COURSE DESCRIPTION

Over six billion people worldwide now own or have access to a mobile phone. While traditional wire line voice traffic continues to decline, advances in smart phone and tablet technologies are creating and driving a tremendous level of interest and demand in audio and video content – not the least of which is the emergence of the smart phone as the new frontier for television. The range of applications is significant, including the realms of entertainment, education, news, finance, games, government, medicine, supply-chain, consumer services, retail, social networking, and sex.

In other words, mobile technology is instrumental to the future of communication, business, and entertainment. Consumers use handheld devices to work, connect, and play – and skilled practitioners are needed to develop, produce and market applications and devices to meet the growing demand for new services. This course provides a solid grounding in the history, technology, future developments and practical applications of mobile devices and applications in business, education, public and commercial services. The success of the next generation of mobile systems will depend largely on the ability of industry and academia to develop and provide appropriate applications to the users of the new mobile and wireless world. Hopefully, some of you will become a part of this process.

This is not a highly technical course. However, we will take a look at a wide range of mobile communications technologies and applications, examining their capabilities and limitations, in order to more fully understand appropriate applications of technologies to meet both business and consumer needs. In addition to gaining a basic understanding of the technological components of mobile devices and networks, we will examine the applications available for a range of wireless devices and the factors that must be considered when designing software, for instance, the theory and practice of space and time optimization for these relatively small and comparatively slow devices. You will be introduced to development tools and the arcane world of coding in Objective C. We will also identify and examine the implications of security, legal, privacy, and other social issues associated with wireless and mobile computing and applications.
REQUIRED READING

You’re in luck. I haven’t been able to find a textbook that comes remotely close to achieving the goals of this course. That doesn’t mean you won’t have some reading to do. However, I will either provide you with the material or point you in the right direction. Most of your reading will be associated with the research you undertake to complete the research paper, the case study, and the reaction paper, though I am toying with the idea of incorporating some research into the exams, as well.

EVALUATION EXPECTATIONS

Your grade for this course will be based on your weighted and averaged scores for a research paper, a case study/presentation, a mid-term examination, a final examination, a reaction paper, and your attendance in class.

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<th>Percentage</th>
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<tbody>
<tr>
<td>Research Paper</td>
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<tr>
<td>Case Study/Presentation</td>
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<td>Midterm Exam</td>
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<td>Final Exam</td>
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<td>Reaction Paper</td>
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<td>Attendance</td>
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**Research Paper:** You will be writing a formal research paper on a topic of your choosing within the confines of the general topic of mobile applications and interactivity. Additionally, you will limit the topic of your paper to one of four categories: education, business-to-business (B2B), civic participation and/or government, and entertainment. Part of your grade will be based on a number of preliminary steps you take – at intervals throughout the semester you will be expected to submit a topic paragraph for my approval, an annotated bibliography, and a two-page outline of the paper. The completed paper will be 10-12 pages in length and will conform to APA style. I will provide you with further guidelines and a list of possible topics later in the semester.

**Case Study Presentation:** This assignment requires you to write a five-six page explanation and analysis of a mobile application associated with a specific business or organization. It will be up to you to pick the business or organization and the app, but your choices will be subject to my approval. Needless to say, both the app and its intended purpose should be sufficiently complex to provide the subject matter for this assignment. Additionally, on an assigned date, you will make a 12-15 minute PowerPoint presentation to the class based on your paper. You will also provide a brief (one page), comprehensible outline to be distributed to each student.

**Examinations:** Both of the exams will consist of a number of short-answer questions, along with one or two essay questions. In the interests of higher academic success and happiness, I will magnanimously provide you with my notes throughout the semester and a general indication of the nature of potential essay questions before each exam.

**Reaction Paper:** This assignment requires you to write a five-six page paper based on an explanation and analysis of, and personal reaction to, some specific component of the curriculum of this course. With
that said, the subject matter of the paper is really your favorite subject: you. You will be asked to assimilate the first few lectures of the course and then write about what you have learned through the filter of your own life and experiences and the lives and experiences of your friends and family. Per the February 9 date in the schedule, be prepared to discuss your experiences.

**Attendance:** Attendance for each class is strictly voluntary. It's not my responsibility to make sure you come to class. After all, each of you is old enough to drive, vote, serve in the military, think for yourself, and bear the consequences of your actions. With that said, the consequences of your actions if you miss class will be the loss of five percent of your attendance grade for every absence, unless you notify me of your absence beforehand or have a verifiable excuse after the fact.

**Grading Policy:**

- A  Excellent work, 90 – 100
- B  Good work, 80 – 89
- C  Barely satisfactory work, 70 – 79
- D  Inferior work, 60 – 69
- E  Unacceptable work, below 60

**THE USUAL WARNINGS**

Make-up exams and late papers will not be allowed without a valid and verifiable reason. The definition of valid and verifiable is left totally to my discretion. It is required that all work submitted for a grade is the original work of the student whose name appears on it, and that the work was prepared expressly for this course. Any use of a cell phone or digital assistant or even the appearance of these devices during an exam will be construed as cheating. Any student caught cheating or copying from another's exam or in any way plagiarizing from any source, whether published or not, will be sanctioned according to University rules. At the very least, he or she will receive a failing grade for the course.

**CLASS SCHEDULE**

- **January 12**  Introduction to the course and to each other
- **January 17**  A Brief History of Mobile Communications
- **January 19**  A Brief History of Mobile Applications
- **January 24**  Mobile Applications for Education
- **January 26**  Mobile Applications for Business and Civic Affairs
- **January 31**  Mobile Applications for Retail and Entertainment
February 1 (Wednesday) Last day to drop this course without it appearing on your transcript and last day to change your grading option

February 2 Legal and Social Issues Associated with Wireless and Mobile Computing

February 7 Legal and Social Issues Associated with Wireless and Mobile Computing

February 9 Roundtable discussion on the reaction paper

February 14 Reaction Paper Due

February 14 Planet of the Apps Video

February 16 Student Presentations

February 21 iPhone Development: Design and Coding

February 21 iPhone Development: HelloWorld Phases 1 and 2

February 23 Guest speaker: Heather Chandler

February 28 iPhone Development: Navigation Phases 1-4

February 28 Topic Paragraph Due

March 1 Student Presentations

March 5 Midterm of the semester

March 6 Midterm Exam

March 8 Reflection on the Midterm Exam and other soul-searching activities

March 12-17 (Spring Break) Academic holidays – show up only if you are completely clueless

March 20 Guest Speaker

March 22 Student Presentations

March 27 Guest Speaker

March 29 Annotated Bibliography Due

March 29 Student Presentations

April 3 iPhone Development: ViewSwitcher Phase 1 and 2

April 5 Student Presentations
April 6  Last day to withdraw from this course with a "W" 
(Friday)

April 10  Student Presentations

April 12  Student Presentations

April 17  Future Developments in Mobile Applications
          Detailed Outline Due

April 19  Student Presentations

April 24  Guest Speaker
          Research Paper Due

April 26  Review, Wrap-up, Reflection – or something!
          Teaching and Course Evaluations

May 3  Final Exam – 1:00 PM in 213 Whitehall Classroom Building
(Thursday)