COMP 3710, Wireless Software Engineering

Credit hours: 3 lecture
Contact hours: 3 lecture

Catalog Description: Software engineering for wireless applications: specification, process, testing, and performance evaluation. Design and development of wireless application layer software, including current protocols.

Prerequisites: COMP 2710
Corequisites: None

Required Course (WIRS) Selected Elective Course (CSCI, SWEN)

Instructor or Course Coordinator: Dr. David Umphress

Required Textbook

Software Used

Course Outcomes
The student will be able to
• understand the complexities of mobile device software development.
• understand design notation for embedded systems.
• understand cross-platform development tools and processes.
• design and develop a solution for a mobile device.

Topics Covered
• Android anatomy (4 hours)
• MVC, design behavior, lifecycle activities (4 hours)
• Debugging, Intents (1 hour)
• Design structure, Fragments (2 hours)
• Widgets, Lists, Fragment arguments (3 hours)
• Swiping (1 hour)
• Dialogs, Audio (2 hours)
• Rotation, Action bars, Files, Context menus (4 hours)
• Images, Implicit intents, Intents, Tasks (4 hours)
• Databases, Content providers, HTTP (2 hours)
• Handlers (1 hour)
• Styles (1 hour)
• XML Drawables (1 hour)
• Broadcast Intents (2 hours)
• Services (2 hours)
• Sensors (1 hour)

Course Requirements
• Programming Assignments (40%)
• Exams (60%)

Syllabus prepared: Spring 2016