Fall 2020

IT 251 Intro to Mobile Apps

## Contact Info

Sean Bush

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E-mail is the preferred method of contact, as I check my email daily. Most emails will be answered within 24 hours. If you do not receive a reply within 24 hours, check to make sure the email address is correct and email me again. When emailing me, it is very important that you include course number in the subject. Example: IT251: question about design.

**Office Hours**

All office hours will be conducted by Zoom. Tuesdays and Thursdays 2:00 – 3:00pm & 5:00 – 6:00pm by appointment only via email.

## Course Overview

This class will introduce students to the world of mobile application design using an open source cross-platform programming language. HTML5-based web application frameworks, API, functional UI, CSS3, cloud services.

## Course Goals

Learn how to create websites or apps that render correctly on any screen size, platform, or device.

**Changes to Syllabus**

This syllabus is subject to change as necessary during the quarter.  If a change occurs, it will be thoroughly addressed during class and sent via email.

## Prerequisites

IT 130

**Textbook**

No textbook is required for this course.

**GRADING POLICY**

**Grading Scale**

Course grades will be reported on the following scale:

|  |  |
| --- | --- |
| **Grade** | **%** |
| A | 94-100 |
| A- | 90-93 |
| B+ | 87-89 |
| B | 84-86 |
| B- | 80-83 |
| C+ | 77-79 |
| C | 74-76 |
| C- | 70-73 |
| D+ | 68-69 |
| D | 60-67 |
| F | Less than 60 |

Grades will be posted in D2L.

**ASSIGNMENTS AND GRADING POLICY:**

**Grading**

1. Assignments (3) 60 points each
2. Quizzes (3) 15 points each
3. Final Project Written Proposal 20 points
4. Final Project 100 points

The goal of assignments is to practice the concepts taught in class. You will have a week to complete each assignment. You are expected to do your own assignments. However, some collaboration with other students is allowed and even encouraged. The following types of collaboration are allowed:

* Discussing strategies for solving a problem
* Explaining why a Web page does not work
* Reviewing and testing someone else's Web pages
* Using HTML and JavaScript code provided by the instructor and texts

The following types of collaboration are not allowed:

* Copying someone else's work
* Telling someone what code to write

Engaging in these last two types of collaboration will be considered a violation of the university's policy on academic integrity. Violators will receive a zero for the corresponding assignment and will be reported as required by the policy.

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Assignments will be accepted up to two days after the due date with a 15% penalty per day late off your assignment. Assignments submitted more than 2 days after the due date will **not be accepted**. There is **no** extra credit in the class.

Make sure you submit the correct version of your assignment. It’s your responsibility to turn in the correct work for each assignment. Saying you turn in the wrong assignment will not be considered as an excuse.

If you make changes to an assignment that you have already submitted, you are welcome to upload the newer version to D2L provided, of course, that it is uploaded before the assignment deadline. I will always grade your submission with the most recent timestamp in D2L.

All quizzes must be completed before the due date. Missing the due date will result in a grade of zero. You **cannot** make up quizzes.

**GRADING FOR FALL 2020**

Students in all undergraduate classes, with the exception of those in CEO cohort programs, may opt to change the grading basis of A/B/C/D/F to Pass/D/Fail. A grade of Pass (P) will indicate that the student's work met expectations for a grade of at least C-. Work that would merit a grade of D+ or D in the traditional grading basis would still earn a D+ or D. Work that does not merit a passing grade will earn a Fail (F). The Pass/D/Fail grading option may apply to any graduation requirement, including courses in the major, minor, Liberal Studies Program or open electives.

**OTHER COURSE POLICIES AND PROCEDURES:**

Please see the [CDM Intranet](http://my.cdm.depaul.edu/courses/syllabus.asp?course=IS-430-901&q=3&y=2010&id=333) for general information about school policies.

**Communication**

If you have questions or special circumstances – no matter how minor -- let me know right away.  Don't wait!   These classes move quickly.  Just like on a project, timely communication is vital to ensure things go smoothly.

**Academic Integrity and Plagiarism**

This course will be subject to the university's academic integrity policy. Please note that while I do not object to students working side-by-side on an assignment, each student is responsible for their own work. It’s okay to ask a colleague to help you work out a bug or similar, but it is not acceptable for them to simply solve a problem for you. Similarly, it is not acceptable for two students to submit essentially an identical assignment with only cosmetic changes between the two. Each student must complete a unique assignment.

More information can be found at <http://academicintegrity.depaul.edu/>. If you have any questions, consult with instructor.

**Incomplete**

An incomplete grade is given only for an exceptional reason such as a death in the family, a serious illness, etc. Any such reason must be documented. Any incomplete request must be made at least two weeks before the final, and approved by the Dean of the College of Computing and Digital Media. Any consequences resulting from a poor grade for the course will not be considered as valid reasons for such a request. Incompletes are only granted when the large majority of the course work has already been completed.

**COURSE SCHEDULE AND TOPICS:**

Here is a summary of the course. Note that this is subject to tweaking – I will give you plenty of notice when something changes:

| **Session** | **Topics** |
| --- | --- |
| Week 1 | Course Overview; HTML & CSS review, Responsive Web Intro to Flexbox Properties |
| Week 2 | Flexbox Intro |
| Week 3 | Flexbox Concepts |
| Week 4 | CSS Grid Intro |
| Week 5 | CSS Grid Concepts |
| Week 6 | Intro to Web Frameworks |
| Week 7 | Web Framework Properties |
| Week 8 | Web Framework Concepts |
| Week 9 | Working on Final Project |
| Week 10 | Final Project due |

**Learning Domain Outcomes**

1.     Students will understand the major principles guiding modern scientific thought. Students will demonstrate a mastery of the science content knowledge of their SID courses.

2.     Students will know that science, technology, and math serve as mechanisms for inquiry into the nature of the universe. Students will:

a.     identify questions that can be answered through scientific investigations;

b.     design and conduct a scientific investigation to test a scientific hypothesis;

c.     use appropriate tools and techniques together, analyze, and interpret data to support or refute a scientific hypothesis;

d.     develop descriptions, explanations, predictions, and models using evidence;

e.     describe relationships between evidence and explanations using critical and logical thinking;

f.      recognize and analyze alternative explanations and predictions;

g.     communicate scientific procedures and explanations;

h.     use mathematics in all aspects of scientific inquiry.

3.     Students will understand and appreciate the interrelationships among science, technology and math. Students will:

a.     use technology and mathematics to identify a problem or design a solution to a problem;

b.     give examples of how science and technology inform and influence each other.

4.     Students will understand and appreciate the role of science in society and in their lives. Students will:

a.    provide examples of how science and technology impact our lives, and how social needs and concerns impact our development of technology and scientific investigation;

b.    develop positive attitudes towards science, technology, and mathematics;

c.    establish an ongoing experiential/service-learning interest in science, technology, and mathematics.

5.     Students will understand the nature of science, technology, and mathematics. Students will:

a.     provide examples of the abuse of science, including the representation of unfalsifiable claims as science and other forms of pseudoscience;

b.     explain the strengths and limits of scientific inquiry;

c.     explain the difference between evidence and inference, and the  provisional nature of scientific explanations by providing examples of how our understanding of the workings of the world has changed in the past;

d.     explain the difference between probability and certainty and describe what is meant by uncertainty in the context of science, technology, and mathematics.

**How Learning Outcomes Will Be Met**

Programming is a rigorous intellectual challenge that must be approached systematically with extreme attention to detail. The structure, grammar, syntax and underlying theory must all be studied and reviewed in order to be able to not only apply the principles towards achieving a functioning program. Another very important skill is the ability to use programming to solve tasks that occur in the real world. For a web page, this might include tasks such as error checking, creating a working ‘shopping basket’ and so on. Even mathematical skills come into play whether it involves random number generation in a video game requiring simulated die rolls, or careful attention to order of operations when putting together a complicated estimate from a reservations page for a travel agency’s website.  All of these situations (or ones closely resembling them) will be required of students at some point in the course.

**Writing Expectations**

Writing is integral for communicating ideas and progress in science, mathematics and technology. The form of writing in these disciplines is different from most other fields and includes, for example, mathematical equations, computer code, figures and graphs, lab reports and journals. Courses in the SI domain must include a writing component where that component takes on the form appropriate for that course (e.g., *lab reports, technical reports, etc.)*

**How Writing Expectations Will Be Met**

In the course of the quarter, students will be required at times to provide clearly written summaries explaining some of the programming and web-design theories expounded upon during the course. The student will also be required to explain their own reasoning accompanied by specific examples from their own code and from their interpretation of code found during exploration of well-designed web pages created by others.

# **Other**

Attitude: A professional and academic attitude is expected throughout this course.  Measurable examples of non-academic or unprofessional attitude include but are not limited to: talking to others when the instructor is speaking, mocking another’s opinion, sleeping, working on assignments for other classes, listening to headphones, cell phones ringing, emailing, texting or using the internet whether on a phone or computer.  If any issues arise a student may be asked to leave the classroom.

Civil Discourse: DePaul University is a community that thrives on open discourse that challenges students, both intellectually and personally, to be [Socially Responsible Leaders](http://studentaffairs.depaul.edu/sli/about/framework.asp).  It is the expectation that all dialogue in this course is civil and respectful of the dignity of each student.  Any instances of disrespect or hostility can jeopardize a student’s ability to be successful in the course.

Student responsibilities:  Each student is responsible for their time management and for meeting the expectations in the syllabus.  The instructor is not responsible for reminding students of assignment deadlines in class.  In the event of an absence, it is the student's responsibility to contact the instructor regarding the absence and the topics covered in class. Students must keep backup copies of all submitted assignments. By itself, an illness is not a reason to eliminate late penalties. If an assignment is listed on the syllabus, you are still responsible for completing the assignment on time.