

Course Title & Number: ____Project Management – CSC 252_____

Competency Area: **SCIENTIFIC REASONING** (Goal: Students will become familiar with science as a method of inquiry. Students will develop a habit of mind that uses quantitative skills to solve problems and make informed decisions.)

Faculty submitting the Learning Outcomes: ____Sandra Eddy_____

Date: ____9/15/13_____

[Instructions: *Please match the Learning Outcomes in the left hand column to those of the course you are submitting for Gen Ed approval. List the corresponding course outcomes in the right hand column to indicate a match.***]**

BOR TAP's Learning Outcomes	Corresponding Outcomes for Course Named Above
1. Explain the methods of scientific inquiry that lead to the acquisition of knowledge. Such methods include observations, testable hypotheses, logical inferences, experimental design, data acquisition, interpretation, and reproducible outcomes.	<ul style="list-style-type: none">• Demonstrate an understanding and application of the nine project management knowledge areas – project, integration, scope, time, cost, quality, human resource, communications, risk, and procurement management, following the PMBOK framework.• Demonstrate an understanding and application of the five process groups of information technology projects – initiating, planning, executing, controlling, and closing.
2. Apply scientific methods to investigate real-world phenomena, and routine and novel problems. This includes data acquisition and evaluation, and prediction.	<ul style="list-style-type: none">• Apply methods to appraise and justify decisions (utilizing case studies) based on data analysis, methodologies and strategies such as, project selection methods , work breakdown structures WBS, network diagrams, critical path analysis and critical chain scheduling, cost estimation, earned value management EVM, quality management, team building and communications.• Utilize PM software & methodologies for analysis and evaluation of management problems, including, analysis of PERT charts & Gantt charts, understanding of task relationships, application and analysis of critical path (network diagramming using AOA and AON), leveling over allocations, and analysis of cost information.• Use the Internet, software, methodologies, data, and other sources for personal, technical, and academic research.
3. Represent scientific data symbolically, graphically, numerically, and	<ul style="list-style-type: none">• Utilize PM software & methodologies for analysis and evaluation of management problems, including, analysis of PERT charts & Gantt

verbally.	charts, understanding of task relationships, application and analysis of critical path (network diagraming using AOA and AON), leveling over allocations, and analysis of cost information.
4. Interpret scientific information and draw logical references from representations such as formulas, equations, graphs, tables, and schematics.	<ul style="list-style-type: none"> Utilize PM software & methodologies for analysis and evaluation of management problems, including, analysis of PERT charts & Gantt charts, understanding of task relationships, application and analysis of critical path (network diagraming using AOA and AON), leveling over allocations, and analysis of cost information.
5. Evaluate the results obtained from scientific methods for accuracy and/or reasonableness.	<ul style="list-style-type: none"> Apply methods to appraise and justify decisions (utilizing case studies) based on data analysis, methodologies and strategies such as, project selection methods , work breakdown structures WBS, network diagrams, critical path analysis and critical chain scheduling, cost estimation, earned value management EVM, quality management, team building and communications.
	<p><i>Additional Outcomes</i></p> <ul style="list-style-type: none"> Effectively utilize MS Project for the following Project Management skills: <ul style="list-style-type: none"> Entering tasks, durations, establishing dependencies, creating calendars, assigning resources and costs, and updating progress