COURSE OUTLINE

Section 1:

Course Title: Project Management

Course Code: BUSI-1500

Course Description: Manage technology-based projects. Students develop project charters, work breakdown structures, task and resources schedules. Monitoring and controlling of project scope, time, resources, costs, and quality are emphasized. Use of project management software as a tool to manage projects is also covered.

Grade Scheme: ☐ Pass/Fail ☒ Percentage Minimum Pass Mark: 60% (Some programs require a mark greater than 60% to meet graduation requirements).

Course Value: Outcome hours OR 3 Credit(s) 45 Class Hours

Pre-requisites: NONE

Co-requisites: NONE

Section 2:

Learning Outcomes and Competencies

1. Apply project management techniques and concepts to ensure successful completion of a project.

1.1 Describe the four phases of the project life cycle.

1.2 Describe the systems development life cycle (SDLC) and its importance for managing technology projects.

1.3 Describe the processes associated with initiating a project.

1.4 Identify project stakeholders.

1.5 Collect and document project requirements.

1.6 Write a project proposal.

1.7 Develop a scope management plan.

1.8 Generate a project charter.

1.9 Describe the interplay among scope, time, cost, and quality of a project.

1.10 Implement a change management process.

1.11 Apply principles of project integration management, cost management, quality management, human resource management, and communications management.

2. **Develop project schedules for on-time completion.**

    2.1 Develop a work breakdown structure (WBS).

    2.2 Identify resource requirements for each task on the WBS.

    2.3 Sequence tasks on the WBS.

    2.4 Calculate early-start and early-finish dates for all tasks.

    2.5 Calculate project finish date.

    2.6 Identify the critical path for project completion.

    2.7 Calculate free and total-slack for each task on the WBS.

    2.8 Determine milestones.

    2.9 Prepare status reports to meet stakeholder needs.

3. **Develop Gantt charts to aid in project management**.

    3.1 Schedule tasks using Gantt charts.

    3.2 Highlight critical tasks on Gantt charts.

    3.3 Utilize Gantt charts to construct resource-loading charts for resource management.

4. **Control costs to complete project within budget.**

    4.1 Describe important finance terms and principles for project management.

    4.2 Compare and contrast the types of cost estimates.

    4.3 Create detailed cost estimates for projects.

    4.4 Develop project budgets based on WBS.

    4.5 Explain the main processes in procurement management for projects.

    4.6 Compare and contrast the different types of procurement contracts.

    4.7 Monitor costs to avoid overruns.

5. **Manage project quality to meet stakeholder expectations.**

    5.1 Describe the importance of project quality management.

    5.2 Describe the importance of quality assurance.

    5.3 Control project quality using tools such as Pareto analysis, statistical sampling, and quality control charts.

6. **Utilize project management software to control projects**.

    6.1 Enter project information including WBS, task durations, resources, and costs.

6.2 Display project information using a variety of methods available in the project management software.

6.3 Perform critical path analysis.

6.4 Perform various cost analyses.

6.5 Apply the principles of resource leveling to deal with over-allocated resources.

6.6 Control project quality.

6.7 Prepare project and status reports.

Section 3:

Assessment Categories:

Assignments	30%
Case Study	30%
Tests and exams	30%
Professionalism	10%

Research Component?   ☐ Yes ☒ No

Section 4:
(For administrative use only)

Is this course new?   ☐ Yes ☒ No

Is this course replacing an existing course(s)?   ☐ Yes ☒ No

If this course is replacing another, please record the name and code of the old course:
None

Course equivalents: EET-1042

Note: See Quality Procedure A01 for more details.

Catalog Year of Original Course Implementation: 2011

Catalog Year of Current Version Implementation: 2015

Revision level: 1   **Version:** 2   **Date:** Nov/14   **Authorized by:** mlgj

Accreditation and or Supporting Documents: CCTT National Technology Benchmarks: General Program Criteria

Additional Information: None

Subject matter expert(s):   Doug Kelly, Lino Forner

Approved by: (Program Manager)

Natalie Mitton   Date Approved: **2011-02-15**

Approved by: (Curriculum Consultant)

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