

University of North Alabama
Departmental Syllabus

COURSE: CS 315
COURSE TITLE: Graphical User Interface Programming
CREDIT: 3 Semester hours

COURSE PREREQUISITE: CS 120 or 155

COURSE DESCRIPTION: Introduction to programming for modern graphical user interfaces using a visual programming tool. Topics include integrated development environments, object-oriented design, use of components and rapid application development.

COURSE OBJECTIVES: The student shall demonstrate knowledge of:

1. A visual integrated development environment such as Visual Basic, Visual C++, or Visual J++.
2. Recommended design techniques and specifications for graphical user interface.
3. Standard and user-defined components in a graphical user interface.
4. Fundamental syntax rules and programming concepts of the high-level language underlying the development environment (BASIC, C++, Java, etc.).

The student shall demonstrate the ability to:

5. Create, debug, and run appropriately designed, functional graphical user interfaces in an integrated development environment.
6. Create, debug, and execute segments of computer code in the programming language underlying the Development environment (BASIC, C++, Java, etc).
7. Use event-driven programming to solve problems through a graphical user interface.

COURSE OUTLINE:

1. Introduction to graphical user interface programming
2. Designing GUI applications
3. Standard and user-defined GUI components
4. Variables and constants
5. Selection
6. Repetition
7. Data files
8. Menus
9. Dialog boxes
10. Error trapping
11. Arrays

Assessment of Student Progress: There will be a minimum of 3 hourly tests. An additional grade will be obtained from the percentage of possible points earned on 10-12 in-class computer assignments. Another grade will be obtained from the percentage of possible points earned on 3-4 out-of-class computer projects and a final project to be worked during the final examination period.

Grading Policy: The student's grade will be the average of the hourly tests, the in-class assignments grade, and the project grade described above. Grades will be converted to letter grades as follows: 90-100=A, 80-89=B, 70-79=C, 60-69=D, below 60=F.

Accommodation Statement: In accordance with the Americans with Disabilities Act (ADA) and Section 504 of the Rehabilitation Act of 1973, the University offers reasonable accommodations to students with eligible documental learning, physical and/or psychological disabilities. Under Title II of the Americans with Disabilities Act (ADA) of 1990 and Section 504 of the Rehabilitation Act of 1973, a disability is defined as a physical or mental impairment that substantially limits one or more major life activities as compared to an average person in the population. It is the responsibility of the student to contact Developmental Services prior to the beginning of the semester to initiate the accommodation process and to notify instructors within the first three class meetings to develop an accommodation plan. Appropriate, reasonable accommodations will be made to allow each student to meet course requirements, but no fundamental or substantial alteration of academic standards will be made. Students needing assistance should contact Development Services.