

**CS 321 – Mobile Application Development**

**Credit Hours:** 3

**Scheduled hours per week**

Lecture: 3

Lab:

Other:

**Catalog Course Description:** This course teaches how to design, author, and publish applications for mobile devices such as smart phones and tablets.

**Pre-requisites:** CS 122 must be passed with a grade of C or higher

**Co-requisites:**

**Course Learning Outcomes:**

Students should have an understanding of and be able to apply the following concepts:

- Develop requirements for a mobile application
- Determine the best platform upon which to build a particular mobile application
- Design and develop interactive mobile applications
- Design and develop mobile applications using touch gestures
- Design and develop mobile applications using peripheral equipment provided with a mobile device such as cameras, GPS, audio recording or internet connectivity

**Topics to be studied:**

|  |   |
|--|---|
| <ul style="list-style-type: none"> <li>● Introduction to Mobile Applications</li> <li>● Building user interfaces and basic applications</li> <li>● Activities and Intents within an application</li> <li>● Menus, action bars and fragments</li> </ul> | <ul style="list-style-type: none"> <li>● Graphics, Drawing and Audio</li> <li>● Threads, Handlers and Movement</li> <li>● Touch Gestures</li> <li>● Sensors and Camera</li> <li>● File Storage</li> </ul> |
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**Relationship of Course to Program or Discipline Learning Outcomes:**

BAT-Software Engineering

|   |  |
|---|--|
| ✓ | Ability to understand, plan, and execute good Project Management   |
| ✓ | Ability to recognize and apply industry recognized code of ethics to various situations                    |
|   | Ability to understand and apply Information Security concepts and best practices                           |
| ✓ | Ability to understand, plan, and implement good Systems Analysis and Software Engineering                  |
| ✓ | Ability to understand, plan, implement, and troubleshoot Mobile Applications and related technologies      |
|   | Ability to understand, plan, implement, and troubleshoot Advanced Web Design and Web Services technologies |

For general education courses, a listing of the general education competencies that are met.)

| <b>Relationship of Course to General Education Learning Outcomes:</b>   |   |
|---|---|
| <b>Composition and Rhetoric</b> Students illustrate a fundamental understanding of the best practices of communicating in English and meet the writing standards of their college or program-based communication requirements.                | ✓ |
| <b>Science &amp; Technology</b> Students successfully apply systematic methods of analysis to the natural and physical world, understand scientific knowledge as empirical, and refer to data as a basis for conclusions.                     | ✓ |
| <b>Mathematics &amp; Quantitative Skills</b> Students effectively use quantitative techniques and the practical application of numerical, symbolic, or spatial concepts.  | ✓ |
| <b>Society, Diversity, &amp; Connections</b> Students demonstrate understanding of and a logical ability to successfully analyze human behavior, societal and political organization, or communication.                                       |   |
| <b>Human Inquiry &amp; the Past</b><br>Students interpret historical events or philosophical perspectives by identifying patterns, applying analytical reasoning, employing methods of critical inquiry, or expanding problem-solving skills. |   |
| <b>The Arts &amp; Creativity</b><br>Students successfully articulate and apply methods and principles of critical and creative inquiry to the production or analysis of works of art.   | ✓ |
| <b>5/3/2016</b>   |   |

**Special requirements of the course:**

You will need a computer with an Internet connection

**Additional information:**

**Prepared by:** Gary Thompson

**Date:** 10/20/2017