**ITD 120**

**Design Concepts for Mobile Applications**

**COURSE OUTLINE**

**Prerequisites:**

ITP 140

**Course Description:**

Provides skills for designing both Web-based and stand-alone applications for wireless devices. Details discussions of the needs for applications including mobile phones, tablets and other hand-held devices, Importance of using servers to push web developments to the World Wide Web. Emphasizes the importance of HTML, CSS, JavaScript, and JQuery web developments including applications and basic web games. Design techniques that will be interchangeable for mobile devices and other platforms as well.

**Semester Credits:** 3 **Lecture Hours:** 3 **Lab/Recitation Hours:** 0

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**Course Objectives**

**At the completion of this course, the student should be able to:**

* Be able to prep and prepare a JQuery Mobile Project
* Work with JQuery Mobile Pages, CSS, HTML, JavaScript & JQuery
* Enhance Pages with Headers, Footers, and Toolbars
* Manipulate JavaScript Arrays and Functions
* Build a Simple JavaScript / JQuery Game
* Work with Forms and JQuery Mobile Tools
* Create Modal Dialogs and Widgets
* An Extensive Understanding of Mobile Applications
* JQuery Mobile Configuration, Utilities, and JavaScript Functions
* Work with Events, Key Capturing, and manipulation of mouse.
* Be able to transition HTML, CSS, JavaScript and JQuery to work with multiple platforms and browsers.

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Required Course Materials:

Notepad ++, Brackets or other text editor (freeware)
Some photo editing software (freeware)

Textbook:

**jQuery Mobile Web Development Essentials –**by Raymond Camden and Andy Matthes Publisher: Packt Publishing, Pub Date: September 2013 ISBN-10: 1782167897 ISBN-13: 9781782167891, Second Edition

The following supplementary materials are available:

1. Safari Online is available for students to view other Java text and reference books online for free
2. Internet searches are a fundamental source for auxiliary materials on Web design
3. Video movies provided by the instructor.

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Topical Description: (Outline chapters and sections to be covered in the book – may include timeline)

* Chapter 1: Preparing Your First jQuery Mobile Project
	+ Important preliminary points
	+ Building an HTML page
	+ Getting jQuery Mobile
	+ Customized downloads
	+ Implementing jQuery Mobile
	+ Working with data attributes
* Chapter 2: Working with jQuery Mobile Pages
	+ Important preliminary points
	+ Adding multiple pages to one file
	+ jQuery Mobile, links, and you
	+ Working with multiple files
	+ jQuery Mobile and URLs
	+ Additional customization
	+ Page titles
	+ Prefetching content
	+ Changing page transitions
* Chapter 3: Enhancing Pages with Headers, Footers, and Toolbars
	+ Important preliminary points
	+ Adding headers
	+ Icon sneak peak
	+ Working with back buttons
	+ Working with footers
	+ Creating fixed and full-screen headers and footers
	+ Full-screen headers and footers
	+ Working with navigation bars
	+ Persisting navigation bar footers across multiple pages
* Chapter 4: Working with Lists
	+ Creating lists
	+ Working with list features
	+ Creating inset lists
	+ Creating list dividers
	+ Autodividers
	+ Creating lists with count bubbles
	+ Using thumbnails and icons
	+ Creating split button lists
	+ Using a search filter
* Chapter 5: Getting Practical – Building a Simple
Hotel Mobile Site
	+ Welcome to Hotel Camden
	+ The home page
	+ Finding the hotel
	+ Listing the hotel rooms
	+ Contacting the hotel
* Chapter 6: Working with Forms and jQuery Mobile
	+ Before you begin
	+ What jQuery Mobile does with forms
	+ Working with radio buttons and checkboxes
	+ Working with select menus
	+ Search, toggle, and slider fields
	+ Search fields
	+ Flip toggle fields
	+ Slider fields
	+ Using native form controls
	+ Working with the mini fields
* Chapter 7: Creating Modal Dialogs and Widgets
	+ Creating dialogs
	+ Laying out content with grids
	+ Making responsive grids
	+ Working with collapsible content
	+ Popups
	+ Responsive tables
	+ Working with panels
* Chapter 8: Moving Further with the Notekeeper
Mobile Application
	+ What is a mobile application?
	+ Designing your first mobile application
	+ Listing out the requirements
	+ Building your wireframes
	+ Designing the add note wireframe
	+ Display notes wireframe
	+ View note/delete button wireframe
	+ Writing the HTML
* Adding functionalities with JavaScript