J. Sargeant Reynolds Community College Course Content Summary

Course Prefix and Number: <u>BUS 206</u> Credits: <u>3</u>

Course Title: Advanced Project Management

Course Description:

Provides students with in-depth knowledge and advanced skills and techniques necessary to lead projects assigned to project managers. Covers project initiating, project planning, project executing, project monitoring and controlling, and project closing. Prerequisite: BUS 204. Lecture 3 hours. Total 3 hours per week. 3 credits

General Course Purpose

The purpose of the advanced project management course is to develop additional in-depth competencies in such topics as project charter creation, work breakdown structure (WBS) design, risk management, cost budgeting, scheduling tools (e.g., network diagrams and Gantt charts), team development and motivation, stakeholder management, earned value management (EVM), and other pertinent project management skills.

Course Prerequisites and Co-requisites:

Prerequisite: BUS 204

Student Learning Outcomes:

Upon completing the course, the student will be able to

- a. Prepare a complete project management plan including the following components: business case, project charter, work breakdown structure (WBS), duration estimates, critical path, budget, baseline, earned value management (EVM), team member human resource management and motivation, stakeholder management, risk management, communication plan development, change management plan, and project closing procedures.
- b. Define and develop a project management plan
- c. Discuss how individual project fit with an organization's strategic plan, programs, and overall project portfolio
- d. Define project scope
- e. Develop a project charter
- f. Develop work breakdown structures (WBS)
- g. Understand network diagramming concepts and techniques for project scheduling
- h. Estimate project activity durations
- i. Discuss estimation techniques such as forward-pass and backward-pass for project scheduling
- j. Identify the project critical path
- k. Develop project budgets and baselines
- I. Utilize techniques to control scope, cost, duration, quality, and risk
- m. Identify stakeholders and know techniques for managing stakeholders
- n. Define project activities
- o. Sequence project activities
- p. Planning project communication distribution of project information

- q. Use tools, and techniques necessary to complete project work activities and work packages
- r. Discuss the human resource management techniques for project management
- s. Identify methods for communicating with and working with project stakeholders
- t. Understand the process of selecting vendors and awarding procurement contracts
- u. Understand methods for monitoring, tracking, and reviewing the progress and performance of a project
- v. Identify how to perform project change management
- w. Use earned value management (EVM) to measure and monitor project performance and update project completion estimates
- x. Understand how project deliverables are accepted as completed
- y. Describe the interrelationships of the triple-constraints of project management: scope, schedule/cost, and quality
- z. Develop basic risk analysis plans and risk response plans
- aa. Discuss and use project management decision making tools, techniques, and formulas

Major Topics to be Included:

- Project management planning
- Strategic planning
- Organizational structure
- Project portfolio management
- Project scope
- Project charter
- Work breakdown structures (WBS)
- Network diagramming concepts and techniques (Gantt, PERT, AOA, AON)
- Forward-pass and backward-pass for project scheduling
- Critical path
- Project budgets and baselines
- Control scope, cost, duration, quality, and risk
- Managing stakeholders
- Defining project activities
- Sequencing project activities
- Estimating project activity durations
- Project communication management
- Work activities and work packages
- Human resource management techniques specific to project management
- Vendor selection
- Procurement contracts
- Monitoring, tracking, and reviewing the progress and performance of a project
- Project change management
- Earned value management (EVM)
- Project performance and completion estimates
- Project deliverable acceptance
- Triple-constraints of project management: scope, schedule/cost, and quality
- Risk analysis and risk response plans
- Additional project management decision making tools, techniques, and formulas

Effective Date/Updated: June 25, 2024