

FUNDAMENTALS OF PROJECT MANAGEMENT
ACTIVITY/COURSE CODE: 5480

COURSE DESCRIPTION: The Fundamentals of Project Management is designed to introduce students to processes of initiating, planning, executing, monitoring/controlling, and closing projects. Students will learn the ten knowledge areas of project management (integration, scope, schedule, cost, quality, resources (human and physical), communication, risk, procurement and stakeholder management) through projects, simulations, and work-based scenarios. Successful completion of this course will lead toward Certified Associate in Project Management certification by PMI®.

OBJECTIVE: Given the necessary equipment, supplies, and facilities, the student will complete all of the following core standards successfully.

RECOMMENDED GRADE LEVEL:	10-12
COURSE CREDIT:	1 (120 hours) unit
PREREQUISITE:	None
COMPUTER REQUIREMENT:	One computer per student
RESOURCES AND MATERIALS:	See Materials/Resources

A. SAFETY

Effective professionals know the academic subject matter, including safety as required for proficiency within their area. They will use this knowledge as needed in their role. The following accountability criteria are considered essential for students in any program of study.

1. Review school safety policies and procedures.
2. Review classroom safety rules and procedures.
3. Review safety procedures for using equipment in the classroom.
4. Identify major causes of work-related accidents in office environments.
5. Demonstrate safety skills in an office/work environment.

B. STUDENT ORGANIZATIONS

Effective professionals know the academic subject matter, including professional development, required for proficiency within their area. They will use this knowledge as needed in their role. The following accountability criteria are considered essential for students in any program of study.

1. Identify the purpose and goals of a Career and Technology Student Organization (CTSO).

2. Explain how CTSOs are integral parts of specific clusters, majors, and/or courses.
3. Explain the benefits and responsibilities of being a member of a CTSO.
4. List leadership opportunities that are available to students through participation in CTSO conferences, competitions, community service, philanthropy, and other activities.
5. Explain how participation in CTSOs can promote lifelong benefits in other professional and civic organizations.

C. TECHNOLOGY KNOWLEDGE

Effective professionals know the academic subject matter, including the ethical use of technology as needed in their role. The following accountability criteria are considered essential for students in any program of study.

1. Demonstrate proficiency and skills associated with the use of technologies that are common to a specific occupation.
2. Identify proper netiquette when using e-mail, social media, and other technologies for communication purposes.
3. Identify potential abuse and unethical uses of laptops, tablets, computers, and/or networks.
4. Explain the consequences of social, illegal, and unethical uses of technology (e.g., piracy; cyberbullying; illegal downloading; licensing infringement; inappropriate uses of software, hardware, and mobile devices in the work environment).
5. Discuss legal issues and the terms of use related to copyright laws, fair use laws, and ethics pertaining to downloading of images, photographs, documents, video, sounds, music, trademarks, Creative Commons, and other elements for personal use.
6. Describe ethical and legal practices of safeguarding the confidentiality of business-related information.
7. Describe possible threats to a laptop, tablet, computer, and/or network and methods of avoiding attacks.

D. PERSONAL QUALITIES AND EMPLOYABILITY SKILLS

Effective professionals know the academic subject matter, including positive work practices and interpersonal skills, as needed in their role. The following accountability criteria are considered essential for students in any program of study.

1. Demonstrate punctuality.
2. Demonstrate self-representation.
3. Demonstrate work ethic.
4. Demonstrate respect.
5. Demonstrate time management.
6. Demonstrate integrity.
7. Demonstrate leadership.
8. Demonstrate teamwork and collaboration.
9. Demonstrate conflict resolution.
10. Demonstrate perseverance.
11. Demonstrate commitment.
12. Demonstrate a healthy view of competition.

13. Demonstrate a global perspective.
14. Demonstrate health and fitness.
15. Demonstrate self-direction.
16. Demonstrate lifelong learning.

E. PROFESSIONAL KNOWLEDGE

Effective professionals know the academic subject matter, including positive work practices and interpersonal skills, as needed in their role. The following accountability criteria are considered essential for students in any program of study.

1. Demonstrate effective speaking and listening skills.
2. Demonstrate effective reading and writing skills.
3. Demonstrate mathematical reasoning.
4. Demonstrate job-specific mathematics skills.
5. Demonstrate critical-thinking and problem-solving skills.
6. Demonstrate creativity and resourcefulness.
7. Demonstrate an understanding of business ethics.
8. Demonstrate confidentiality.
9. Demonstrate an understanding of workplace structures, organizations, systems, and climates.
10. Demonstrate diversity awareness.
11. Demonstrate job acquisition and advancement skills.
12. Demonstrate task management skills.
13. Demonstrate customer-service skills.

F. PROFESSIONAL DEVELOPMENT

Effective project managers understand the importance for professional development, as needed in their role. The following accountability criteria are considered essential for students in all of the Business programs of study.

1. Analyze the role of the project manager.
2. Research careers, career trends, compensation, and opportunities found using project management.
3. Research education and training requirements for a particular career.
4. Evaluate and apply the characteristics and skills of effective project managers.
5. Evaluate and apply the code of ethics and professional conduct within project management.
6. Create a résumé and cover letter.

G. PROJECT MANAGEMENT FUNDAMENTALS

Effective project managers demonstrate knowledge in the nature and scope of project management, as needed in their role. The following accountability criteria are considered essential for students in all of the Business programs of study.

1. Compare and contrast projects, programs, and portfolios.

2. Analyze various types of project life cycles, (i.e., predictive, iterative, incremental, hybrid, and agile.)
3. Analyze internal and external factors which determine the nature and scope of project management.
4. Identify the components of the project framework.
5. Create a business management plan to determine the effectiveness of a project.

H. INITIATE PROJECTS

Effective project managers demonstrate appropriate skills for initiating projects, as needed in their role. The following accountability criteria are considered essential for students in all of the Business programs of study.

1. Establish SMART goals and monitor progress.
2. Identify needs for projects to occur.
3. Research to identify project assumptions and constraints.
4. Explain the role of each of the stakeholders within the project.

I. PLANNING PROJECTS

Effective project managers demonstrate appropriate skills for planning projects, as needed in their role. The following accountability criteria are considered essential for students in all of the Business programs of study.

1. Analyze the importance of the “iron triangle”.
2. Develop project requirements, scope, and goals.
3. Create various tasks sets.
4. Estimate task resources and durations.
5. Justify deadlines and constraints to pre-defined tasks.
6. Analyze tasks’ durations to determine the critical path within the project.
7. Develop a timeline and a project flow chart for completing tasks.
8. Analyze project stakeholders and decision-makers.
9. Identify and evaluate risks.
10. Develop risk response plans for each risk.
11. Identify project costs.
12. Develop contingency plans.
13. Establish project budgets to include resources and assignments.
14. Establish communication and stakeholder engagement plans.
15. Establish a quality management plan.

J. EXECUTING PROJECTS

Effective project managers demonstrate appropriate skills for executing projects, as needed in their role. The following accountability criteria are considered essential for students in all of the Business programs of study.

1. Execute the creation of the deliverable, (i.e., products, services, or goods).

2. Execute the risk response plans as needed.
3. Execute contingency plans as needed.
4. Monitor and resolve conflict as identified between stakeholders and team members.
5. Collect project progress information, (e.g., status reports).

K. MONITOR AND CONTROL PROJECTS

Effective project managers demonstrate appropriate skills for monitoring and controlling projects, as needed in their role. The following accountability criteria are considered essential for students in all of the Business programs of study.

1. Perform earn-value analysis on various projects to determine differences in planned versus actual.
2. Based upon various analyses, create change requests for approval.
3. Monitor project information for risks, resource availabilities, and “scope creep”.
4. Execute quality assurance checks on project deliverables.
5. Execute customer acceptance testing.
6. Analyze communication and stakeholder engagements and adjust as needed.
7. Compare and contrast the planned budget versus the invoices paid for project control.
8. Monitor and adjust planned project components as needed.

L. CLOSING THE PROJECT

Effective project managers demonstrate appropriate skills for closing projects, as needed in their role. The following accountability criteria are considered essential for students in all of the Business programs of study.

1. Create an evaluative tool to assess project success.
2. Perform an official acceptance meeting to close a project.

M. INTEGRATING TECHNOLOGY WITHIN PROJECT MANAGEMENT

Effective project managers demonstrate appropriate skills for integrating project management software, as needed in their role. The following accountability criteria are considered essential for students in all of the Business programs of study.

1. Design and use various templates to create reports, budgets, plans, change control (requests), schedules, and lists (activities, risks, stakeholders).
2. Evaluate various software applications used for project management (e.g., MS Project, MS Excel, and Oracle Primavera).
3. Use various software to perform PERT analysis, Gantt charts, schedule network diagrams, and to track project information such as costs, duration, and work.
4. Use various software to filter, group, and create custom views of data.

[Course Materials and Resources](#)

[Course Academic Standards and Indicators](#)