-type: none"> ○ Chapter 3, "Project Management Processes for a Project," Section 3.6, "Monitoring and Controlling Process Group" ○ Chapter 4, "Project Integration Management," Section 4.4, "Monitor and Control Project Work" <ul style="list-style-type: none"> ● Labs: 2.1
3—Project Implementation, Monitoring, and Controlling II	<ul style="list-style-type: none"> ● Read from <i>A Guide to the Project Management Body of Knowledge:</i> <ul style="list-style-type: none"> ○ Chapter 4, "Project Integration Management," Section 4.5, "Perform Integrated Change Control" <ul style="list-style-type: none"> ● Labs: 3.1
4—Project Implementation, Monitoring, and Controlling III	<ul style="list-style-type: none"> ● Read from <i>A Guide to the Project Management Body of Knowledge:</i> <ul style="list-style-type: none"> ○ Chapter 10, "Project Communications Management," Section 10.2, "Plan Communications" <ul style="list-style-type: none"> ● Labs: 4.1
5—Project Implementation, Monitoring, and Controlling IV	<ul style="list-style-type: none"> ● Read from <i>A Guide to the Project Management Body of Knowledge:</i> <ul style="list-style-type: none"> ○ Chapter 11, "Project Risk Management," Section 11.6, "Monitor and Control Risks" ● Read from <i>Project Management: Case Studies:</i> <ul style="list-style-type: none"> ○ "Quantum Telecom," pp. 329-330 <ul style="list-style-type: none"> ● Labs: 5.1
6—Project Implementation, Monitoring, and Controlling V	<ul style="list-style-type: none"> ● Read from <i>Effective Project Management:</i> <ul style="list-style-type: none"> ○ Chapter 6, "How to Monitor and Control a Project," sections titled "Variances," "Gantt Charts," "Stoplight Reports," "Burn Charts," and "Milestone Trend Charts," pp. 259-265 ● Read from <i>Project Management: Case Studies:</i> <ul style="list-style-type: none"> ○ "The Bathtub Period," pp. 407-409 <ul style="list-style-type: none"> ● Labs: 6.1
7—Project Implementation, Monitoring, and Controlling VI	<ul style="list-style-type: none"> ● Read from <i>Effective Project Management:</i> <ul style="list-style-type: none"> ○ Chapter 6, "How to Monitor and Control a Project," sections titled "Earned Value Analysis" and "Integrating Milestone Trend Charts and Earned Value Analysis," pp. 265-273 <ul style="list-style-type: none"> ● Labs: 7.1
8—Project Evaluation and Closure I	<ul style="list-style-type: none"> ● Read from <i>Effective Project Management:</i> <ul style="list-style-type: none"> ○ Chapter 7, "How to Close a Project," sections titled "Closing a Project," "Getting Client Acceptance," "Installing Project Deliverables," and "Documenting the Project," pp. 284-289 <ul style="list-style-type: none"> ● Labs: 8.1 ● Course Project Part 1
9—Project	<ul style="list-style-type: none"> ● Read from <i>A Guide to the Project Management Body of Knowledge:</i>

Unit	Activities
Evaluation and Closure II	<ul style="list-style-type: none"> ○ Chapter 3, "Project Management Processes for a Project," Section 3.7, "Closing Process Group" • Labs: 9.1
10—Project Evaluation and Closure III	<ul style="list-style-type: none"> • Read from <i>Effective Project Management</i>: <ul style="list-style-type: none"> ○ Chapter 7, "How to Close a Project," sections titled "Conducting the Post-Implementation Audit" and "Writing the Final Report," pp. 289-291 • Read from <i>A Guide to the Project Management Body of Knowledge</i>: <ul style="list-style-type: none"> ○ Chapter 4, "Project Integration Management," Section 4.6, "Close Project" • Read from <i>Project Management: Case Studies</i>: <ul style="list-style-type: none"> ○ "The Blue Spider Project," pp. 301-316 • Labs: 10.1 • Course Project Part 2
11—Presentation of the Capstone Project	<ul style="list-style-type: none"> • Course Project Part 3

Instructional Methods

This course provides you with an opportunity to integrate, through project work, the principles you learned from previous courses. In this course, you will implement the capstone project planned in the course Project Management Integration I (Capstone Project), perform monitoring and controlling activities to track the project's progress throughout the project life cycle, and close the project. The structure of Project Management Integration II (Capstone Project) will enable you to apply the knowledge and real-world functions of the important tools, templates, and processes used to execute, monitor, control, and close a project. Preparing and conducting presentations will be an important part of your career as a project manager. Therefore, you will present your project to the instructor, who will act as a project sponsor. This presentation will help you enhance your communication skills and, at the same time, learn from other students' experiences.

This course involves the continued study and application of project management processes and Knowledge Areas along with an understanding of how and when to apply various project management life cycles and strategies to a particular project. The outcome of this course is the completion of a project that demonstrates the mastery of these processes and Knowledge Areas.

The instructional strategies for the course include the following:

- Unit 1 begins with reviewing the project selected during Project Management Integration I (Capstone Project), including the project charter and scope documents, and planning for executing the project. You will receive all project-related documentation from Project Management Integration I (Capstone Project), including solutions to lab exercises, completed course project deliverables, meeting agendas, and minutes of the meetings, from school. These documents will help you identify how the capstone project was planned by the teams in the course Project Management Integration I (Capstone Project). It is important that you thoroughly go through all the documentation before starting the work for this course. You will be required to execute, monitor and control, and close the same project selected by the teams in the first course.
- You will also review and discuss the project schedule created in the first course and make updates, if any, before finalizing the schedule. In addition, you will analyze the capstone project deliverables created during the first course so as to check for the completeness and appropriateness of the project.

- In Units 2-7, you will execute the finalized project plan and conduct monitoring and controlling activities to track the project's progress. Units 8-10 will focus on project evaluation and closure activities.
- This course covers the fourth edition of *PMBOK® Guide*.
- The lab time in the course will be used to hold team meetings and work on course project deliverables.
- The instructor for this course will perform the role of an advisor, a consultant, a project sponsor, and a stakeholder.
- Weekly in-class meetings will be conducted regularly so that the instructor can provide all student teams with consultation and guidance on the course project and discuss various implementation and problem-solving strategies. These meetings will be in the form of status or progress meetings with the instructor. It is suggested that you maintain a record of the minutes of the weekly in-class meetings. Your instructor will share a template with you, which you can use to document the minutes of the meetings. Remember to save the minutes of all meetings in your project notebook.
- The course project is divided into three parts, with deliverables in Units 8, 10, and 11. You can work on the course project in a team of three to four members. It is suggested that there be a rotation of leaders within a team so that all members get an equal opportunity to lead the team.
- Your participation in the course project will be graded at both individual and team levels. For each course project part, you will receive a certain percentage of the grade on the basis of peer review feedback, and the rest of the percentage will be evaluated on the basis of completion of team deliverables. This will ensure that all students actively participate in project tasks. Your instructor will share a peer evaluation form with you in Unit 1. Remember to fill out and submit a copy of the form with each course project part deliverable.
- Unit 11 concludes with a graded presentation by each project team, where each team presents its project to the project sponsor.
- It is important that you save all lab solutions and course project deliverables and all meeting agendas and minutes of the meetings in printed form as well as electronically. This is because you are required to e-mail all electronically saved deliverables and documents to your instructor. Having an electronic copy will enable you to update the deliverables. At the same time, it will enable your instructor to capture all the electronic documentation completed in the course and submit it to the campus dean or program chair for archival.

Instructional Materials and References

Student Textbook Package

Students should have received the following textbooks with the course Project Management Integration I (Capstone Project). The same textbooks will be used in this course as well.

- Wysocki, Robert K. *Effective Project Management*. 5th ed. Indianapolis, IN: Wiley Publishing, 2009.
- Kerzner, Harold. *Project Management: Case Studies*. 3rd ed. Hoboken, NJ: John Wiley & Sons, 2009.

Other Required Resources

In addition to the student textbook package, the following is also required in this course:

Project Management Institute. *A Guide to the Project Management Body of Knowledge (PMBOK® Guide)*. 4th ed. Newtown Square, PA: PMI Publications, 2008.

This book is normally issued with the following course: Introduction to Project Management. If students have not registered for that course, the book will be issued in this course.

Equipment and Tools

- Microsoft Project 2007

References

ITT Tech Virtual Library

Log on to the ITT Tech Virtual Library at <http://www.library.itt-tech.edu/> to access online books, journals, and other reference resources selected to support ITT Tech curricula.

Books

You may click “Books” or use the “Search” function on the home page to find the following books.

Books24x7

- DeCarlo, Doug. *eXtreme Project Management: Using Leadership, Principles, and Tools to Deliver Value in the Face of Volatility*. San Francisco, CA: Jossey-Bass, 2004.
- Morris, Rick A., and Brette McWhorter Sember. *Project Management That Works: Real-World Advice on Communicating, Problem-Solving, and Everything Else You Need to Know to Get the Job Done*. NY: AMACOM, 2008.
- Portny, Stanley E. *Project Management For Dummies*. 2nd ed. Hoboken, NJ: John Wiley & Sons, 2007.
- Saladis, Frank P., and Harold Kerzner. *Bringing the PMBOK® Guide to Life: A Companion for the Practicing Project Manager*. Hoboken, NJ: John Wiley & Sons, 2009.
- Turner, J. Rodney. *The Handbook of Project-Based Management: Leading Strategic Change in Organizations*. 3rd ed. The McGraw-Hill Companies, 2009.

Reference

You may click “Reference” or use the “Search” function on the home page to find the following reference resources.

Project Management

- allPM
- Microsoft Project
- Primavera Systems
- Project Management Institute

School Of Study

You may click “School Of Study” or use the “Search” function on the home page to find the following resources.

School of Business> Recommended Links

- Project Magazine
- Projects@Work

School of Business> Professional Organizations

- American Society for the Advancement of Project Management

- International Association of Project & Program Managers
- International Project Management Association
- International Research Network on Organizing by Projects
- National Management Association

Other References

The following resources may be found **outside** of the ITT Tech Virtual Library, whether online or in hard copy.

Web sites

- 4PM: This Web site provides training and tutorials on project management. It also contains articles on project management and some career advice from project managers around the world.
<http://www.4pm.com/> (accessed November 30, 2009).
- gantthead.com: This Web site is an online community for information technology (IT) project managers.
<http://www.gantthead.com/> (accessed November 30, 2009).
- Microsoft Office Online: This Web site provides many project management artifact templates.
<http://office.microsoft.com/en-us/templates/CT012261931033.aspx?ofcresset=1> (accessed November 30, 2009).

All links to Web references outside of the ITT Tech Virtual Library are always subject to change without prior notice.

PM469 COURSE SNAPSHOT

Grading Category	Grade Book Category Weight (% of course total)	Unit(s)	Activity/Graded Deliverables	Grade Allocation (% of course total)	Measuring Rubric*
A. Project Part 1	35%	5	Weekly Status Reports	5%	A-1-1 PMBOK Nine Areas A-2-1 PMBOK 5 Process Groups
			Project Documents	5%	
			Project Schedule	15%	A-3-1 Documentation

			EVA Worksheet and EVA Chart Design Document	5% 5%	A-4-1 Communication A-8-1 Critical Thinking
B. Project Part 2	20%	7	Closing Plan/Strategy	5%	B-1-1 PMBOK Nine Areas B-2-1 PMBOK 5 Process Groups B-3-1 Documentation B-4-1 Communication
			Updated Project Documents	5%	
			Complete Project Notebook with Presentation	5%	
			Closeout Document	5%	
C. Project Part 3	15%	8	Presentation	2%	C-1-1 PMBOK Nine Areas C-2-1 PMBOK 5 Process Groups C-3-1 Documentation C-4-1 Communication C-8-1 Critical Thinking
				2%	
				3%	
				5%	
D. Labs	30%	1-10	Submission of Word document - email and hard copy	3%	D-3-1 Documentation (1.0%) D-4-1 Communication (1.0%) D-8-1 Critical Thinking (1.0%)
				3%	
				30%	
Total	100%			100%	

COURSE GRADING RUBRIC

PM469—Project Management Integration II

Campus: _____

Faculty Name: _____

Student Name: _____

Directions: Please assign a percentage grade on the line for each subcategory.

A. Project Part I (35% of total grade)

Unit 5—Status Reports, Project Documents, Project Schedule, EVA Worksheet & Chart, Design Document

_____ ***A-1-1 PMBOK Nine Areas:***

- 90-100%: Students show a complete understanding of all designated areas of a project. These areas are well integrated in the plan and it is clear that the student has a detailed scope for all elements.
- 80-89%: Students uses all of the designated areas as a plan to bring the important elements into their project. The areas are appropriately defined.
- 70-79%: Students uses most of the designated areas of concentration. Some areas are not well represented in their final work.
- 60-69%: Student uses some of the designated areas of concentration. Several areas are missing in their work.
- Below 60%: Student makes little or no use of the nine designated areas. The project plan is an ad hoc compilation of subjective groups of activities.

_____ ***A-2-1 PMBOK 5 Process Groups:***

- 90-100%: Student uses the process groups as interactive activities and anchors project deliverables within each process.
- 80-89%: Student uses the process groups to scope the project deliverables and recognizes the interactive nature of the process groups.
- 70-79%: Student uses the process groups to establish the timeline of the project and details them appropriately. There may be some misunderstanding of the application tools to employ.

- 60-69%: Student leaves out steps in the formal project plan that indicates a lack of process knowledge. Some steps are "taken for granted" and not documented.
- Below 60%: Student does not use the five process groups to establish the timeline of the project. Project steps are chosen with an unstructured approach.

A-3-1 Documentation

- 90-100%: Student presents documentation that is compelling and concise in displaying project performance and the project schedule. It is apparent the project has been managed by using documentation tools.
- 80-89%: Student provides documentation that is fact-based in communicating activities and results. It is linked to many of the important elements of the project and presents information that is clear and useful.
- 70-79%: Student recognizes need for formal documentation, but there are some gaps in their use. Appropriate forms are used for those applications considered.
- 60-69%: Student takes a dim view of formal documentation, and, while using documents in the project, they are usually not those taught in the program.
- Below 60%: Student does not use forms that were taught in the program. Documentation is not evident in the project materials, and where it exists, it usually does not address the intent of formal project management.

A-4-1 Communication:

- 90-100%: Student uses communication mechanisms in a way that enriches the professionalism of the project. Student brings fact-based information to the project team to assimilate quickly, and for project stakeholders to comprehend the project status easily.
- 80-89%: Student applies communication methods to bring clarity to the project status and results in most process and performance categories.
- 70-79%: Student has an understanding of communication mechanisms and uses them to convey project status in several ways. There may be some gaps in the effectiveness of the methods, but they generally convey appropriate information.
- 60-69%: Student does not use communication instruments in a formal way and in some cases does not provide enough information to assess project.

- Below 60%: Student has not indicated they are aware of formal methods of communicating project status. They provide few, if any charts or graphs to summarize the results or timeline and schedule status of a project.

_____ ***A-8-1 Critical Thinking:***

- 90-100%: Students uses decision tools that were taught in the program for all decisions that require them. Student chooses between several methods and chooses the best one for any problem.
- 80-89%: Student makes use of decision-making tools that were taught throughout the program. Most choices reflect a methodical problem-solving approach to problem solutions. Methods are mostly used appropriately.
- 70-79%: Student has an understanding of evaluative techniques and occasionally uses some to draw conclusions. Depth of understanding is weak and frequency of use in this area is limited to one or two.
- 60-69%: Student does not demonstrate a complete understanding of decision-making in a complex environment. Some analysis tools are used, but they may be deployed incorrectly, or conclusions based on the techniques may be incorrect.
- Below 60%: Student has not indicated an ability to do critical thinking or make complex decisions. Student seems to be grasping at any solution that comes their way, rather than actually think, at all.

B. Project Part 2 (20% of total grade)

Unit 7—Closing Plan/Strategy, Updated Project Documents, Complete Project Notebook, Closeout Document

_____ ***B-1-1 PMBOK Nine Areas:***

- 90-100%: Students show a complete understanding of all designated areas of a project. These areas are well integrated in the plan and it is clear that the student has a detailed scope for all elements.
- 80-89%: Students uses all of the designated areas as a plan to bring the important elements into their project. The areas are appropriately defined.
- 70-79%: Students uses most of the designated areas of concentration. Some areas are not well represented in their final work.
- 60-69%: Student uses some of the designated areas of concentration. Several areas are missing in their work.

- Below 60%: Student makes little or no use of the nine designated areas. The project plan is an ad hoc compilation of subjective groups of activities.

B-2-1 PMBOK 5 Process Groups:

- 90-100%: Student uses the process groups as interactive activities and anchors project deliverables within each process.
- 80-89%: Student uses the process groups to scope the project deliverables and recognizes the interactive nature of the process groups.
- 70-79%: Student uses the process groups to establish the timeline of the project and details them appropriately. There may be some misunderstanding of the application tools to employ.
- 60-69%: Student leaves out steps in the formal project plan that indicates a lack of process knowledge. Some steps are "taken for granted" and not documented.
- Below 60%: Student does not use the five process groups to establish the timeline of the project. Project steps are chosen with an unstructured approach.

B-3-1 Documentation

- 90-100%: Student presents documentation that is compelling and concise in displaying project performance and the project schedule. It is apparent the project has been managed by using documentation tools.
- 80-89%: Student provides documentation that is fact-based in communicating activities and results. It is linked to many of the important elements of the project and presents information that is clear and useful.
- 70-79%: Student recognizes need for formal documentation, but there are some gaps in their use. Appropriate forms are used for those applications considered.
- 60-69%: Student takes a dim view of formal documentation, and, while using documents in the project, they are usually not those taught in the program.
- Below 60%: Student does not use forms that were taught in the program. Documentation is not evident in the project materials, and where it exists, it usually does not address the intent of formal project management.

B-4-1 Communication:

- 90-100%: Student uses communication mechanisms in a way that enriches the professionalism of the project. Student brings fact-based information to the project team to assimilate quickly, and for project stakeholders to comprehend the project status easily.
- 80-89%: Student applies communication methods to bring clarity to the project status and results in most process and performance categories.
- 70-79%: Student has an understanding of communication mechanisms and uses them to convey project status in several ways. There may be some gaps in the effectiveness of the methods, but they generally convey appropriate information.
- 60-69%: Student does not use communication instruments in a formal way and in some cases does not provide enough information to assess project.
- Below 60%: Student has not indicated they are aware of formal methods of communicating project status. They provide few, if any charts or graphs to summarize the results or timeline and schedule status of a project.

C. Project Part 3 (15% of total grade)

Unit 8—Presentation

_____ *C-1-1 PMBOK Nine Areas:*

- 90-100%: Students show a complete understanding of all designated areas of a project. These areas are well integrated in the plan and it is clear that the student has a detailed scope for all elements.
- 80-89%: Students uses all of the designated areas as a plan to bring the important elements into their project. The areas are appropriately defined.
- 70-79%: Students uses most of the designated areas of concentration. Some areas are not well represented in their final work.
- 60-69%: Student uses some of the designated areas of concentration. Several areas are missing in their work.
- Below 60%: Student makes little or no use of the nine designated areas. The project plan is an ad hoc compilation of subjective groups of activities.

_____ *C-2-1 PMBOK 5 Process Groups:*

- 90-100%: Student uses the process groups as interactive activities and anchors project deliverables within each process.

- 80-89%: Student uses the process groups to scope the project deliverables and recognizes the interactive nature of the process groups.
- 70-79%: Student uses the process groups to establish the timeline of the project and details them appropriately. There may be some misunderstanding of the application tools to employ.
- 60-69%: Student leaves out steps in the formal project plan that indicates a lack of process knowledge. Some steps are "taken for granted" and not documented.
- Below 60%: Student does not use the five process groups to establish the timeline of the project. Project steps are chosen with an unstructured approach.

C-3-1 Documentation

- 90-100%: Student presents documentation that is compelling and concise in displaying project performance and the project schedule. It is apparent the project has been managed by using documentation tools.
- 80-89%: Student provides documentation that is fact-based in communicating activities and results. It is linked to many of the important elements of the project and presents information that is clear and useful.
- 70-79%: Student recognizes need for formal documentation, but there are some gaps in their use. Appropriate forms are used for those applications considered.
- 60-69%: Student takes a dim view of formal documentation, and, while using documents in the project, they are usually not those taught in the program.
- Below 60%: Student does not use forms that were taught in the program. Documentation is not evident in the project materials, and where it exists, it usually does not address the intent of formal project management.

C-4-1 Communication:

- 90-100%: Student uses communication mechanisms in a way that enriches the professionalism of the project. Student brings fact-based information to the project team to assimilate quickly, and for project stakeholders to comprehend the project status easily.
- 80-89%: Student applies communication methods to bring clarity to the project status and results in most process and performance categories.
- 70-79%: Student has an understanding of communication mechanisms and uses them to convey project status in several ways. There may be some gaps in the effectiveness of the methods, but they generally convey appropriate information.

- 60-69%: Student does not use communication instruments in a formal way and in some cases does not provide enough information to assess project.
- Below 60%: Student has not indicated they are aware of formal methods of communicating project status. They provide few, if any charts or graphs to summarize the results or timeline and schedule status of a project.

_____ ***C-8-1 Critical Thinking:***

- 90-100%: Students uses decision tools that were taught in the program for all decisions that require them. Student chooses between several methods and chooses the best one for any problem.
- 80-89%: Student makes use of decision-making tools that were taught throughout the program. Most choices reflect a methodical problem-solving approach to problem solutions. Methods are mostly used appropriately.
- 70-79%: Student has an understanding of evaluative techniques and occasionally uses some to draw conclusions. Depth of understanding is weak and frequency of use in this area is limited to one or two.
- 60-69%: Student does not demonstrate a complete understanding of decision-making in a complex environment. Some analysis tools are used, but they may be deployed incorrectly, or conclusions based on the techniques may be incorrect.
- Below 60%: Student has not indicated an ability to do critical thinking or make complex decisions. Student seems to be grasping at any solution that comes their way, rather than actually think, at all.

D. Project Demonstration (15% of total grade)

Unit 11–Submission of Word document with supporting documentation & project proposal presentation

_____ ***C-3-1 Documentation***

- 90-100%: Student presents documentation that is compelling and concise in displaying project performance and the project schedule. It is apparent the project has been managed by using documentation tools.
- 80-89%: Student provides documentation that is fact-based in communicating activities and results. It is linked to many of the important elements of the project and presents information that is clear and useful.

- 70-79%: Student recognizes need for formal documentation, but there are some gaps in their use. Appropriate forms are used for those applications considered.
- 60-69%: Student takes a dim view of formal documentation, and, while using documents in the project, they are usually not those taught in the program.
- Below 60%: Student does not use forms that were taught in the program. Documentation is not evident in the project materials, and where it exists, it usually does not address the intent of formal project management.

_____ ***C-4-1 Communication:***

- 90-100%: Student uses communication mechanisms in a way that enriches the professionalism of the project. Student brings fact-based information to the project team to assimilate quickly, and for project stakeholders to comprehend the project status easily.
- 80-89%: Student applies communication methods to bring clarity to the project status and results in most process and performance categories.
- 70-79%: Student has an understanding of communication mechanisms and uses them to convey project status in several ways. There may be some gaps in the effectiveness of the methods, but they generally convey appropriate information.
- 60-69%: Student does not use communication instruments in a formal way and in some cases does not provide enough information to assess project.
- Below 60%: Student has not indicated they are aware of formal methods of communicating project status. They provide few, if any charts or graphs to summarize the results or timeline and schedule status of a project.

_____ ***C-8-1 Critical Thinking:***

- 90-100%: Students uses decision tools that were taught in the program for all decisions that require them. Student chooses between several methods and chooses the best one for any problem.
- 80-89%: Student makes use of decision-making tools that were taught throughout the program. Most choices reflect a methodical problem-solving approach to problem solutions. Methods are mostly used appropriately.
- 70-79%: Student has an understanding of evaluative techniques and occasionally uses some to draw conclusions. Depth of understanding is weak and frequency of use in this area is limited to one or two.

- 60-69%: Student does not demonstrate a complete understanding of decision-making in a complex environment. Some analysis tools are used, but they may be deployed incorrectly, or conclusions based on the techniques may be incorrect.
- Below 60%: Student has not indicated an ability to do critical thinking or make complex decisions. Student seems to be grasping at any solution that comes their way, rather than actually think, at all.

D. Labs (30% of total grade)

Units 1 to 10—Submission of Word document –email and hard copy

The rubrics below are used to grade three components of each analysis document.

Unit 1: _____ D-3-1 Documentation _____ D-4-1 Communication _____ D-8-1 Critical Thinking

Unit 2: _____ D-3-1 Documentation _____ D-4-1 Communication _____ D-8-1 Critical Thinking

Unit 3: _____ D-3-1 Documentation _____ D-4-1 Communication _____ D-8-1 Critical Thinking

Unit 4: _____ D-3-1 Documentation _____ D-4-1 Communication _____ D-8-1 Critical Thinking

Unit 5: _____ D-3-1 Documentation _____ D-4-1 Communication _____ D-8-1 Critical Thinking

Unit 6: _____ D-3-1 Documentation _____ D-4-1 Communication _____ D-8-1 Critical Thinking

Unit 7: _____ D-3-1 Documentation _____ D-4-1 Communication _____ D-8-1 Critical Thinking

Unit 8: _____ D-3-1 Documentation _____ D-4-1 Communication _____ D-8-1 Critical Thinking

Unit 9: _____ D-3-1 Documentation _____ D-4-1 Communication _____ D-8-1 Critical Thinking

Unit 10: _____ D-3-1 Documentation _____ D-4-1 Communication _____ D-8-1 Critical Thinking

D-3-1 Documentation

- 90-100%: Student presents documentation that is compelling and concise in displaying project performance

and the project schedule. It is apparent the project has been managed by using documentation tools.

- 80-89%: Student provides documentation that is fact-based in communicating activities and results. It is linked to many of the important elements of the project and presents information that is clear and useful.
- 70-79%: Student recognizes need for formal documentation, but there are some gaps in their use. Appropriate forms are used for those applications considered.
- 60-69%: Student takes a dim view of formal documentation, and, while using documents in the project, they are usually not those taught in the program.
- Below 60%: Student does not use forms that were taught in the program. Documentation is not evident in the project materials, and where it exists, it usually does not address the intent of formal project management.

D-4-1 Communication:

- 90-100%: Student uses communication mechanisms in a way that enriches the professionalism of the project. Student brings fact-based information to the project team to assimilate quickly, and for project stakeholders to comprehend the project status easily.
- 80-89%: Student applies communication methods to bring clarity to the project status and results in most process and performance categories.
- 70-79%: Student has an understanding of communication mechanisms and uses them to convey project status in several ways. There may be some gaps in the effectiveness of the methods, but they generally convey appropriate information.
- 60-69%: Student does not use communication instruments in a formal way and in some cases does not provide enough information to assess project.
- Below 60%: Student has not indicated they are aware of formal methods of communicating project status. They provide few, if any charts or graphs to summarize the results or timeline and schedule status of a project.

D-8-1 Critical Thinking:

- 90-100%: Students uses decision tools that were taught in the program for all decisions that require them. Student chooses between several methods and chooses the best one for any problem.

- 80-89%: Student makes use of decision-making tools that were taught throughout the program. Most choices reflect a methodical problem-solving approach to problem solutions. Methods are mostly used appropriately.
- 70-79%: Student has an understanding of evaluative techniques and occasionally uses some to draw conclusions. Depth of understanding is weak and frequency of use in this area is limited to one or two.
- 60-69%: Student does not demonstrate a complete understanding of decision-making in a complex environment. Some analysis tools are used, but they may be deployed incorrectly, or conclusions based on the techniques may be incorrect.
- Below 60%: Student has not indicated an ability to do critical thinking or make complex decisions. Student seems to be grasping at any solution that comes their way, rather than actually think, at all.

Course Evaluation and Grading

Evaluation Criteria Table

The final grades will be based on the following categories:

CATEGORY	WEIGHT
Labs	30%
Course Project Part 1	35%
Course Project Part 2	20%
Course Project Part 3	15%
Total	100%

Note: Students are responsible for abiding by the Plagiarism Policy.

Grade Conversion Table

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

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