COURSE SYLLABUS

Course Number: COMP3510
Course Title: EMBEDDED SYSTEMS DEVELOPMENT
Credit Hours: 3
Prerequisites: COMP3350 or ELEC 2220
Corequisite: none

I. Course Content/Objectives:
   1. Objectives: At the conclusion of this course the student will have an understanding of the techniques essential to the design and implementation of embedded systems and be familiar with the underlying real-time issues.

   2. Tentative Schedule and Outline of Course Content.
      - Characteristics of real-time and embedded systems: 3 classes
      - Review of key OS features: 2 classes
      - Methodologies for design, implementation and testing: 5 classes
      - Exception handling: 3 classes
      - Concurrent Programming: 4 classes
      - Inter-task communication and synchronization: 4 classes
      - Task scheduling algorithms: 5 classes
      - Memory management: 5 classes
      - Device driver development: 4 classes
      - Real-time kernels: 5 classes
      - Kernel support for network communication: 3 classes
      - Tests: 2 classes

   3. Textbook or assigned readings
      

II. Grading and Evaluation Procedures:

   - Test 1 25%
   - Test 2 25%
   - Homework 20%
   - Final exam 30%
Grading scale:

- 90-100 A
- 80-89 B
- 70-79 C
- 60-69 D
- 59 and lower F

III. Statement related to policies on unannounced quizzes and class attendance and participation.

There will be no unannounced quizzes and attendance will not affect the grade.

**Accommodation Statement:** Students who need special accommodations should make an appointment to discuss the Accommodation Memo during my office hours as soon as possible. If scheduled office hours conflict with classes, please arrange an alternate appointment time. If you do not have an Accommodation Memo, but need special accommodations, contact the Program for Students with Disabilities in 1244 Haley Center (844-2096 V/TTY).

11/5/01