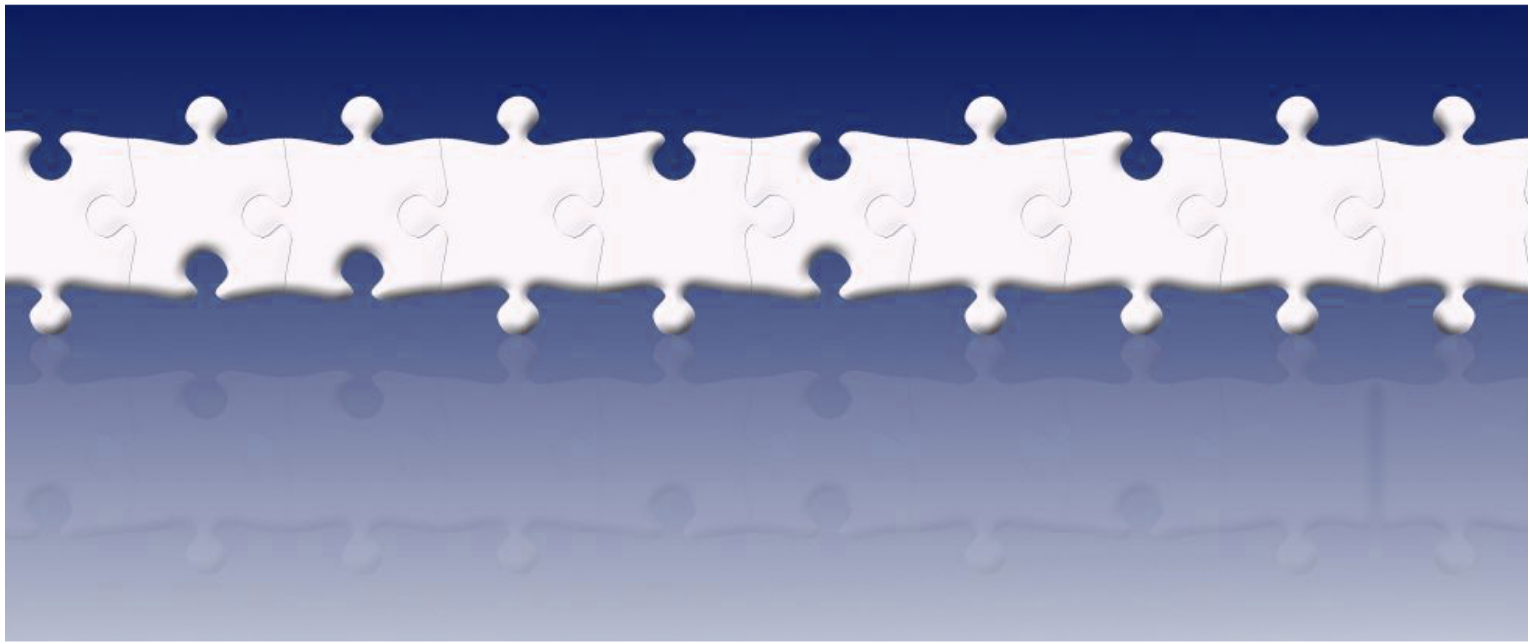


EDTECH 597-4173

Mobile App Design for Teaching and Learning

SYLLABUS



Department of Educational Technology

Boise State University

1 COURSE INFORMATION

Instructor

Yu-Chang Hsu, Ph.D.

Office Hours

1-3pm MST, Tue.-Thurs. or by appointment

Room 328, College of Education

E-mail: hsu@boisestate.edu

Skype: EdtechHSU

Course Description

“Leverage the potential of mobile technologies by exploring, analyzing, and designing mobile apps for use in various settings such as teaching, learning, and work.”

In this course, you will evaluate the strengths and weakness of different apps available in the Android Market. You will then learn to design and develop mobile apps running on Android OS devices through hands-on activities and studying tutorials as well as web-based documentations, participating in online discussions, and sharing resources.

[There are no prerequisites for this course.]

Course Location

This is an online course hosted on the Moodle course management system. The login page is located at:

<http://edtech.mrooms.org/login/index.php>



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OBJECTIVES & STANDARDS

Course Objectives

After completing this course the student will be able to:

- Describe the strengths and weaknesses of different mobile app development platforms
- Explain mobile apps design with mobile interaction design principles
- Explain and critique the pedagogical values of one's mobile app design
- Create an app design proposal
- Develop app that can be used in their own authentic teaching or working contexts.
- Develop Android mobile apps for learning with App Inventor
- Present and promote the use of mobile apps they/their team developed
 - Pedagogical values
 - Work aid
- Develop a scenario of using your app for mobile learning

Standards

The assignments in this course have been aligned to the *Standards for the Accreditation of School Media Specialist and Educational Technology Programs*:

<http://www.ncate.org/ProgramStandards/AECT/AECTstandardsREV2005.doc>

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OBJECTIVES & STANDARDS

Standard	Assignment
Standard 1: DESIGN	
1.1 Instructional Systems Design 1.1.a Utilize and implement design principles which specify optimal conditions for learning.	6, 9
1.1.1 Analyzing 1.1.1.b Analyze instructional tasks, content, and context.	2, 5
1.1.2 Designing 1.1.2.b Create instructional plans (micro-level design) that address the needs of all learners, including appropriate accommodations for learners with special needs.	5
1.1.3 Developing 1.1.3.a Produce instructional materials which require the use of multiple media.	6, 7, 8, 9
1.2 Message Design 1.2.a Apply principles of educational psychology, communications theory, and visual literacy to the selection of media for macro- and micro-level design of instruction. 1.2.b Apply principles of educational psychology, communications theory, and visual literacy to the development of instructional messages specific to the learning task. 1.2.c Understand, recognize and apply basic principles of message design in the development of a variety of communications with their learners.	6
1.3 Instructional Strategies 1.3.d Select motivational strategies appropriate for the target learners, task, and learning situation.	1, 5
1.4 Learner Characteristics 1.4.a Identify a broad range of observed and hypothetical learner characteristics for their particular area(s) of preparation. 1.4.b Describe and/or document specific learner characteristics which influence the selection of instructional strategies. 1.4.c Describe and/or document specific learner characteristics which influence the implementation of instructional strategies.	5
Standard 2: DEVELOPMENT	
2.0.3 Apply instructional design principles to select appropriate technological tools for the development of instructional and professional products. 2.0.4 Apply appropriate learning and psychological theories to the selection of appropriate technological tools and to the development of instructional and professional products.	3, 5
2.2 Audiovisual Technologies 2.2.1 Apply principles of visual and media literacy for the development and production of instructional and professional materials and products.	4, 6, 7, 9
2.3 Computer-Based Technologies	4, 6, 7, 9

2.3.1 Design and produce audio/video instructional materials which use computer-based technologies.	
2.4 Integrated Technologies 2.4.1 Use authoring tools to create effective hypermedia/multimedia instructional materials or products.	4, 5, 6, 7, 8, 9
Standard 3: UTILIZATION	
3.1 Media Utilization 3.1.1 Identify key factors in selecting and using technologies appropriate for learning situations specified in the instructional design process. 3.1.2 Use educational communications and instructional technology (SMETS) resources in a variety of learning contexts.	4
Standard 5: EVALUATION	
5.1 Problem Analysis 5.1.1 Identify and apply problem analysis skills in appropriate school media and educational technology (SMET) contexts (e.g., conduct needs assessments, identify and define problems, identify constraints, identify resources, define learner characteristics, define goals and objectives in instructional systems design, media development and utilization, program management, and evaluation).	5, 6, 7, 8, 9

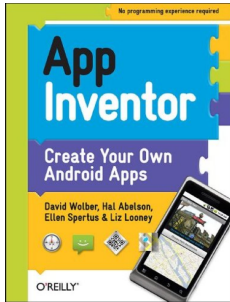
Technical Skills for Success

To be successful in this course, students must possess these minimum technical skills:

- Intermediate to advanced general computer knowledge
- Ability to communicate via email
- Internet navigation and research
- Use of online collaboration tools such as Google Docs, IM or Skype
- Use of Web 2.0 tools such as subscribing to RSS feed and Google Groups.

3 TEXTBOOK & TECHNOLOGY

Required Text



David Wolber, Hal Abelson, Ellen Spertus, & Liz Looney (2011). App Inventor: Create Your Own Android Apps (1st ed.). O'Reilly Media. ISBN: 1449397484.

Other web-based tutorials and documentations will be assigned in class.

The textbook may be ordered through one of the following options:

1. Option 1: Order online from the BSU Bookstore.
Boise State University Bookstore: <http://www.boisestatebooks.com/>
2. Option 2: Order online at www.amazon.com or another online book retailer.

Technology Requirements/Recommendations for this Course

- ✓ Required:
 - One smartphone running Android 1.6 or newer version of Android OS. ([the newer, the better](#))
 - Google account in order to register for Android App Inventor.
 - High-speed or broadband Internet connection
 - Updated Internet browser
 - Computer

- ✓ Recommended:
 - At least two monitors

4 ASSIGNMENTS

Assignments

Detailed information about assignments will be posted in Moodle. All assignments are listed on your course home page. Please check at least twice per week to read announcements since these can be posted at any time. Also, check your BSU email at least once per week for course related correspondence. The default email address in Moodle is your BSU email address.

For information about the BSU student email system (BroncoMail) please visit:

http://helpdesk.boisestate.edu/students/broncomail/getting_started.shtml

Course grade will be based on the completion and quality of the following:

Number	Major Assignment	Points
1	W1: Mobile Computing Discussion	25
2	W2: Mobile Apps Discussion	25
3	W3-12: App Design Journal (Blogging) (10 entries; 10 points each)	100
4	W3-10: App Design Practice and Discussion (8 apps; 50 points each) HelloPurr/PaintPot/MoleMash/NoTexting/ LadybugChase/ParisMapTour/FindMyCar/PresidentQuiz	400
5	W11: Final Project (1) App Design Proposal	100
6	W12: Final Project (2) Interface and Component Design	50
7	W13: Final Project (3) Coding Behaviors in Block Editor	50
8	W15: Final Project (4) Revising and Debugging	50
9	W16: Final Project (5) Completed Working App	200
	Grand Total Points	1000

5 GRADING

You can check your grades in Moodle to track your progress. Grades are updated as assignments are scored throughout the semester. Grades at the end of the course will be determined by the point scale shown in the table below.

Point Scale for Final Grades	
Grade	Points Required
A	940-1000
A-	900-930
B+	870-890
B	840-860
B-	800-830
C+	770-790
C	740-760
C-	700-730
D+	670-690
D	640-660
D-	600-630
F	590-Below

6 ACADEMIC POLICIES

Academic Honesty

It is expected that students in this class will create original works for each assignment. We will follow the BSU Student Code of Conduct and also observe U.S. copyright laws in this course. In addition to this please adhere to the following guidelines:

- Please do original work for each project. Projects that were created for other classes may not be submitted for credit in EDTECH 597. Each project may only be submitted for credit one time by the person who created it. The BSU Student Code of Conduct states: "Academic dishonesty also includes submitting substantial portions of the same academic course work to more than one course for credit without prior permission of the instructor(s)."
- All project text should be original text written by the student who is creating the project. The exception to this is the use of small amounts of quoted material that is properly cited. Copying and pasting from other Web sites or projects (including the instructor's examples) is not allowed.
- Images or other media used in projects should be original, or used with permission of the owner, or come from the public domain. Please check terms of use on sites containing these items.
- Please cite the source for materials that are obtained for your projects unless they are created by you. If permission is granted for use of copyrighted materials please post a statement explaining that near those materials.

In the event of academic dishonesty a complaint is filed with the BSU Student Conduct Office with supporting documentation. This complaint remains on file and actions may be taken against the student (e.g., loss or credit, reduction in grade, etc.).

More information about copyright: Several great links to copyright information are available on the BSU Academic Technologies site at: <http://itc.boisestate.edu/resource.htm>

6 ACADEMIC POLICIES

Late Work

Please be advised that the following late work policy will be enforced in this class:

- Only one assignment may be submitted late. This one late assignment can be no more than one week late or it receives zero points. All other late work receives a zero.
 - **This one-time waiver will only be granted upon request before assignment due date.**
- **No late submission of the Final Project will be accepted.**
- All assignment due dates fall on **SUNDAY midnight, except for the last submission of your Final Project due on Friday midnight**. Assignments must be submitted by midnight Mountain time on scheduled due dates. For time zone information please visit the World Clock Web site: <http://www.timeanddate.com/worldclock/>

It is a good idea to schedule specific times to work on your assignments each week and keep the appointment with yourself. Plan to spend **9 - 12 hours per week** on this class. The amount of time that is actually needed will depend on entry level skills. It is in your best interest to start early on each assignment to give yourself time to fix technical problems or get help before the due date passes.

Communication

I typically respond to e-mail twice per day Monday through Friday during the semester. Exceptions to this rule occur when there is a holiday, BSU break, or during other unavoidable situations that sometimes come up (e.g., power failure, out-of-town conference presentations etc.). If you send an e-mail during the week you should typically have a reply within 24 hours unless it is late Friday or the weekend. I catch up on weekend e-mail on Mondays. If you do not receive a reply to your e-mail within a reasonable period time, please send it again. Sometimes e-mail is captured by SPAM filters, is addressed incorrectly, or just simply does not make it through. Also, check your own e-mail filters that screen out junk mail. It is likely that my e-mail response got filtered into your e-mail junk box.

Note: Always include **EDTECH597 and a short description of message purpose** in your subject line. This will help ensure your e-mail get my attention.

Posting of Assignments

All assignments are posted for the entire semester in the Moodle course room and are listed by week. Assignments are due at the end of the week under which they are posted.

Assignment Submissions

All assignments should be submitted to the Moodle course site. The majority of the projects will be uploaded to the student's EdTech2 website and the URL of projects will be posted to the discussion board for review and feedback.

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ACADEMIC POLICIES

Feedback/grades

All projects will be graded within 7 to 10 days after submission due dates. Grades will become available in the Moodle gradebook ("Grades" on the left of the course website) and will reflect a running total grade throughout the semester.

Feedback will be provided for each project and assignment either in the discussion board or as comments to graded assignments in the gradebook.

Technical Difficulties

On occasion, you may experience problems with accessing Moodle or class files located within Moodle, with your Internet service, and/or other computer related problems. Do make the instructor aware if a technical problem prevents you from completing coursework.

For technical assistance, please contact the following resources:

BroncoMail - <http://helpdesk.boisestate.edu/email/broncomail/>

Moodle Assistance - EDTECH Admin boisebarbara@gmail.com

Reasonable Accommodations

Any student who feels s/he may need accommodations based on the impact of a disability should contact me privately to discuss your specific needs. You will also need to contact the [Disability Resource Center](#) at 208-426-1583 located in the Administration Building, room 114 to meet with a specialist and coordinate reasonable accommodations for any documented disability.

Boise State's FERPA policy

The Family Educational Rights and Privacy Act (FERPA) affords students certain rights with respect to their education records.

<http://registrar.boisestate.edu/catalogs/ugrdcurrent/frontpages/chapter2/confidentiality.shtm>

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Modification of the Syllabus and Schedule

I reserve the right to modify the syllabus and schedule at any time. Notice of any change will be emailed or posted as an announcement on Moodle course site.

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CONCEPTUAL FRAMEWORK

College of Education - The Professional Educator

Boise State University strives to develop knowledgeable educators who integrate complex roles and dispositions in the service of diverse communities of learners. Believing that all children, adolescents, and adults can learn, educators dedicate themselves to supporting that learning. Using effective approaches that promote high levels of student achievement, educators create environments that prepare learners to be citizens who contribute to a complex world. Educators serve learners as reflective practitioners, scholars and artists, problem solvers, and partners.

Department of Educational Technology Mission

The Department of Educational Technology supports the study and practice of facilitating and improving learning of a diverse population by creating, using, managing, and evaluating appropriate technological processes and resources. Believing technology is a tool that enhances and expands the educational environment, we promote the use of current and emergent technologies for teaching and learning in a dynamic global society. Educational technologists are leaders and innovators, serving in institutions of higher education, public or private school settings, federal, state, or local educational agencies, and educational organizations in the private sector.