DEPT. CSCI                      COURSE NUMBER: 2235

NUMBER OF CREDITS: 3

COURSE TITLE: Develop Mobile Apps

CATALOG DESCRIPTION: provides the beginning programmer with a strong foundation necessary to build mobile applications and participate in this growing market. It familiarizes the student with the open-source software for creating fully-functional mobile apps.

AUDIENCE: PSEO students, former or current programming students, career-engaged computer programmers, entrepreneurs and IT workplace employees.

FULFILLS MN TRANSFER CURRICULUM AREA(S) (Leave blank if not applicable)
Area: by meeting the following competencies:
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PREREQUISITES OR NECESSARY ENTRY SKILLS/KNOWLEDGE: NONE

LENGTH OF COURSE: one semester, 3 credits

THIS COURSE IS USUALLY OFFERED:
Every other year fall spring summer undetermined

Four goals are emphasized in course at Minnesota West Community & Technical College:

1) ACADEMIC CONTENT: The academic objectives of this course are:
   a. The student will achieve the knowledge and skill needed in the area of developing mobile apps for the Android platform

2) THINKING SKILLS: This course will help students improve the effectiveness of their thinking skills through:
a. The student will create fully-functional mobile Android apps based on programming logic and Java code that puts the software design and logic into practice.

3) COMMUNICATIONS SKILLS: This course will help students improve their oral and written communication skills through:
   a. The student will demonstrate appropriate communication techniques in working with the internet and peers to complete assignments

4) HUMAN DIVERSITY: This course will help students recognize, understand, and appreciate human diversity through:
   a. The student will gain self-awareness regarding their feelings towards people of different cultures, value systems and socioeconomic status

TOPICS TO BE COVERED:
Smartphone User Interface
User Input, Variables and Operations
Icons and Decision-Making Controls
Lists, Arrays and Web Browsers
Audio in Apps
Displaying Pictures in a Gallery
Creating Animation
Incorporating Google Maps
Publishing your App

LIST OF EXPECTED COURSE OUTCOMES:
Presents the mobile platform and current market for apps
Discusses user interface
Covers user input, variables and operations
Discusses icons and decision-making controls
Describes how to use lists, arrays and Web browsers in a mobile app
Explains how to audio such as music in mobile apps
Explains how to create animation; frame-by-frame or motion tween
Shows how to create a mobile app that includes Google Maps
Identifies steps to market a mobile app

LEARNING/TEACHING TECHNIQUES used in the course are:
X Collaborative Learning X Problem Solving
□ Student Presentations X Interactive Lectures
□ Creative Projects □ Individual Coaching
X Lecture □ Films/Videos/Slides
□ Demonstrations □ Other (describe below)
□ Lab

ASSIGNMENTS AND ASSESSMENTS FOR THIS CLASS INCLUDE:
EXPECTED STUDENT LEARNING OUTCOMES:
The student will demonstrate an understanding of the market for mobile apps
The student will create a mobile app project
The student will execute a smartphone app on an emulator
The student will develop a user interface using multiple activities
The student will add text, declare variables, convert and format numeric data
The student will change color controls and design decision-making controls

Veteran Services: Minnesota West is dedicated to assisting veterans and eligible family members in achieving their educational goals efficiently. Active duty and reserve/guard military members should advise their instructor of all regularly scheduled military appointments and duties that conflict with scheduled course requirements. Instructors will make every effort to work with the student to identify adjusted timelines. If you are a veteran, please contact the Minnesota West Veterans Service Office.

The information in this course outline is subject to revision

To receive reasonable accommodations for a documented disability, please contact the campus Student Services Advisor or campus Disability Coordinator as arrangements must be made in advance. In addition, students are encouraged to notify their instructor.

This document is available in alternative formats to individuals with disabilities by contacting the Student Services Advisor or by calling 800-658-2330 or via your preferred Telecommunications Relay Service.

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