BAKER COLLEGE
STUDENT LEARNING OUTCOMES

CIS 2510 System Development Methods

3 Semester Hours

Student Learning Outcomes & Enabling Objectives

1. Explore the development of information systems and their methodologies.
   a. Explain information systems.
   b. Identify different methodologies.
   c. Explain the need of an orderly, structured methodology.
   d. Explain the different phases in system planning.

2. Explain project management.
   a. Explore the role of project management.
   b. Describe and explain the functions and responsibilities of project team personnel.

3. Research different project and software tools.
   a. Compare different software tools.
   b. Explain which tools are best for certain systems development.
   c. Demonstrate the use of software tools.
   d. Apply software tools to development of systems to solve practice problems and case studies.

4. Explain the system development lifecycle and prototyping.
   a. Describe the implementation and conversion procedures for both the life cycle and prototyping approaches.
   b. Explain different phases of life cycle planning.
   c. Explain the different types of prototyping.

5. Explain the major tools and methods of systems analysis.
   a. Explain the use of data flow diagrams, flowcharts, data dictionaries, data structure diagrams, modules, reports, and questionnaires.
   b. Demonstrate the ability to identify, describe, create, and use these major tools.

6. Develop a project using system development methodology.
   a. Complete an introductory-level systems development project.
   b. Explain the reasons for the methods used.

Big Ideas and Essential Questions

Big Ideas

- Structured, object-oriented, and agile systems development methods.
- Project management tools and techniques
- IT business strategies in a competitive environment
- Internet business strategies and relationships, including B2C and B2B

Essential Questions

1. What is systems analysis and design's information technology role in today's dynamic business environment?
2. How do systems projects get started and how is a project proposal evaluated to determine its feasibility?
3. What are the requirements modeling process used to design and develop the system?
4. What are the data and process modeling techniques that analysts use to show how the system transforms data into useful information?
5. How are object modeling techniques used by analysts to create a logical model?
6. How do we ensure successful development strategies for the new system, and plan for the transition to the systems design phase?
7. Why is it important to design an effective user interface, and be able to handle data security and control issues?
8. What data design skills are necessary for a systems analyst to construct the physical model of the information system?

These SLOs are approved for experiential credit.

Effective: Fall 2017