

# IT 0060 - PROJECT MANAGEMENT CONCEPTS AND SOFTWARE

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## Catalog Description

Formerly known as CIS 136

Advisory: Completion of BUS 252 and/or IT 55 with grade of "C" or better  
Hours: 72 (54 lecture, 18 laboratory)

Description: Explores Project Management concepts and terminologies along with the use of Microsoft Office Project and other project management tools through discussions, hands-on exercises and classroom learning experiences. Includes WBS, budgeting, and resource allocation and other important PM topics such as Scope and Project Team Development. Helps prepare students to use the software package in their daily duties as a project manager or project assistant. Helps prepare students to take the Certified Associate in Project Management - CAPM exam from PMI or the CompTIA Project+ exam. (not transferable)

## Course Student Learning Outcomes

- CSLO #1: Research, analyze and evaluate information to solve business problems using project management concepts and software.
- CSLO #2: Design and produce project management solutions incorporating current trends, security, and best practices.
- CSLO #3: Employ project management concepts and terminology in professional communication.
- CSLO #4: Demonstrate marketable project management career skills.

## Effective Term

Fall 2023

## Course Type

Credit - Degree-applicable

## Contact Hours

72

## Outside of Class Hours

90

## Total Student Learning Hours

162

## Course Objectives

Lecture Objectives:

1. Define what constitutes a Project
2. Describe the Project Management processes.
3. Define components of the Project Management lifecycle.
4. Analyze how to work with multiple projects in a project portfolio and monitor resource usage across projects.
5. Explore tools used to manage projects.

Laboratory Objectives:

1. Set-up and monitor items in the Microsoft Project environment including resources, tasks and project plans.
2. Track a project plan and evaluate for outlier items.
3. Generate project progress reports for budgeting and schedules.

## General Education Information

- Approved College Associate Degree GE Applicability
- CSU GE Applicability (Recommended-requires CSU approval)
- Cal-GETC Applicability (Recommended - Requires External Approval)
- IGETC Applicability (Recommended-requires CSU/UC approval)

## Articulation Information

- Not Transferable

## Methods of Evaluation

- Objective Examinations
  - Example: Students will be graded on their understanding of concepts through the chapter review questions and written exam questions. Sample Question 1) Tasks that represent major events or decision points in a project such as the completion of a phase should be marked as a \_\_\_\_\_. a. Threshold b. Milestone c. Subtask d. None of the above Answer: b Sample Question 2) You would create a \_\_\_\_\_-to-\_\_\_\_\_ task relationship between two tasks to make sure the start date of predecessor task determines the start date of the successor task. Answer: Start-to-start
- Problem Solving Examinations
  - Example: Students will be given instructions - Download and open the Microsoft Project file Resource Analysis from the LMS. Open the Project Information Statistics window and capture an image using your Snipping tool, paste the image into a Word document. Examine other areas of the project file to analyze why the Cost of the project is so far over and why the work and duration are also over the planned time. Write an analysis below the image explaining your findings and giving recommendations for correcting the problems. Submit your answers to the Assignment link in the LMS prior to class. At the following class meeting the instructor will guide the students through a discussion on reviewing over allocated resources and help them notice that because 2 tasks of "Accept Applications" were set to run for 5 days and assigned to the same employee, it shows the employee spending 80 hours of work and 10 to do this when in reality they only spend a small amount of time each day and both tasks can run concurrently. Adjusting the % and changing the predecessor fix the problem. Students will be awarded full points for the assignment they submitted, even if they did not find all the key errors. It is a learning process and the same concept can be tested later in the class.
- Projects
  - Example: Students will complete the planning and setup of a project of their choosing and provide a working file for their final project. Students will submit several smaller parts of the final project throughout the semester for instructor feedback and assistance such as a project overview, charter, WBS and resource list. Grading will be based on points for the various submissions of project parts and a grading rubric will be provided with the instructions of each part.
- Skill Demonstrations
  - Example: Students will be graded on the weekly hands-on labs for completion, correctness, and clarity. Sample: complete the end-

of-chapter case problem by creating a Work Breakdown Structure (WBS) for the provided sample project by listing tasks, adding start and finish dates, predecessors and resources in Microsoft Project. Grading will be based on a rubric provided by instructor.

## Repeatable

No

## Methods of Instruction

- Laboratory
- Lecture/Discussion
- Distance Learning

Lab:

1. After students read the assigned chapter on "Building a WBS" and complete the review questions, the instructor will lead students through a demonstration of the skills for that chapter and a discussion on the key concepts of the week. (Lab Objective 1)  
Example – Post to the class discussion a top-level Work Breakdown Structure for the project that will be used for the final project. Instructor will grade based upon rubric provided with assignment instructions and provide feedback as needed.

Lecture:

1. After students read the assigned chapter on "Building a WBS" and complete the review questions, the instructor will lead students through a demonstration of the skills for that chapter and a discussion on the key concepts of the week. Example – Discuss the importance of planning the tasks for a project and determining how the use of predecessors will keep project flow tracked. (Lecture Objective 2)

Distance Learning

1. The LMS can be used to initiate discussion between the instructor and students, as well as, student to student like those that would take place in an on-ground course. (Lecture Objective 3) Example – Following an instructor lecture on project management and program management, students will explain the difference between project management and program management. Students will also discuss the following: How would having a shared server based project portfolio help with the allocation of resources throughout the organization. Once you have posted your replies review what other students posted and comment on at least 3 other students posts, be sure to show in your response that you read their post completely. Instructor will monitor responses and provide feedback to students throughout the exercise.

## Typical Out of Class Assignments

### Reading Assignments

Students will read one chapter from the text each week prior to the class meeting to familiarize themselves with terminology and concepts and then complete the required chapter review questions and participate in concept review discussion 1. Example: Read the chapter titled "Project Basics" and complete topic questions provided by the instructor. 2. Example: Read the chapter titled "Task Assignments" and complete the assigned lab project.

## Writing, Problem Solving or Performance

Students will complete a set of chapter review questions for each chapter. Example: True or False - Project resources include such items as personnel, budgets and charts. Students will complete hands-on lab computer assignments applying the weekly concepts. Example: Open the week 1 project file and find the tasks assigned to the lead technical advisor.

## Other (Term projects, research papers, portfolios, etc.)

Students will complete the setup of a Microsoft project of their choosing and provide a working file for their final project.

## Required Materials

- Microsoft Project 2019 Step by Step
  - Author: Chatfield
  - Publisher: Microsoft Press Store by Pearson
  - Publication Date: 2019
  - Text Edition: 1st
  - Classic Textbook?: No
  - OER Link:
  - OER:
- PMBOK® Guide – Seventh Edition
  - Author: Project Management Institute
  - Publisher: Project Management Institute
  - Publication Date: 2021
  - Text Edition: 7th
  - Classic Textbook?: No
  - OER Link:
  - OER:

## Other materials and-or supplies required of students that contribute to the cost of the course.

Students should bring a 10 GB or larger USB drive for moving files from home to school and back unless they have high-speed internet access for transferring files directly.