CS 320 – Object Oriented Design
Credit Hours: 3
Scheduled hours per week
Lecture: 3
Lab:
Other:

Catalog Course Description: Object-oriented design is the process of planning a system of interacting objects for the purpose of solving a software problem.

Pre-requisites: CS 221 must be passed with a grade of C or higher

Co-requisites:

Course Learning Outcomes:
Students should have an understanding of and be able to apply the following concepts:
- Object oriented analysis and design
- Develop analysis techniques to identify objects required to build a complex software system
- Develop skills determining attributes and behaviour of objects in a system.
- Learn use of basic software patterns

Topics to be studied:

● Introduction to Object Oriented Concepts ● Thinking in Terms of Objects ● Advanced Object Oriented Concepts ● Class Anatomy ● Class Design Guidelines	● Design with Objects ● Inheritance and Composition ● Interfaces and Abstract Classes ● Building Objects ● Object Models ● Topics in OOD

Relationship of Course to Program or Discipline Learning Outcomes:
BAT-Software Engineering

✓	Ability to understand, plan, and execute good Project Management
	Ability to recognize and apply industry recognized code of ethics to various situations
✓	Ability to understand and apply Information Security concepts and best practices
✓	Ability to understand, plan, and implement good Systems Analysis and Software Engineering
	Ability to understand, plan, implement, and troubleshoot Mobile Applications and related technologies
	Ability to understand, plan, implement, and troubleshoot Advanced Web Design and Web Services technologies

For general education courses, a listing of the general education competencies that are met.)

Relationship of Course to General Education Learning Outcomes:	
Composition and Rhetoric Students illustrate a fundamental understanding of the best practices of communicating in English and meet the writing standards of their college or program-based communication requirements.	✓
Science & Technology Students successfully apply systematic methods of analysis to the natural and physical world, understand scientific knowledge as empirical, and refer to data as a basis for conclusions.	✓
Mathematics & Quantitative Skills Students effectively use quantitative techniques and the practical application of numerical, symbolic, or spatial concepts.	✓
Society, Diversity, & Connections Students demonstrate understanding of and a logical ability to successfully analyze human behavior, societal and political organization, or communication.	
Human Inquiry & the Past Students interpret historical events or philosophical perspectives by identifying patterns, applying analytical reasoning, employing methods of critical inquiry, or expanding problem-solving skills.	✓
The Arts & Creativity Students successfully articulate and apply methods and principles of critical and creative inquiry to the production or analysis of works of art.	
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Special requirements of the course:

You will need a computer with an Internet connection

Additional information:

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