Course Design Document (Sample)

Course Number/Name:	**Development Started:**	**Target Delivery:**
Course Instructor:	**Email:**	**Phone:**
Instructional Designer: *Leave Blank if Unknown*	**Program Chair:**	

Course Learning Objectives: *In the space below, please write your course learning objectives. Course learning objectives should **describe what the students will be able to do after completing this course.***

By the end of this course, you will be able to:

1. Explain scheduling, estimating, and earned value management, and why these are critical for project success.
2. Apply project planning and control practices to address project management activities and issues.
3. Select the appropriate set of project planning and control tools for application on technical projects.
4. Interpret earned value management terminology, variables, and concepts, and their implications to a technical project management task.
5. Illustrate how project managers can effectively carry out their planning and control responsibilities.
6. Apply the appropriate tools and techniques for exercising project planning and control in an earned value environment.

Assessment Strategy: *In the space below, please describe how you plan to assess whether or not your students are achieving the course learning objectives. Assessments may include, but are not limited to, discussion activities, problem sets, group and/or individual projects, research papers, presentations, and exams.*

- Two major group projects – one at the midpoint of the course (Module 7) and one at the end of the course (Module 14). In each of these projects, students will be required to work in teams to effectively apply the tools and techniques presented in each half of the course to two real-world scenarios involving project management (Module 7) and earned value management (Module 14). Student teams will present their projects to the class, and students will be required to critique other teams' presentations and their approaches to managing the fictional projects presented in the scenarios. Each team will also be required to submit a written report outlining their project management and earned value management strategy. I will grade the presentations and written reports using rubrics, which will be distributed when each project is assigned. (40% of total grade / 20% per project)
- Each module will contain a graded assignment that students will complete individually. Weekly assignments will vary depending on module learning objectives. (30% of total grade)
- Weekly discussion activities - students will be asked to participate in asynchronous weekly discussions on topics related to the module learning objectives. (15% of total grade)
- Graded quizzes/assessments will be given in Modules 3, 6, 10, and 13. These will assess students' achievement of the learning objectives in modules 1-3, 4-6, 8-10, and 11-13 respectively. (15% of total grade)
- Brief, ungraded self-check activities and quizzes will be given in each module.

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Module Outline: *In the table below, please 1) provide a working title for each module, 2) write a brief description of what you plan to cover in that module 3) note how your assessment strategy will be implemented in that module, and 4) note the course learning objective(s) that module aligns with.*

Module #	*Module Working Title*	*Module Description*	*Assessments*	*Course Learning Objective Alignment (#)*
1	Project Management in an Earned Value Environment	This module will cover the course introduction as well as a review of project management. Additionally the module will address the Work Breakdown Structure (WBS), the Organizational Breakdown Structure (OBS), and how those two structures are blended to establish the Responsibility Assignment Matrix (RAM).	First team project assigned	1, 2, 6
2	Schedule Overview	This module will cover the nature and purpose of scheduling and its importance to a project and project management. Also discussed will be the various scheduling types, the application of network logic, the Precedence Diagramming Method (PDM), scheduling devices, and the use of the Critical Path Method (CPM).		1, 2
3	Development of an Integrated Master Schedule	This module will cover resource loading / leveling, the development of high quality and useful schedules, and the attendant scheduling health checks. Also covered will be top-down and bottoms-up planning, the Integrated Master Plan (IMP), as well as scheduling granularity, schedule approaches, and determination of the proper level of granularity in the schedule.	Graded quiz/assessment of modules 1-3	1, 2, 3
4	Baseline Scheduling and Statusing a Schedule	This module will cover defining and establishing a traceable baseline schedule and methods for updating schedules using various statusing techniques. Also covered will be change management and the approach for resolving negative slack in the schedule.	First team project draft presentation due	1, 2
5	Schedule Risk Assessment and Performance Measurement	This module will cover the relationship between risk management and the Earned Value Management System (EVMS). Also covered will be the assessment of schedule risk and how scheduling is performed in an EVM environment.		1, 4

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6	Cost Estimating	This module will cover the topic of estimating, the estimating process, types of estimates, and the development of cost estimates. Also covered are the learning curve approach to estimating manufacturing costs, the assessment of cost risk, and how estimates are reviewed.	Graded quiz/assessment of modules 4-6	1, 2, 3
7	Application of Project Management Fundamentals	In this module, student teams will record and upload their group presentations as assigned at the beginning of the course. This is a comprehensive demonstration of what students have learned in the first half of the course. Students will be required to view and substantively critique their classmates' presentations by the end of the module. I will also ask follow-up questions and provide feedback to student teams' presentations, and to the critiques.	First team project due	1, 2, 3
8	Introduction to the Earned Value Management System	This module will cover the fundamentals of Earned Value Management (EVM), the elements that comprise the Earned Value Management System (EVMS), and the history of EVM and its relevance in the current project management environment. Also covered are the requirements for EVM for all parties to include Government agencies in general, DoD, and industry as well as the actual implementation of an EVMS.	Second team project assigned	2, 4
9	Earned Value Basics	This module will cover the integration of scope, schedule and budget as well as earned value and the techniques for measuring accomplishment. Also covered will be the various uses of earned value by industry and the earned value tools and engines that serve to bring the elements of earned value together to accomplish coherent project management.		2, 3, 4
10	Earned Value Baseline and Execution	This module will cover establishing a performance measurement baseline (PMB) and the collection of actual costs. It will also review cost and schedule integration and the conduct of an Integrated Baseline Review (IBR).	Graded quiz/assessment of modules 8-10	1, 3, 4, 5

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11	Earned Value Performance Measurements and Analyses	This module will cover earned value types for performance measurement, performance measurement calculations, and the Estimate at Completion (EAC). It will examine variance analysis, baseline revisions, and change control as well as compliance, maintenance, and surveillance activities for an EVMS.		4, 5, 6
12	Baseline Revision, Change Control, and Subcontractor Management	This module will cover baseline revisions, change control, and the budget baseline log. Also covered will be subcontract and procurement management in an EVM environment.	Second team project draft presentation due	4, 5, 6
13	Implementation of the Project Management Process	This module will cover the implementation of the project management process to include compliance, best practices, roles, and responsibilities.	Graded quiz/assessment of modules 11-13	5, 6
14	Project Management and Earned Value Application and Assessment	In this module, student teams will record their presentations of the second major course project, which requires them to apply all material covered in the second half of the course, and upload these to the course site. Students will then watch and critique each team's presentation, and I will provide a summary analysis of the presentations, as well as a course wrap-up discussion.	Second team project due	4. 5. 6