

# Course Abstract

*If you need accommodations due to a disability, contact Disability Services in Edison Hall Room 100, 732.906.2546.*

*To foster a productive learning environment, the College requires that all students adhere to the Code of Student Conduct which is published in the college catalog and website.*

**Course ID and Name:** CSC225 – Systems Analysis and Design

**Department:** Business and Computer Science

Chairperson or Course Coordinator: Dr. Aslihan Cakmak

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**Prerequisites:** CSC106 or CSC133 or CSC161

**Co-requisites:** None

## Course Description:

Provides an introductory systems analysis and design course for computer programmers, systems analysts and business analysts. Presents an overview of information systems and the systems development life cycle. Stresses techniques for systems development using case tools and methodologies including structured and object oriented methods for describing data modeling, process modeling, file and database design, input and output design, and programming specifications. Also surveys other important skills including fact-finding, communications, and project management.

**General Education Status:** N/A

**Credits:** 3      **Lecture Hours:** 2      **Lab Hours:** 3

## Learning Outcomes:

**Upon successful completion of this course, a student will be able to:**

1. Adequately state a problem.
2. Successfully develop criteria for the solution of the problem.
3. Complete a preliminary and detailed investigation of a problem.
4. Design system input, output, files, and processing for the problem.
5. Clearly present the solution of the problem both orally and in writing.

**Course Content Areas:**

- The Systems Development Environment
- The Sources of Software
- Managing The Information Systems Project
- Agile Methodologies
- Systems Planning and Selection
- Determining System Requirements
- Structuring System Requirements: Process Modeling
- Structuring System Requirements: Conceptual Data Modeling
- Designing The Human Interface
- Designing Databases
- Systems Implementation and Operation