

# CLASS SYLLABUS

## *User Interface Design for Mobile Devices*

### DAY ONE (June 9)

<i>Topic</i>	<i>Time</i>
<b>Opening</b>	<b>9:00 -9:20</b>
<b>Introductions</b>  Review our class plan; discuss course objectives, student introductions (on-ground & online). Review bibliography. (note: I will have spoken with online folks before the class to put them into teams and acquaint them with the tools they'll be using)	
<b>Mobile Phone Design - Strategic Considerations</b>	<b>9:20 - 9:50</b>
<ul style="list-style-type: none"><li>• What applications should (and should not) have a mobile version</li><li>• How platform affects approach (iPhone/touch vs. Blackberry vs. feature phone), pro's and con's of creating an application for a specific device vs. for the mobile web</li><li>• Mobile audience &amp; some intriguing examples of how the world is using this technology (presented via case studies)</li><li>• How to decide which platforms you need to support - a view of the marketplace</li></ul>	
<b>How mobile UI Design is different from traditional UI Design</b>	<b>9:50- 10:00</b>
<ul style="list-style-type: none"><li>• Overview of mobile's unique strengths and limitations</li><li>• Discussion of how <b>USER CONTEXT</b> plays into design</li><li>• Impact of device on design decisions</li><li>• Personalization &amp; localization</li></ul>	

**BREAK**

<i>Topic</i>	<i>Time</i>
<b>Mobile information architecture &amp; navigation</b> <ul style="list-style-type: none"><li>• How to translate task/workflow analysis to mobile information architecture &amp; navigation</li><li>• Specific navigation challenges with mobile devices</li><li>• Techniques for keeping navigation shallow</li><li>• Common IA and navigation approaches (shown via case studies of different mobile apps from various industries.</li></ul>	<b>10:15 - 11:15</b>
<b>Hands-on Workshop</b> <p>Introduce students to the TBD class project. Break into teams of 3-4 students to develop an information architecture and navigational approach for the project.</p>	<b>11:15 - 12:00</b>
<b>LUNCH (12 to 1 PM)</b>	
<b>Design review</b> <p>Teams present and critique each other's IA and navigational approaches. Review of the afternoon</p>	<b>1:10 - 1:30</b>
<b>Mobile screen design</b> <ul style="list-style-type: none"><li>• What are the best layouts for a small screen</li><li>• What are the best fonts, graphics, colors to use while minimizing latency</li><li>• Techniques for minimizing user input</li><li>• Small screen information design</li><li>• Error handling</li><li>• Form design for small screens</li></ul>	<b>1:30 - 2:30</b>
<b>BREAK</b>	<b>2:30 - 2:45</b>
<b>Hands-on Workshop</b> <p>Teams develop paper prototype page designs of their screen layouts for the class project.</p>	<b>3:00 - 3:45</b>
<b>Design review</b> <p>Teams present and critique each other's page layouts</p>	<b>3:45 - 4:05</b>
<b>BREAK</b>	<b>4:05 - 4:15</b>

## Specific design challenges & resources

4:15 - 5:00

- How to optimize a standard Web site so it works on mobile devices
- How to include graphics, audio, and video into a mobile application
- Case study showing how to incorporate location awareness into a mobile design
- Case study showing creative ways of incorporating social media into a mobile design

## DAY TWO (June 10)

### Section

### Topic

### Method/Time

#### The technology side of designing for mobile applications

9:00 - 11:00

guest speaker: Michael Kuperstein, CTO of MobiFlex

- Comparing mobile web apps vs. mobile native apps
- Layout issues across devices for iPhone, Android, Blackberry, Windows
- Comparing building approaches: custom vs. coding frameworks vs non-coding studios
- Data management for mobile apps
- Security
- Testing and Provisioning for distribution of mobile apps
- Overview of MobiFlex - the tool we will use for the class project.

## BREAK

### Hands-on Workshop

11:00 - 12:00

Students will build a working prototype of a mobile design using the MobiFlex platform

## LUNCH

### Design review

1:00 - 1:30

Teams debrief & present and critique each other's MobiFlex prototypes

<i>Section</i>	<i>Topic</i>	<i>Method/Time</i>
	<b>Formal techniques for communicating a mobile design to a client</b>	<b>1:30 - 2:00</b>
	<ul style="list-style-type: none"><li>• Design documents for a mobile project</li></ul>	
<b>BREAK</b>		
	<b>Hands-on Workshop</b>	<b>2:15 - 3:00</b>
	<b>Overview of methods for evaluating a mobile design</b>	
	<ul style="list-style-type: none"><li>• Role of analytics to evaluate design</li><li>• Case study - How a TBD application tem uses analytics to shape features and detailed UI design</li><li>• How to set up a usability test for a mobile application</li><li>• Walk through the thought process of how you approach this type of evaluation (how is it different from traditional usability testing?)</li><li>• Demonstrate the equipment to record a session, using Morae software</li></ul>	<b>3:15 - 4:00</b>
	<b>Hands-on Workshop - Usability Testing a Mobile Application</b>	<b>4:00 - 4:30</b>
	Teams usability test their mobile application (or a TBD application if their mobile products are not ready). As a class we put together a task list for a simulated usability session.	
	<b>Debrief discussion</b> - Compare notes from our observation of the usability study. We identify usability issues and discuss how to resolve them, based on our learning over the past 2 days.	<b>4:30 - 4:45</b>
	<b>Course evaluation &amp; thank you!!</b>	<b>4:45 - 5:00 PM</b>