COURSE SYLLABUS

Course Number: COMP3710
Course Title: WIRELESS SOFTWARE ENGINEERING
Credit Hours: 3
Prerequisites: COMP2210
Corequisite: none

I. Course Content/Objectives:
1. Objectives: The primary objective of this course is to familiarize students with the principles, methods, and processes of developing software for mobile computers. Upon successful completion of the course, students will have an understanding of the computing constraints imposed by wireless devices; be exposed to tools and processes used in developing software for small embedded systems; and be able to design, implement, and test software for a wireless or handheld computer.

2. Tentative Schedule and Outline of Course Content.
   - Introduction 3 lectures
     - Main operating systems
     - Common hardware architectures
     - Software engineering singularities for wireless computers
   - Infrastructural support 3 lectures
     - Software tools
     - Processes for embedded software development
   - Requirements Analysis and Design 12 lectures
     - Design methodologies
     - User interface
     - Components of handheld software
     - Embedded system design
     - Database design
     - File organization
   - Implementation 17 lectures
     - C/C++ review
     - APIs
     - Event handling
     - Memory and power consumption minimization
     - Communication technologies
   - Software Testing 8 lectures
     - Testing principles for mobile devices
     - Conducting user studies
   - In-class exams 2 lectures

3. Textbook or assigned readings
II. Grading and Evaluation Procedures:

<table>
<thead>
<tr>
<th>Component</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test 1</td>
<td>10%</td>
</tr>
<tr>
<td>Test 2</td>
<td>15%</td>
</tr>
<tr>
<td>Homework</td>
<td>25%</td>
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<tr>
<td>Project</td>
<td>30%</td>
</tr>
<tr>
<td>Final exam</td>
<td>20%</td>
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</tbody>
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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).