Course Title & Number: ____Systems Analysis and Design – CSC 250_____

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.	• Describe the major alternative methodologies used in developing information systems and the considerations involved in choosing which methodology to use. • Describe components of System Analysis and Design terminology and apply this knowledge to the manner computing effects the world around us.
2. Apply scientific methods to investigate real-world phenomena, and routine and novel problems. This includes data acquisition and evaluation, and prediction.	• Construct and interpret a variety of system description documents, including physical and logical data-flow diagrams, entity-relationship diagrams, as well as screen, form, and report layouts. • Communicate effectively, in both written and oral forms, systems specifications, and to be persuasive in these presentations. • Prepare and use various information-gathering techniques for eliciting user information requirements and system expectations.
3. Represent scientific data symbolically, graphically, numerically, and verbally.	• Construct and interpret a variety of system description documents, including physical and logical data-flow diagrams, entity-relationship diagrams, as

	well as screen, form, and report layouts. • Produce the requisite systems documentation with clarity and completeness at each point in the analysis and design of an information system. • Prepare and use various information-gathering techniques for eliciting user information requirements and system expectations.
4. Interpret scientific information and draw logical references from representations such as formulas, equations, graphs, tables, and schematics.	• Construct and interpret a variety of system description documents, including physical and logical data-flow diagrams, entity-relationship diagrams, as well as screen, form, and report layouts. • Analyze a need for information and to develop an appropriate strategy to solve the problem and provide the required information service.
5. Evaluate the results obtained from scientific methods for accuracy and/or reasonableness.	• Construct and interpret a variety of system description documents, including physical and logical data-flow diagrams, entity-relationship diagrams, as well as screen, form, and report layouts. • Analyze a need for information and to develop an appropriate strategy to solve the problem and provide the required information service.
	Additional Outcomes • Understand the importance and industry directions of Project Management and industry certification in this business line. • Develop a personal plan for improving yourself to become a better systems professional or user/manager of a system, by understanding your own strengths and weaknesses and matching those with the critical success factors of a modern business manager.