

CS 260 – Computer Science Capstone

Credit Hours: 3

Scheduled hours per week

Lecture: 3

Lab:

Other:

Catalog Course Description: This course is the final capstone project for the CS degree. It is designed to give the student supervised experience in a real world software development. The student will undertake a real world project that will encompass all the different subject areas covered in the CS program. Students will also sit for an industry certification exam.

Pre-requisites: CS 201 AND CS 220 AND CS 221 must be passed with a grade of C or better or taken concurrently

Co-requisites:

Course Learning Outcomes:

Students should have an understanding of and be able to apply the following concepts:

- To demonstrate a comprehensive knowledge and understanding of topics taught in the CS degree, and the ability to apply those concepts to a real world situation.
- Take an industry certification to show industry competencies learned throughout your CS degree

Topics to be studied:

<ul style="list-style-type: none"> • Selecting a Project • Gathering Requirements • Designing a Solution • Implementing a Solution 	<ul style="list-style-type: none"> • Verification • Developing a Maintenance Plan • Deploying a Solution • MS 98-361 Certification
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Relationship of Course to Program or Discipline Learning Outcomes:

Computer Science

✓	Ability to understand and use elements of good programming style and best practices
✓	Understanding of programming paradigms, such as imperative, functional, and object oriented design
✓	Ability to understand and use variables with different data types and control structures
✓	Ability to perform top-down design, use modular programming, string processing, elementary data structures, basic disk I/O, and recursion
✓	Ability to use data structures and algorithms to represent data relationships, data manipulation, searching, sorting, and solving complex problems
✓	Ability to design, configure, troubleshoot, and manage database tables, normalize data, and store and retrieve object attributes in a database

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.	✓
5/3/2016	

Special requirements of the course:

You will need a computer with an Internet connection.

Additional information:

Prepared by:

Date: 10/20/2017