

Fall 2023 ITLS-4260-IO1 XL Syllabus

ITLS Mobile Design and Development for Learning 4260/6260

Course Description

This course is designed for those who are interested in developing mobile apps for learning. You will practice building apps, but also examine the ideas behind effectively using mobile development for learning in various applications.

Throughout the semester you will build 16 mobile apps using *App Inventor 2 (AI2)*. AI2 is a block-based programming environment, through which you can learn many valuable computer science concepts. You can begin developing mobile applications with little to no previous programming experience. Each app that you build will provide you with skills you'll need to complete your **final project: a unique, professionally developed Mobile App for Learning**.

In the first half of the semester, you will build simple apps to provide instruction, to assess, and to support learning in various environments. Towards the middle of semester you will begin developing game-based applications. In the last part of the semester, you will learn to work with cloud-based databases and how to develop a login system for your application. To support the development of your final project, you will also engage in short weekly readings about learning and instructional design principles.

Finally, in addition to learning to develop mobile apps, you will also learn to evaluate mobile apps in terms of their usability, design quality, and learning value.

Course Objectives

The course is designed to not only foster skills for mobile design and development but to also review and promote a deeper understanding of design and learning principles. Upon completion of this course students will be able to:

- *Evaluate, design and build multiple mobile apps for educational purposes.*
- *Utilize fundamental programming concepts like variables, control structures, procedures, and cloud-based database storage systems.*
- *Apply design and learning principles to create educational apps.*
- *Creatively use programming skills and design/learning principles to personalize and adapt mobile apps to contexts outside of the course.*

IDEA Learning Objectives:

- *Learn fundamental principles, generalizations, or theories about mobile design and learning.*
- *Developing specific skills, competencies and points of view needed by professionals in the field most closely related to this course*
- *Developing creative capacities (writing, inventing, designing, performing in art, music drama, etc.)*

Instructor

L. Roy "LT" Thackeray

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Original Course Design

Frederick Poole

Course Format

All learning is asynchronous (you don't have to be anywhere at a particular time), online.

Thursdays: Reading and Apps due

Mondays: Feedback and Peer Reviews due

Delivery of this course is online, through the Canvas learning management system. Each week you will have assignments that are due on **Thursdays**, with follow-up assignments due on **Mondays**. (Those assignments involve leaving feedback on others' work and/or peer reviews).

Each week you will be expected to:

- Complete readings (**due on Thursday**),
- Build one (or sometimes two) applications (**also due on Thursday**),
- Provide feedback to your classmates Apps (**due on Monday**).
- Participate in a discussion about graduate research and example presentations (**due on Monday**).

Occasionally, you'll have additional assignments (e.g. evaluate a commercial apps, final project proposal) these will be **due on Thursdays**.

Graduate students: If you are in Level 6260, you will be required to do additional research. You will find your own example of the use of mobile design to share with the class. This can be a research paper, an interview with a professional, or another idea. See Week 2 to sign up for a week to present your research. You will also have additional requirements in your final app write-up.

To help build the mobile apps, you will have videos (to introduce the app, and provide instruction on key concepts) and text-based instructions. The videos and text-based instructions in this course were created by Frederick Poole. The videos splash page shows the wrong course number, but I decided it wasn't worth the time to re-edit them all. You can live with it, right?

Creativity is encouraged in every app you build; you will need to extend and personalize each one. However, your final apps will need to include the **minimal standards** (outlined by rubrics) to get full points. Research has shown that people can only be creative when they first have a base of knowledge to be creative *with*. You will build the knowledge by following examples, but use your own details and goals.

You will be asked to **evaluate your classmates apps**. This accomplishes multiple goals. First, you will get to see more apps and get more ideas. Second you will receive more feedback from different perspectives. Third, you will learn to be analytical in applying what you are learning in your readings to give feedback to your peers.

Readings will be relatively short (~10 pages / week), and you'll need to complete a short, low-stakes quiz to demonstrate you completed the reading. There are 12 total readings.

Finally, you will have several weeks with an additional presentation from one of your graduate student peers. You will be graded on your participation in discussions about these presentations.

Evaluation Methods and Criteria

<i>Grade Component</i>	<i>Assignment Description</i>	<i>IDEA Objective</i>	<i># of Assignments</i>	<i>Points</i>	<i>Total Points</i>
<i>Build Apps</i>	You will follow in-Canvas instruction to build apps which increase in difficulty and introduce new programming concepts.	Developing specific skills.	16	15	240
<i>App Extensions</i>	After building the Apps via Canvas instructions, you are expected to expand/adapt the apps. Extensions can be cosmetic, functional, or content-based.	Developing specific skills/ Creatively use programming skills and design/learning principles	16	10	160
<i>Reading quizzes</i>	Each week readings introducing learning and/or design principles will be given. After readings you are expected to complete a short quiz about your understanding of the text.	Learn fundamental principles or theories about mobile design and learning	12	5	60
<i>Evaluate Classmates Apps</i>	In addition to building the apps, you will evaluate two of your classmates' apps each week and give constructive feedback.	Learn fundamental principles or theories about mobile design and learning	32	5	160
<i>Evaluate Commercial Apps</i>	Using the design/learning principles studied via the readings, you will evaluate three educational apps during the course.	Learn fundamental principles or theories about mobile design and learning	3	30	90
<i>Graduate Students Only: Research and example of Mobile Design for learning</i>	Find Research, articles, expert, tool, etc. and present to the class this example of mobile design.	Learning how to find, evaluate, and use resources to explore a topic in depth	1	50	50

Discuss Examples of Mobile Design	Watch/read graduate presentations, then discuss the contents with peers.	Developing skill in expressing myself orally or in writing	Varies	10	# x 10
Final Project					
<i>Project Proposal</i>	Write a half-page proposal of the final app that you plan to build.		1	20	20
<i>Prototype</i>	Submit a prototype of the app using a design tool (e.g. InDesign)	Creatively use programming skills and design/learning principles	1	30	30
<i>First Draft</i>	Submit a first draft of the project. The first draft should include at least 25% of the project completed.	Creatively use programming skills and design/learning principles	1	30	30
<i>Peer Feedback</i>	You will provide feedback to one other student, including suggestions for improving their app design.	Learn fundamental principles or theories about mobile design and learning	1	20	20
<i>Final Draft with Write up</i>	Turn in final app with a 2-page write up describing the design and learning principles used to develop the app.	Developing specific skills	1	200	200

Grade Scheme

The following grading standards will be used in this class:

Grade	Range
A	100 % to 93.0%
A-	< 93.0 % to 90.0%
B+	< 90.0 % to 87.0%
B	< 87.0 % to 83.0%
B-	< 83.0 % to 80.0%

Grade	Range
C+	< 80.0 % to 77.0%
C	< 77.0 % to 73.0%
C-	< 73.0 % to 70.0%
D+	< 70.0 % to 67.0%
D	< 67.0 % to 60.0%
F	< 59.0 % to 0.0%

Late Assignments

It is important to submit assignments on time as it is easy to get behind in this course. The due dates for each assignment are on the modules page. Late assignments will be accepted with a late penalty. One to five days late = 10%. After five days it will be 50%. I will accept assignments until the course closes on Dec 8th. **After that time, no assignments will be accepted.**

Nonattendance Policy

Students May Be Dropped For Nonattendance

If a student does not attend a class during the first week of the term or by the second class meeting, whichever comes first, the instructor may submit a request to have the student dropped from the course. ***(This does not remove responsibility from the student to drop courses which he or she does not plan to attend.)*** This option is typically used for classes that are full and the instructor is trying to make a seat available for another student, but may be considered for other courses. Requests must be made during the first 20 percent of the course and will be considered on an individual student basis. Students who are dropped from courses will be notified by the Registrar's Office through their preferred e-mail account (see 2018-2019 General Catalog (<http://catalog.usu.edu/content.php?catoid=12&navoid=3955>)).

Assumption of Risk

All classes, programs, and extracurricular activities within the University involve some risk, and certain ones involve travel. The University provides opportunities to participate in these programs on a voluntary basis. Therefore, students should not participate in them if they do not care to assume the risks. Students can ask the respective program leaders/sponsors about the possible risks a program may generate, and if students are not willing to assume the risks, they should not select that program. By voluntarily participating in classes, programs, and extracurricular activities, a student does so at his or her own risk. General information about University Risk Management policies, insurance coverage, vehicle use policies, and risk management forms can be found at: <http://www.usu.edu/riskmgt/> (<http://www.usu.edu/riskmgt/>)

Library Services

All USU students attending classes in Logan, at our Regional Campuses, or online can access all databases, e-journals, and e-books regardless of location. Additionally, the library will mail printed books to students, at no charge to them. Students can also borrow books from any Utah academic library. Take advantage of all library services and learn more at libguides.usu.edu/rc. (<http://libguides.usu.edu/rc>)

Classroom Civility

Utah State University supports the principle of freedom of expression for both faculty and students. The University respects the rights of faculty to teach and students to learn. Maintenance of these rights requires classroom conditions that do not impede the learning process. Disruptive classroom behavior will not be tolerated. An individual engaging in such behavior may be subject to disciplinary action. Read Student Code Article V Section V-3 (<https://studentconduct.usu.edu/studentcode/article5>) for more information.

University Policies & Procedures

Academic Freedom and Professional Responsibilities

Academic freedom is the right to teach, study, discuss, investigate, discover, create, and publish freely. Academic freedom protects the rights of faculty members in teaching and of students in learning. Freedom in research is fundamental to the advancement of truth. Faculty members are entitled to full freedom in teaching, research, and creative activities, subject to the limitations imposed by professional responsibility. Faculty Code Policy #403 (<https://www.usu.edu/policies/403/>) further defines academic freedom and professional responsibilities.

Academic Integrity – "The Honor System"

Each student has the right and duty to pursue his or her academic experience free of dishonesty. To enhance the learning environment at Utah State University and to develop student academic integrity, each student agrees to the following Honor Pledge:

"I pledge, on my honor, to conduct myself with the foremost level of academic integrity."

A student who lives by the Honor Pledge is a student who does more than not cheat, falsify, or plagiarize. A student who lives by the Honor Pledge:

- Espouses academic integrity as an underlying and essential principle of the Utah State University community;
- Understands that each act of academic dishonesty devalues every degree that is awarded by this institution; and
- Is a welcomed and valued member of Utah State University.

Academic Dishonesty

The instructor of this course will take appropriate actions in response to Academic Dishonesty, as defined the University's Student Code. Acts of academic dishonesty include but are not limited to:

- **Cheating:** using, attempting to use, or providing others with any unauthorized assistance in taking quizzes, tests, examinations, or in any other academic exercise or activity. Unauthorized assistance includes:
 - Working in a group when the instructor has designated that the quiz, test, examination, or any other academic exercise or activity be done "individually;"
 - Depending on the aid of sources beyond those authorized by the instructor in writing papers, preparing reports, solving problems, or carrying out other assignments;
 - Substituting for another student, or permitting another student to substitute for oneself, in taking an examination or preparing academic work;
 - Acquiring tests or other academic material belonging to a faculty member, staff member, or another student without express permission;

- Continuing to write after time has been called on a quiz, test, examination, or any other academic exercise or activity;
- Submitting substantially the same work for credit in more than one class, except with prior approval of the instructor; or engaging in any form of research fraud.
- **Falsification:** altering or fabricating any information or citation in an academic exercise or activity.
- **Plagiarism:** representing, by paraphrase or direct quotation, the published or unpublished work of another person as one's own in any academic exercise or activity without full and clear acknowledgment. It also includes using materials prepared by another person or by an agency engaged in the sale of term papers or other academic materials.

For additional information go to: ARTICLE VI. University Regulations Regarding Academic Integrity
(<https://studentconduct.usu.edu/studentcode/article6>)

Discrimination and Sexual Misconduct

General Overview

USU strives to provide an environment for students and employees that is free from discrimination (<https://www.usu.edu/equity/non-discrimination>) and sexual misconduct (<https://www.usu.edu/equity/sexual-misconduct/Sexual-Misconduct-Terms>). If you experience sexual misconduct or discrimination at any point during the semester inside or outside of class, you are encouraged to contact the USU Title IX Coordinator via Distance Education room 400 in Logan, 435-797-1266 (tel:1-435-797-1266), titleix@usu.edu (<mailto:titleix@usu.edu>), or at [equity.usu.edu/report](https://www.usu.edu/equity/report) (<https://www.usu.edu/equity/report>). You can learn more about the USU resources available for individuals who have experienced sexual misconduct at [sexualrespect.usu.edu](https://www.usu.edu/sexual-respect/) (<https://www.usu.edu/sexual-respect/>). Resources for individuals who have experienced discrimination are listed at [equity.usu.edu/resources](https://www.usu.edu/equity/resources) (<https://www.usu.edu/equity/resources>).

Required Reporting of Sexual Misconduct

The instructor is designated by USU as a "reporting employee (<https://www.usu.edu/equity/sexual-misconduct/employees#reporting>)." This means that if you share information about sexual misconduct (<https://www.usu.edu/equity/sexual-misconduct/Sexual-Misconduct-Terms>) (sexual harassment, sexual exploitation, sexual assault, relationship violence, or sex-based stalking) with the instructor, they *will report* that information to the USU Title IX Coordinator. The instructor is also required to tell you about designated confidential resources (<https://www.usu.edu/equity/sexual-misconduct/confidential-resources>), supportive measures (<https://www.usu.edu/equity/Supportive-Measures>), and how you can file a report (<https://www.usu.edu/equity/report>) with the USU Title IX Coordinator.

Withdrawal Policy and "I" Grade Policy

Students are required to complete all courses for which they are registered by the end of the semester. In some cases, a student may be unable to complete all of the coursework because of extenuating circumstances, but not due to poor performance or to retain financial aid. The term 'extenuating' circumstances includes: (1) incapacitating illness which prevents a student from attending classes for a minimum period of two weeks, (2) a death in the immediate family, (3) financial responsibilities requiring a student to alter a work schedule to secure employment, (4) change in work schedule as required by an employer, or (5) other emergencies deemed appropriate by the instructor.

Students with Disabilities

USU welcomes students with disabilities. If you have, or suspect you may have, a physical, mental health, or learning disability that may require accommodations in this course, please contact the Disability Resource Center (DRC) (<http://www.usu.edu/drc/>) as early in the semester as possible (University Inn # 101, (435) 797-2444, drc@usu.edu (<mailto:drc@usu.edu>)). All disability related accommodations must be approved by the DRC. Once approved, the DRC will coordinate with faculty to provide accommodations.

Students who are at a higher risk for complications from COVID-19 or who contract COVID-19 may also be eligible for accommodations.

Respect for Diversity

Regardless of intent, careless or ill-informed remarks can be offensive and hurtful to others and detract from the learning climate. If you feel uncomfortable in a classroom due to offensive language or actions by an instructor or student(s) regarding ethnicity, gender, or sexual orientation, contact:

- Division of Student Affairs: <https://studentaffairs.usu.edu> (<https://studentaffairs.usu.edu/>), (435) 797-1712, studentservices@usu.edu (<mailto:studentservices@usu.edu>), TSC 220
- Student Legal Services: <https://www.usu.edu/involvement/student-association/student-advocacy/legal-services> (<https://www.usu.edu/involvement/student-association/student-advocacy/legal-services>), (435) 797-2912, TSC 326,
- Access and Diversity: <http://accesscenter.usu.edu> (<http://accesscenter.usu.edu/>), (435) 797-1728, access@usu.edu (<mailto:access@usu.edu>); TSC 315
- Multicultural Programs: <http://accesscenter.usu.edu/multiculture> (<http://accesscenter.usu.edu/multiculture>), (435) 797-1728, TSC 315
- LGBTQA Programs: <http://accesscenter.usu.edu/lgbtqa> (<http://accesscenter.usu.edu/lgbtqa/>), (435) 797-1728, TSC 3145
- Provost's Office Diversity Resources: <https://www.usu.edu/provost/diversity> (<https://www.usu.edu/provost/diversity/>), (435) 797-8176

You can learn about your student rights by visiting:

The Code of Policies and Procedures for Students at Utah State University: <https://studentconduct.usu.edu/studentcode> (<https://studentconduct.usu.edu/studentcode/>)

Grievance Process

Students who feel they have been unfairly treated may file a grievance through the channels and procedures described in the Student Code: Article VII (<https://studentconduct.usu.edu/studentcode/article7>).

Full details for USU Academic Policies and Procedures can be found at:

- Student Conduct (<http://www.usu.edu/studentconduct>)
- Student Code (<https://studentconduct.usu.edu/studentcode/>)
- Academic Integrity (<https://studentconduct.usu.edu/studentcode/article6>)
- USU Academic Policies and Procedures (<http://catalog.usu.edu/content.php?catoid=4&navoid=546>)
- Academic Freedom and Professional Responsibility Policy (<https://www.usu.edu/policies/403/>)

Emergency Procedures

In the case of a drill or real emergency, classes will be notified to evacuate the building by the sound of the fire/emergency alarm system or by a building representative. In the event of a disaster that may interfere with either notification, evacuate as the situation dictates (i.e., in an earthquake when shaking ceases or immediately when a fire is discovered). Turn off computers and take any personal items with you. Elevators should not be used; instead, use the closest stairs.

General Health Protocols

The cold, flu, COVID-19, and other illnesses can have an impact on the health of our university community. USU welcomes the wearing of masks in all university buildings and encourages taking measures to mitigate risk as recommended by federal and state public health officials: getting vaccinated, staying home if you are sick (even with mild symptoms), and frequent hand washing.

Mental Health

Mental health is critically important for the success of USU students. As a student, you may experience a range of issues that can cause barriers to learning, such as strained relationships, increased anxiety, alcohol/drug problems, feeling down, difficulty concentrating and/or lack of motivation. These mental health concerns or stressful events may lead to diminished academic performance or reduce your ability to participate in daily activities. Utah State University provides

free services for students to assist them with addressing these and other concerns. You can learn more about the broad range of confidential mental health services available on campus at Counseling and Psychological Services (CAPS) (<https://counseling.usu.edu>).

Students are also encouraged to download the “SafeUT App” (<https://safeut.org/>) to their smartphones. The SafeUT application is a 24/7 statewide crisis text and tip service that provides real-time crisis intervention to students through texting and a confidential tip program that can help anyone with emotional crises, bullying, relationship problems, mental health, or suicide related issues.