

## **CIS 291P Case Study in Computer Science**

### **I. CIS 291P Case Study in Computer Science – 3 Semester Hours**

#### **II. Course Description**

This course is a case study involving the assignment of a complete system development project for analysis, programming, implementation, and documentation. Topics include planning system analysis and design, programming techniques, coding and documentation. Upon completion, students should be able to design, code, test and document a comprehensive computer information system.

#### **III. Prerequisite**

CIS 281 or equivalent background

#### **IV. Textbook**

None Required

#### **V. Course Objectives**

1. The student will understand the concepts of system analysis and design.
2. The student will understand program planning, coding, debugging, and testing.
3. The student will be able to fully document a computer information system.
4. The student will apply the skills of self-management to complete a case study project.
5. The student will design a system that meets a minimum set of requirements

#### **VI. Course Outline of Topics**

1. The student will understand the concepts of system analysis and design.
  - a. The student will outline a computer information system through the use of appropriate analysis and design methods.
  - b. The student will prepare preliminary layouts and descriptions for an integrated computer information system.
2. The student will understand program planning, coding, debugging, and testing.
  - a. Using current design techniques, the student will plan individual components of an integrated system.
  - b. The student will code, debug, and test each component and integrate them into a working system.
3. The student will be able to fully document a computer information system.
  - a. The student will prepare system documentation using narrative and graphic representation.
  - b. The student will prepare input/output screens, file/database layouts, and report layouts.
  - c. The student will prepare a narrative description of each system component.
  - d. The student will provide internal system documentation including appropriate notes and comments.
4. The student will apply the skills of self-management to complete a case study project.
  - a. The student will set daily/weekly personal performance goals.
  - b. The student will work toward the set goals on a daily basis to complete a case study project.
5. The student will design a system that meets a minimum set of requirements.
  - a. The system will include the use of a DBMS Application Development Platform.
  - b. The system will read and write data to a database.

- c. The system will generate some printed reports.
- d. The system will perform some calculations.

## **VII. Evaluation and Assessment**

Evaluation and assessment will be determined by the instructor and specified on the instructor's class syllabus. Grades will be based upon following scale: A = 90 – 100%, B = 80 – 89%, C = 70 – 79%, D = 60 – 69%, and F = below 60%.

## **VIII. Attendance**

Students are expected to attend all classes for which they are registered. Students who are unable to attend class regularly, regardless of the reason or circumstance, should withdraw from that class before poor attendance interferes with the student's ability to achieve the objectives required in the course. Withdrawal from class can affect eligibility for federal financial aid.

## **IX. Statement on Discrimination/Harassment**

The College and the Alabama State Board of Education are committed to providing both employment and educational environments free of harassment or discrimination related to an individual's race, color, gender, religion, national origin, age, or disability. Such harassment is a violation of State Board of Education policy. Any practice or behavior that constitutes harassment or discrimination will not be tolerated.

## **X. Americans with Disabilities**

The Rehabilitation Act of 1973 (Section 504) and the Americans with Disabilities Act of 1990 state that qualified students with disabilities who meet the essential functions and academic requirements are entitled to reasonable accommodations. It is the student's responsibility to provide appropriate disability documentation to the College. The ADA Accommodations Office is in FSC 305 (205-856-7731).