

I. COURSE DESCRIPTION:

This course explores software development for wireless devices. Students will become familiar with the processes involved in creating, testing, debugging and deploying applications that will run on mobile phones, PDAs, set-top boxes and embedded systems. Software development will occur using various tools including one or more of the Netbeans IDE, the Eclipse IDE and the BlackBerry Java Development Environment using the Java programming language. Applications will be written that explore the building of user interfaces, deal with persistence of data, send emails, implement a simple game and interact generally with the device. The written applications will be deployed to mobile device emulators and to various hardware devices, logistics permitting.

II. LEARNING OUTCOMES AND ELEMENTS OF THE PERFORMANCE:

Upon successful completion of this course, the student will demonstrate the ability to:

1. Develop Applications For Blackberry Devices.
Potential Elements of the Performance:
 - Learn about the Java ME platform and the programming model for mobile applications.
 - Write simple networked applications that interact with the device.
 - Deploy applications to the device.
2. Develop Applications for Android Devices
Potential Elements of the Performance:
 - Learn about the Android development environment and the programming model for writing Android applications.
 - Write simple networked applications that interact with the device.
 - Deploy the applications to the device
3. Implement a project by developing a small real world application.
Potential Elements of the Performance:
 - Create a functional specification for a small application.
 - Design and implement the application.
 - Create use case diagrams, class diagrams and other supporting documentation.
 - Deploy the application.
4. Research Project
Potential Elements of the Performance:

- Research current trends in mobile device.
- Research the various operating systems and application development environments for various devices not included above. These other device include the Palm Pre and the Apple iPhone.
- Create and deliver a presentation based on the research.

III. TOPICS:

1. Develop Applications For Blackberry Devices.
2. Develop Applications for Android Devices
3. Implement a project by developing a small real world application.
4. Research Project

IV. REQUIRED RESOURCES/TEXTS/MATERIALS:

Android Wireless Application Development
Conder, Darcy
Addison Wesley

V. EVALUATION PROCESS/GRADING SYSTEM:

Test1	25%
Test 2	25%
Report	10%
Lab	40%

The following semester grades will be assigned to students:

Grade	Definition	Grade Point Equivalent
A+	90 – 100%	
A	80 – 89%	4.00
B	70 - 79%	3.00
C	60 - 69%	2.00
D	50 – 59%	1.00
F (Fail)	49% and below	0.00

CR (Credit) Credit for diploma requirements has been awarded.

S Satisfactory achievement in field /clinical placement or non-graded subject area.

U Unsatisfactory achievement in field/clinical placement or non-graded subject area.

X A temporary grade limited to situations with extenuating circumstances giving a student additional time to complete the

NR	requirements for a course.
W	Grade not reported to Registrar's office. Student has withdrawn from the course without academic penalty.

VI. SPECIAL NOTES:

Attendance:

Absenteeism will affect a student's ability to succeed in this course. Absences due to medical or other unavoidable circumstances should be discussed with the professor. Students are required to be in class on time and attendance will be taken within the first five minutes of class. A missed class will result in a penalty in your marks unless you have discussed your absence with the professor as described above. The penalty depends on course hours and will be applied as follows:

Course Hours	Deduction
5 hrs/week (75 hrs)	1% / hr
4 hrs/week (60 hrs)	1.5% /hr
3 hrs/week (45 hrs)	2% /hr
2 hrs/week (30 hrs)	3%/hr

Absentee reports will be discussed with each student during regular meetings with Faculty Mentors. Final penalties will be reviewed by the professor and will be at the discretion of the professor.

VII. COURSE OUTLINE ADDENDUM:

The provisions contained in the addendum located on the portal form part of this course outline.