

# EDTECH 536 - Educational Game Design

3 Credit Online Course

## Instructor Information

Name: Young Baek

Contact Information: 208-426-1023

Office Hours: Mon, Wed Thu 10:00 – 14:00

Availability: By appointment, open to email ([youngkyunbaek@boisestate.edu](mailto:youngkyunbaek@boisestate.edu)) or Skype

(youngkbaek) etc.

Website: <http://edtech.boisestate.edu/>

## Course Description

In this course, students will learn to design and develop educational games. Students will gain an in-depth understanding of educational games and acquire game design skills for teaching and learning. Students will be able to design their own short and simple game for players to play and learn. The activities in the class for designing an educational game will provide novice students with a valuable designing and developing experience. Students can select other game developing tools with instructor's permission. The course materials will be focused on Minecraft.

PREREQ: None

## Course Outcomes

Students read course-related articles to get a basic understanding of game creation in view of teaching and learning. At the end of this course, students will own and manage a basic game for teaching and learning. In this course, students will:

- Install Minecraft or a selected software for developing games on either Mac OSX or Windows operating systems;
- Understand functions of educational games;
- Understand game mechanics, elements, and structures of educational games;
- Create a design sheet for the target game;
- Create sub-components of educational games;
- Integrate sub-components into your target game and
- Create a video of the developed game play.

## Course Location and Login Information

This is an online course delivered in Moodle (<http://edtech.mrooms.org/>). Moodle login page explains how to login to Moodle. Contact Moodle Support at [moodlesupport@boisestate.edu](mailto:moodlesupport@boisestate.edu) if you have problems accessing Moodle. If you have forgotten your password, click the link below the login box, "lost password?" and you will be able to reset it.

## Course Materials

No textbook required.

Software: Minecraft (<http://minecraft.net>, \$26 for life time use), Camtasia or equivalents.

## Internet Connectivity

You need an up-to-date computer with an Internet connection in this course.

## Course Assignments and Final Project

Students are expected to spend 9-12 hours each week. Detailed information about each assignment is posted in Moodle. Check Moodle and your Boise State email regularly each week; announcements and course updates can be posted at any time.

The assignments in the course are:

- Summaries and reflections on articles
- Peer reviews
- Design sheet of the final project game
- Sub-components of games written in your selected software
- The final project is to develop a game in group, synthesized and integrated with small sub-components and outcomes of programming practices during the course. The final project should be based on the design sheet and created in Minecraft or in the student selected software. More detailed instructions will be delivered in the class.
- A video clip showing the gameplay for the final project game

Week	Assignments: Check Moodle for Details	Points	Due Date
1	- Introduce Yourself	10	Aug 25
2	- Assignment 1: Summarize two articles - Assignment 2: Reply to one peer's post	50 10	Sep 1 Sep 1
3	- Assignment 3: Build a house - Assignment 4: A working iron door	100 100	Sep 8 Sep 8
4	- Assignment 5: Post your group's idea for the final project - Assignment 6: Create two command blocks	50 100	Sep 15 Sep 15
5	- Assignment 7: Create your group's final project design sheet	100	Sept 22
6	- Assignment 8: Import a map	30	Sept 29
7	- Assignment 9: Build a complex structure	100	Oct 6
8	- Assignment 10: Make your group server - Assignment 11: Install 2 Custom NPCs, 2 different types of quiz	100 100	Oct 13 Oct 13

	and create dialogue with NPC		
9	- Assignment 12: Post your ideas about interactions	100	Oct 20
11	- Assignment 13: Revise the final project game & Post changes (Group)	100	Nov 3
12	- Assignment 14: Post your group's responses to peer reviews	100	Nov 10
13	- Assignment 15: Review two other games	100	Nov 24
15	- Assignment 16: User Guide_the final game (Group) - Assignment 17: Minecraft Map_the final game (Group)	150 150	Dec 1
16	- Assignment 18: Update the Game Design Sheet (Group) - Assignment 19: Submit game play video	50 100	Dec 8 Dec 8
	Total	1700	

## AECT Standards

Course assignments are aligned to the Association for Educational Communications and Technology ([AECT\) Standards, 2012 version](#).

Assignments are listed by number (based on the assignments list above) in the following table under the standards they are aligned to.

	Standard 1 Content Knowledge	Standard 2 Content Pedagogy	Standard 3 Learning Environments	Standard 4 Professional Knowledge & Skills	Standard 5 Research
Creating	1	13,18	4,5,6,7	11,	
Using		3,10,14			
Assessing/ Evaluating			16		
Managing					12
Ethics					
Diversity of Learners					

Collaborative Practice		11	8,9,	15,18	
Leadership					
Reflection on Practice					
Theoretical Foundations		2			
Method					

**Grade Scale**

Final grades are based on the following scale.

Grade	Points Required
A+	97% ~ 100%
A	93% ~ 96%
A-	90% ~ 92%
B+	87% ~ 89%
B	83% ~ 86%
B-	80% ~ 82%
C+	77% ~ 79%
C	73% ~ 76%
C-	70% ~ 72%
D+	67% ~ 69%
D	63% ~ 66%
D-	60% ~ 62%
F	69% and below

## Grading Cycle

For each assignment, a rubric will be provided. Based on the rubric, the feedback will be given by the week after each assignment's due date.

## Technical Difficulties

On occasion, you may experience problems accessing Moodle or class files located within Moodle, Internet service connection problems, and/or other computer related problems. Make the instructor aware if a technical problem prevents you from completing coursework. If a problem occurs on our end, such as Moodle or EDTECH2 server failure, then an automatic due date extension is granted.

## Reasonable Accommodations

Students with disabilities needing accommodations to fully participate in this class should contact the Educational Access Center (EAC). All accommodations must be approved through the EAC prior to being implemented. To learn more about the accommodation process, visit the EAC's website at <https://eac.boisestate.edu/new-eac-students/>

## Privacy Information

EDTECH courses involves online delivery and for some courses public display of assignments on websites or social media spaces. In the online course, your name, email address, and Moodle profile may be visible to others who have logged into Moodle. You are advised to familiarize yourself with privacy settings on Moodle or social media sites associated with the course. Privacy settings can sometimes be adjusted to restrict certain types of information. Please contact your instructor if you have questions or concerns.

## Academic Honesty

Students are expected to create original work for each assignment. Students must follow the [Boise State Student Code of Conduct](#) as well as observe [U.S. copyright laws](#) in this course.

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

Note: Instructors may append additional course-specific policies as needed.

## Policy for Incompletes

Incompletes are not guaranteed. However, when they are given incompletes adhere to [Boise State University guidelines](#) as follows:

Instructors can enter a grade of I—for incomplete—if both of the following conditions are present:

- Your work has been satisfactory up to the last three weeks of the semester.

- Extenuating circumstances make it impossible for you to complete the course before the end of the semester.

In order to receive an incomplete, you and your instructor must agree to a contract stipulating the work you must do and the time in which it must be completed for you to receive a grade in the class. The terms of this contract are viewable on myBoiseState under your Student Center To Do List. The contract time varies as set by the instructor but may not exceed one year. If no grade other than incomplete has been assigned one year after the original incomplete, the grade of F will automatically be assigned. The grade of F may not be changed without approval of the University Academic Appeals Committee. As long as you have an incomplete in a class, you may not re-enroll in the class during another semester. A grade of incomplete is excluded from GPA calculations until you receive a final grade in the course. You cannot graduate with a grade of I(incomplete) on your record.

### Course Schedule

Please note that students are expected to spend 9-12 hours *each* week on *each* EDTECH course during a regular academic session.

The instructor reserves the right to make changes to the schedule as needed.

Week	Start Date	Due Date	Major Activities: Check Moodle for Details
Module 1: Getting Started			
1	Aug 20	Aug 25	<ul style="list-style-type: none"> <li>• Read the course syllabus</li> <li>• Get an overview of the course</li> <li>• Introduce yourself</li> <li>• Create an account in Minecraft</li> <li>• Install Minecraft Java Edition</li> <li>• Get started with Minecraft Creative Mode</li> <li>• Play with Controls &amp; keyboard</li> </ul>
2	Aug 27	Sep 01	<ul style="list-style-type: none"> <li>• Read two articles &amp; Comment</li> <li>• Form a group of 3 or 4 for Final Group Project</li> <li>• - Assignment 1: Summarize two articles</li> <li>• - Assignment 2: Reply to one peer's post</li> </ul>
Module 2: Building your skills			
3	Sep 03	Sep 08	<ul style="list-style-type: none"> <li>• Build a House</li> <li>• Craft a door</li> <li>• - Assignment 3: Build a house</li> <li>• - Assignment 4: A working iron door</li> </ul>
4	Sep 10	Sep 15	<ul style="list-style-type: none"> <li>• Use game commands</li> <li>• Use Command Blocks</li> <li>• Plan your final project in group (1)</li> </ul>

			<ul style="list-style-type: none"> <li>- Assignment 5: Post what discussed in your group</li> <li>- Assignment 6: Create two command blocks</li> </ul>
5	Sep 17	Sep 22	<ul style="list-style-type: none"> <li>Use advanced Command Blocks</li> <li>Plan your final project (2)</li> <li>- Assignment 7: Create your group's final project design sheet</li> </ul>
Module 3: Structuring Gaming Environment			
6	Sep 24	Sep 29	<ul style="list-style-type: none"> <li>Import a map &amp; edit it</li> <li>- Assignment 8: Import a map</li> </ul>
7	Oct 01	Oct 06	<ul style="list-style-type: none"> <li>Build a complex structure</li> <li>- Assignment 9: Build a complex structure</li> </ul>
8	Oct 08	Oct 13	<ul style="list-style-type: none"> <li>Create your Minecraft server</li> <li>Invite your group members into your world</li> <li>Create NPCs &amp; quizzes</li> <li>- Assignment 10: Create your group server &amp; Invite your group members</li> <li>- Assignment 11: Install 2 Custom NPCs, 2 different types of quiz and create dialogue with NPC</li> </ul>
9	Oct 15	Oct 20	<ul style="list-style-type: none"> <li>Explore possible interactions in Minecraft</li> <li>Post your ideas on interactions</li> <li>Reply to two others' post</li> <li>- Assignment 12: Post your ideas about interactions</li> </ul>
10	Oct 22	Oct 27	<ul style="list-style-type: none"> <li>Include devised interactions in your group project</li> <li>Discuss your group's project plan to include devised interactions</li> </ul>
Module 4: Completing final game			
11	Oct 29	Nov 03	<ul style="list-style-type: none"> <li>Discuss each member's role in the final project</li> <li>Revise the final project plan</li> <li>- Assignment 13: Revise the final project plan &amp; Post changes (Group)</li> </ul>
12	Nov 05	Nov 10	<ul style="list-style-type: none"> <li>Work in the final project</li> <li>- Assignment 14: Post your group's responses to peer reviews</li> </ul>
13	Nov 12	Nov 17	<ul style="list-style-type: none"> <li>Play two other groups' game</li> <li>- Assignment 15: Review two other games</li> </ul>
14	Nov 19	Nov 24	Thanksgiving Holiday
15	Nov 26	Dec 01	<ul style="list-style-type: none"> <li>Submit your final group project</li> </ul>

			<ul style="list-style-type: none"> <li>- Assignment 16: User Guide_the final game (Group)</li> <li>- Assignment 17: Minecraft Map_the final game (Group)</li> </ul>
16	Dec 03	Dec 08	<ul style="list-style-type: none"> <li>- Assignment 18: Update your group's design sheet</li> <li>- Assignment 19: Submit game play video</li> </ul>

## Boise State University Academic Calendar

Please refer to the Boise State University Academic Calendar for University dates and deadlines: <http://registrar.boisestate.edu/academic-calendar.shtml>

## Graduate Catalog

*Graduate Catalogs* for present and prior academic years can be found online at: <http://graduatecatalog.boisestate.edu/>

## 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](#) is a diverse and international network of scholars, professional educators and candidates who:

- Lead research and innovations in online teaching and learning
- Model, promote, manage, and evaluate digital-age work and learning resources in educational environments
- Inspire creativity and expertise in digital media literacies
- Design and develop imaginative learning environments
- Empower learners to be evolving digital citizens who advocate cultural understanding and global responsibility
- Promote and pattern participatory culture, professional practice, and lifelong learning
- Forge connections between research, policy, and practice in educational technology