Department Master Syllabus
Camden County College
Blackwood, New Jersey

Course Title: Systems Analysis & Design

Course Number: CIS-231

Department/Program Affiliation: Computer Information Systems

Date of Review:
(This Department Master Syllabus has been examined by the program/department faculty members and it is decided that no revision is necessary at this time.)

Date of Last Revision: November, 2018
(This Department Master Syllabus has been examined by the program/department faculty members and it is decided a change requiring a revision is necessary at this time.)

N.B. A change to the course materials alone (textbooks and/or supplementary materials) may not constitute a revision. Any other change to the items listed below on this form is considered a revision and requires approval by the program faculty at a Program/Department Meeting and by the division at a Chairs and Coordinator Meeting.

Credits: 3

Contact Hours: **Lecture** 3 **Lab** 0 **Other** 0

Prerequisites: CSC-111 or CSC-171

Co-requisites: None

Course Description: This course will provide students with the conceptual, technical and managerial foundations needed for effective systems analysis, design and implementation. Students will learn both traditional (structured) and object oriented approaches to analysis and design, including data modeling techniques such as data flow, entity relationship, use case, class, sequence, activity and state diagrams using tools such as Microsoft Visio. Students will also learn basic project management skills as it relates to adaptive and predictive projects typical in systems development. This course is taught in a room with computers. Students benefit by interacting with the lecture material. However, there are no graded or mandatory student computer exercises required during the class lecture. All hands-on assignments are completed outside of class.

Course Student Learning Outcomes: (Cognitive, Psychomotor, Affective Domains)

Upon completion of this course, the student will be able to:

1. Design and develop information systems applications as assessed by creating and designing a computerized solution for a business/organization information systems problem through projects, tests, and assignments.

2. Develop systems documentation for each step in the systems development life cycle (SDLC) as assessed by documenting all steps of the development process using various tools through projects, tests, and assignments

3. Analyze an organizational need for data as assessed by collecting through interviews and problem statements the data requirements for a project or assignment

4. Interview user personnel using various information gathering techniques and tools as assessed by collecting information and data through interviews and data evaluation to determine user requirements through projects, tests, and assignments

5. Model systems requirements and systems design as assessed by tests, class participation, projects, homework assignments

General Education Student Learning Outcomes (if applicable): NA

Course Outline:

1. Project Planning and Management
2. Investigating Systems Requirements
3. Use Case Modeling
4. Domain Class Modeling
5. Activity, Sequence and State Modeling
6. Systems Design
7. User and System Interface Design
8. Design Modeling
9. Use Case Realization
10. Databases, Controls and Security
11. Systems Implementation

Course Activities: (A brief sentence or two about the format of the course, certain requirements, etc.)
Course activities include formal and informal lecture and computer lab sessions. Students will be introduced to the course modeling tools (MS Visio). Throughout the semester, students will be guided through a hands-on case study to develop their system design, in addition to weekly assignments and quizzes.

Assessment of Student Learning Outcomes: The student will be evaluated on the degree to which student learning outcomes are achieved. A variety of methods may be used such as tests, class participation, projects, homework assignments, etc. (There must be some evidence that the learning outcomes have been achieved.)

1. Create and design a computerized solution for a business/organization information systems problem through projects, tests, and assignments
2. Document all steps of the development process using various tools through projects, tests, and assignments
3. Collect through interviews and problem statements the data requirements for a project or assignment
4. Collect information and data through interviews and data evaluation to determine user requirements through projects, tests, and assignments.

Course Materials:

Textbook(s): The titles will be assigned the first day of class
Supplemental Materials: These will be assigned the first day of class