# JAMESTOWN COMMUNITY COLLEGE State University of New York

# INSTITUTIONAL COURSE SYLLABUS

Credit Hours: 3

Course Title: Introduction to Systems Analysis

Course Abbreviation and Number: CSC 2540

Course Type: Lecture

**Course Description:** Systems analysis and design determines the direction and scope of information system projects. Upon course completion, students will demonstrate the ability to discuss solutions to business problems, interviewing techniques, process analysis, the system life cycle, construction of data flow diagrams, interface design options, and project management. Students will apply the concepts to real problem situations.

Prerequisite: CSC 1570 or CSC 1760.

<b>General Education Requirements Met</b>	
JCC	
Applied Learning	

#### **Student Learning Outcomes:**

Students who demonstrate understanding can:

- 1. Design interview questions and paper questionnaires to gather information concerning project requirements.
- 2. Plan a project using network diagrams, Gantt charts, and project management software.
- 3. Use data flow diagrams to model user information requirements.
- 4. Create a basic system model through data flow diagrams and entity-relationship diagrams
- 5. Design input and output screens and reports.
- 6. Effectively apply knowledge and skills to a real-world experience, creative project, or independent intellectual investigation. [JCC Gen Ed Applied Learning]
- 7. Thoughfully reflect on connections between concepts studies in the clasroom and insights gained from an applied learning experience/project. [JCC Gen Ed Applied Learning]

## **Topics Covered:**

- Foundations for Systems Development
  - The systems development environment
  - Managing the information systems project
- Systems Planning and Selection
- Systems Analysis
  - Determining systems requirements
  - Process modeling
    - Conceptual data modeling

- Selecting the best alternative design strategy
- Systems Design
  - Designing the human interface
  - Designing databases
  - Rapid Application Development
- Systems implementation and operation
- Systems implementations
  - Systems operation
  - Objected oriented analysis and design

## **Information for Students**

- Expectations of Students
  - <u>Civility Statement</u>
  - <u>Student Responsibility Statement</u>
  - <u>Academic Integrity Statement</u>
- <u>Accessibility Services</u> Students who require accommodations to complete the requirements and expectations of this course because of a disability must make their accommodation requests to the Accessibility Services Coordinator.
- <u>Get Help: JCC & Community Resources</u>
- <u>Emergency Closing Procedures</u>
- Course grade is determined by the instructor based on a combination of factors, including but not limited to, homework, quizzes, exams, projects, and participation. Final course grade can be translated into a grade point value according to the following:

• Veterans and active duty military personnel with special circumstances (e.g., upcoming deployments, drill requirements, VA appointments) are welcome and encouraged to communicate these to the instructor.

Effective Date: Fall 2021