

SOUTHEAST COMMUNITY COLLEGE
CONSTRUCTION MANUFACTURING AND TECHNOLOGY DIVISION
Computer Information Technology Program
Revision Date: August 22, 2022

I. CATALOG DESCRIPTION

Course Number: INFO2584
Course Title: Mobile Device Programming
Prerequisite(s): INFO2431
Catalog Description: This course is a basic introduction to the development of mobile apps using both the Android and the iOS platforms.
Credit Hours: 3
Class Hours: 45
Lab Hours: 0
Total Contact Hours: 45

II. COURSE OBJECTIVES: *Course will:*

- A. Introduce students to React
- B. Provide students with the basic building blocks needed to create a mobile device application using React Native

III. STUDENT LEARNING OUTCOMES AND GENERAL EDUCATION LEARNING OUTCOMES:

- A. Student Learning Outcomes: *Student will be able to:*
 - 1. Recognize React syntax and use it to design basic browser-based user interfaces.
 - 2. Create mobile device applications for both Android and iOS using React Native that include the following:
 - a. Images and sound
 - b. Various layouts and themes
 - c. Responsive design
 - d. Persistent data
- B. General Education Learning Outcomes (GELOs)
 - 1. GELO #3: Critical Thinking & Problem Solving
Outcome 2: Synthesize information to arrive at reasoned solutions to problems.

IV. CONTENT/TOPICAL OUTLINE

- A. An introduction to React
 - 1. JSX
 - 2. Component properties and state
 - 3. Functional components with Hooks
 - 4. Event handling
 - 5. Validating component properties
 - 6. Routes
 - 7. User Interface framework components
- B. React Native
 - 1. Responsive layouts with Flexbox
 - 2. Navigating between screens
 - 3. Lists, progress, geolocation and maps
 - 4. Collecting user input
 - 5. Displaying modal screens

6. Responding to user gestures
7. Controlling image display

V. INSTRUCTIONAL MATERIALS

- A. Required Text(s): Ward, *React Native Cookbook*, (Refer to CID and/or instructor for current edition)

VI. METHODS OF PRESENTATION/INSTRUCTION

- A. Methods of presentation typically include a combination of the following:
1. Technology enhanced lectures
 2. Engaged learning activities

VII. METHODS OF EVALUATION

- A. Methods of evaluation, although determined by the individual instructor, traditionally includes a combination of the following:
1. Homework assignments
 2. Quizzes and Tests