Washtenaw Community College Comprehensive Report

CPS 251 Android Programming Using Java
Effective Term: Winter 2016

Course Cover

Division: Business and Computer Technologies
Department: Computer Instruction
Discipline: Computer Science
Course Number: 251
Org Number: 13410
Full Course Title: Android Programming Using Java
Transcript Title: Android Programming Using Java
Is Consultation with other department(s) required: No
Publish in the Following: College Catalog , Time Schedule , Web Page
Reason for Submission: Course Change
Change Information:
    Consultation with all departments affected by this course is required.
    Course description
    Pre-requisite, co-requisite, or enrollment restrictions
    Outcomes/Assessment
    Objectives/Evaluation
Rationale: Prerequisite change. CPS 161 was a very minimal preparation for CPS 251. If students do really well in CPS 161 we will let them take CPS 251. Otherwise we would like them to take CPS 261 before CPS 251.
Proposed Start Semester: Winter 2016
Course Description: In this course, students create programs written in Java to run on an Android smart phone or tablet. Students taking this class should have a very good knowledge of Java. Topics include Graphical User Interfaces, data storage, audio, databases, GPS and Google Maps.

Course Credit Hours

Variable hours: No
Credits: 4
Lecture Hours: Instructor: 60 **Student:** 60
Lab: Instructor: 0 **Student:** 0
Clinical: Instructor: 0 **Student:** 0

Total Contact Hours: Instructor: 60 **Student:** 60
Repeatable for Credit: NO
Grading Methods: Letter Grades
Audit
Are lectures, labs, or clinicals offered as separate sections?: NO (same sections)

College-Level Reading and Writing

College-level Reading & Writing

College-Level Math
Requisites

Prerequisite
CPS 161 minimum grade "A-"
or

Prerequisite
CPS 261 minimum grade "B-"

General Education
General Education Area 7 - Computer and Information Literacy
Assoc in Arts - Comp Lit
Assoc in Applied Sci - Comp Lit
Assoc in Science - Comp Lit

Request Course Transfer
Proposed For:

Student Learning Outcomes

1. Identify XML concepts used in defining the Android programming environment.
   Assessment 1
   Assessment Tool: multiple choice exam
   Assessment Date: Winter 2016
   Assessment Cycle: Every Three Years
   Course section(s)/other population: All sections
   Number students to be assessed: Random selection of all students up to a maximum of 100
   How the assessment will be scored: Answer key
   Standard of success to be used for this assessment: 70% of the students will score 70% or better on the assessment related questions.
   Who will score and analyze the data: Departmental faculty

2. Identify Graphical User Interface (GUI) techniques used in the Android programming environment.
   Assessment 1
   Assessment Tool: multiple choice exam
   Assessment Date: Winter 2016
   Assessment Cycle: Every Three Years
   Course section(s)/other population: All sections
   Number students to be assessed: Random selection of all students up to a maximum of 100
   How the assessment will be scored: Answer key
   Standard of success to be used for this assessment: 70% of the students will score 70% or better on the assessment related questions.
   Who will score and analyze the data: Departmental faculty

3. Identify the various ways that data can be retrieved and saved on an Android device.
   Assessment 1
   Assessment Tool: multiple choice exam
   Assessment Date: Winter 2016
   Assessment Cycle: Every Three Years
   Course section(s)/other population: All sections
   Number students to be assessed: Random selection of all students up to a maximum of 100
   How the assessment will be scored: Answer key
   Standard of success to be used for this assessment: 70% of the students will score 70% or better on the assessment related questions.
   Who will score and analyze the data: Departmental faculty

4. Develop Java programs that run on android devices.
   Assessment 1

Assessment Tool: Programming Exercise
Assessment Date: Fall 2016
Assessment Cycle: Every Three Years
Course section(s)/other population: All sections
Number students to be assessed: Random sample of 25% of all students with a minimum of one full section
How the assessment will be scored: Departmentally-developed rubric
Standard of success to be used for this assessment: 70% of the students will successfully complete the exercise
Who will score and analyze the data: Departmental faculty

Course Objectives

1. Demonstrate proficiency in the XML concepts used in defining the Android programming environment.
   Matched Outcomes
   1. Identify XML concepts used in defining the Android programming environment.
2. Recognize the difference between types of interfaces including but not limited to keyboard, itemized lists, text boxes and images.
   Matched Outcomes
   2. Identify Graphical User Interface (GUI) techniques used in the Android programming environment.
3. Recognize the different techniques used on Android to retrieve and store data.
   Matched Outcomes
   3. Identify the various ways that data can be retrieved and saved on an Android device.

New Resources for Course

Standard CIS/CPS labs will be sufficient for this course.

Course Textbooks/Resources

Textbooks
Manuals
Periodicals
Software

Equipment/Facilities

Computer workstations/lab

Reviewer	Action	Date
Faculty Preparer:		
Clem. Hasselbach	*Faculty Preparer*	*Feb 19, 2015*
Department Chair/Area Director:		
John Trame	*Recommend Approval*	*Feb 20, 2015*
Dean:		
Kimberly Hurns	*Recommend Approval*	*Feb 25, 2015*
Vice President for Instruction:		
Bill Abernethy	*Approve*	*Apr 13, 2015*