

**FUNDAMENTALS OF PROJECT MANAGEMENT**  
**ACTIVITY/COURSE CODE: 5480**

**COURSE DESCRIPTION:** The Fundamentals of Project Management curriculum is designed to introduce students to processes of initiating, planning/executing, monitoring/controlling, and closing projects. Students will learn the nine knowledge areas of Project Management (integration, scope, time/cost, quality, human resources, risk/procurement management, and communication) through projects, simulations, and work-based scenarios.

**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 Carnegie unit

**PREREQUISITE:** Integrated Business Applications I and Business Principles and Management

**COMPUTER REQUIREMENT:** One computer per student

**RESOURCES AND MATERIALS:**

<http://www.pmi.org/pmief/learningzone/>

**TEXT:** [A Guide to the Project Management Body of Knowledge: \(Pmbok Guide,4e\)](#) by Project Management Institute

**A. SAFETY AND ETHICS**

1. Identify major causes of work-related accidents in offices.
2. Describe the threats to a computer network, methods of avoiding attacks, and options in dealing with virus attacks.
3. Identify potential abuse and unethical uses of computers and networks.
4. Explain the consequences of illegal, social, and unethical uses of information technologies, e.g., piracy, illegal downloading, licensing infringement, inappropriate uses of software, hardware, and mobile devices.
5. Differentiate between freeware, shareware, and public domain software copyrights.
6. Discuss computer crimes, terms of use, and legal issues such as copyright laws, fair use laws, and ethics pertaining to scanned and downloaded clip art images, photographs, documents, video, recorded sounds and music, trademarks, and other elements for use in Web publications.
7. Identify netiquette including the use of e-mail, social networking, blogs, texting, and chatting.
8. Describe ethical and legal practices in business professions such as safeguarding the confidentiality of business-related information.
9. Discuss the importance of cyber safety and the impact of cyber bullying.

## **B. EMPLOYABILITY SKILLS**

1. Identify positive work practices, e.g., appropriate dress code for the workplace, personal grooming, punctuality, time management, organization.
2. Demonstrate positive interpersonal skills, e.g., communication, respect, teamwork.

## **C. STUDENT ORGANIZATIONS**

1. Explain how related student organizations are integral parts of career and technology education courses.
2. Explain the goals and objectives of related student organizations.
3. List opportunities available to students through participation in related student organization conferences/competitions, community service, philanthropy, and other activities.
4. Explain how participation in career and technology education student organizations can promote lifelong responsibility for community service and professional development.

## **D. NATURE OF PROJECTS**

1. Define project scope and goals.
2. Identify requirements for each phase of project management.
3. Identify criteria used to determine the effectiveness of a project.
4. Work with team members to complete a project.
5. Respond positively to change.

## **E. PLANNING PROJECTS**

1. Develop project scope and goals.
2. Identify stakeholders and decision-makers.
3. Obtain tools and resources to accomplish the project.
4. Develop a project flow chart.
5. Develop a timeline for completing tasks.
6. Identify and evaluate risks.
7. Establish a project budget.
8. Secure resources and tools.
9. Communicate with other project members.

## **F. EXECUTING PROJECTS WITH MICROSOFT OFFICE PROJECT**

1. Understand file types.
2. Navigate the project interface.
3. Configure options within MS Office Project/Oracle Primavera software.

## **G. CREATING PROJECTS**

1. Establish a project in the software program.
2. Define properties and options.
3. Create and organize the task list.
4. Import data.
5. Modify and apply calendars.
6. Set scheduling options.

## **H. ESTIMATES AND DEPENDENCIES**

1. Enter task estimates.
2. Use a PERT analysis to estimate task duration.
3. Link and unlink tasks by using the Gantt chart view.
4. Link and unlink tasks by using the Network Diagram View.
5. Add lag or lead time to a linked task.

## **I. DEADLINES, CONSTRAINTS, AND CALENDARS**

1. Set deadlines, constraints, and task calendars for project members.
2. Communicate with project members.
3. Create and modify deadlines.
4. Create and modify constraints.
5. Create and modify task calendars.
6. Identify critical tasks.
7. Work with task driver.

## **J. BUDGETS AND RESOURCES**

1. Determine resources, assignments, and budgets.
2. Enter project budgets.
3. Analyze costs.
4. Develop contingency plans.

## **K. TASK TYPES AND SCHEDULING FORMULA**

1. Use task types and the scheduling formula.
2. Change variables and predict behavior.
3. Apply task types to produce predictable behavior.
4. Allow special situations with effort-driven scheduling.

## **L. PROJECT EFFECTIVENESS**

1. Evaluate project effectiveness related to processes, procedures, and production.
2. Improve project plan as needed.

## **M. CUSTOMIZING AND FORMATTING**

1. Format screen elements.
2. Create and modify templates.
3. Create and modify fields, tables, and formulas.
4. Create and modify filters and groups.
5. Create and modify custom views.

## **N. RESOURCE UTILIZATION**

1. Introduce resource utilization concepts.
2. View resource assignments, allocation, and utilization.
3. Manage resource availability.
4. Optimize and level resource assignments.

## **O. TRACKING PROGRESS**

1. Work with baselines.
2. Enter duration updates.
3. Enter work updates.
4. Enter cost updates.
5. Discover variances.
6. Troubleshoot.

## **P. REPORTS**

1. Select, edit, and create basic reports.
2. Configure print and page setup options.
3. Export reporting data.
4. Create and modify visual reports.

## **Q. MULTIPLE PROJECTS**

1. Create links between projects.
2. Calculate single or multiple paths.
3. Share resources and analyze resource utilization across multiple projects.