

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 and set-top boxes. Software development will occur using Eclipse IDE and 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. Developing Applications For mobile 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. Developing 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 devices include the Palm Pre and the Apple iPhone.
- Create and deliver a presentation based on the research.

III. TOPICS:

1. Develop Applications For mobile 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:

Beginning Android 4 Application Development
 Wei-Meng Lee
 John Wiley & Sons, Inc..
 ISBN-13: 978-1-118-19954-1

Online resources: <http://developer.android.com/training/index.html>

V. EVALUATION PROCESS/GRADING SYSTEM:

Tests	50%
Assignments	10%
Labs	40%

The following semester grades will be assigned to students:

Grade	Definition	<i>Grade Point Equivalent</i>
A+	90 – 100%	4.00
A	80 – 89%	3.00
B	70 - 79%	2.00
C	60 - 69%	1.00
D	50 – 59%	0.00
F (Fail)	49% and below	
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 requirements for a course.
NR	Grade not reported to Registrar's office.
W	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.