

ETCV 524 EDUCATIONAL GAMING AND SIMULATIONS

Fall 2012

University of Arizona South

This course is offered online.

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Please put this class ETCV 524 in subject line of email.

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Office Hours: I have no regular office hours. Office hours can be scheduled by appointment and/or can be held online in Skype, Elluminate or by phone. You can also contact me via email.

Course Description: Study of educational gaming from theoretical and design perspective, and the practical aspects of evaluating and implementing games, simulations, and virtual environments for teaching and learning. This course will also examine the impact of games and simulations on society and education.

Course Objectives: Course objectives are aligned with ISTE Technology Facilitation Standards. At the end of this course, students will be able to:

- Demonstrate a basic knowledge of educational games and simulations (TF-I)
- Analyze and evaluate an educational game or

simulation for its pedagogical value (TF-II; TF-III)

- Demonstrate an understanding of societal issues related to games and simulations (TF-VI)
- Review research literature on educational gaming and simulations and report findings (TF-II)
- Design an instructional scenario that uses educational games and simulations effectively (TF-II; TF-III).

Suggested Readings and Textbook:

Gibson, D. (2006). [Games and simulations in online learning: Research and development frameworks](#). IGI Global.

Prensky, M. (2007). [Digital game-based learning](#). McGraw-Hill

Gee, J.P. (2007). [Good video games and good learning: Collected essays on video games, learning and literacy](#). Peter Lang Publishing.

Michael, D. & Chen, S. (2005). [Serious games: Games that educate, train, and inform](#). Course Technology PTR.

Resources:

Organizations

1. Games for Health - <http://www.gamesforhealth.org/>
2. Game Theory.net - <http://gametheory.net>
3. Marc Prensky - <http://www.gamesparentsteachers.com>
4. Marc Prensky - <http://www.games2train.com>
5. Media Awareness Network - <http://www.media-awareness.ca>
6. National Institute on Media and the Family -

<http://www.mediafamily.org/>

7. Nobelprize.org Educational Games -

http://nobelprize.org/educational_games/

8. Social Impact Games - <http://www.socialimpactgames.com>

Internet Tools:

We will be using the following Internet tools during class.

Moodle: The Educational technology program at UofA South uses Moodle, an open source course management system to deliver online courses. You have to create your own account by going to: <http://moodle.uas.arizona.edu/>. The instructor will email you a 'registration key' which will be required to go into the ETCV 524 course.

lluminate- Illuminate is a collaborative synchronous web conferencing system which allows moderators and participants to share voice, video, text, images, whiteboard, chat, and desktop applications. Anyone with a UANetID can create and manage their own meetings.

Skype – Used for chat and voice communication, this software requires you to create a username and password. You may, at your discretion provide your email if you wish to use Skype outside of class. Please notify the instructors via Moodle when you have created your Skype user ID. Skype can be downloaded at <http://www.skype.com>

Other tools may be added throughout the course.

Use of email for course communication:

The instructor realizes that many students have alternate emails.

However, University policy states that a student's official email is their UANetID@email.arizona.edu account. The instructor will use this email for all communication.

Note: Since this course will be taught entirely on-line, it follows a bit of a different format than a traditional face-to-face class. Instead of meeting for three hours a week, you will be responsible for completing a series of independent and/or group assignments. I am available to you at any time I am online to answer questions and point you in directions should you find parts of this course difficult. I can be reached in one of the following ways.

I hope you enjoy this course and do not hesitate to contact me if you have questions.

Assignments & Grading:

1. Class Participation/Professionalism & Discussions (30 points)
2. Game Analysis Project (20 points)
3. Literature Review Paper (25 points)
4. Integrating Games/Simulations in Curriculum Project (20 points)
5. Reflection Paper (5 points)

Grading:

The grading scale is as follows: A=90-100, B=82-89, C=70-81, F=69 and below.

Course Policies:

1. **Academic Dishonesty:** Cheating and plagiarism are unethical. Students are expected to do their own work.

Plagiarism includes copying or cutting and pasting from online sources, taking information from a book or article, copying someone else's paper, or having someone else do your work for you. Research sources must be properly documented. Students found cheating or intentionally plagiarizing will receive a zero for the assignment and may be dismissed from the class with a failing grade. Finally, be sure to read UA's Code of Academic Integrity at: <http://web.arizona.edu/~dos/uapolicies/cai1.html#responsibility>.

2. **Participation:** All students are to work by themselves on each module exercise and adhere to the university's honor code unless otherwise stated on specific module exercises. However, you also must be present online every week to check e-mail, post assignments, and respond to the class discussion conferences. Let everyone (Instructor and classmates) know if you have problems and cannot participate as you planned.
3. **Paper/Assignment Submission:** All assignments, papers, project should be submitted to Moodle before the class on the due date. Late submission of papers or assignments will receive a 20% deduction of the total points for the assignment. If assignment is not submitted **one week after due date**, student will NOT receive credit. Students are responsible for assuring proper delivery of their assignments/papers/projects.

Special Needs: If you have special needs as addressed by the Americans with Disabilities Act and need course materials in alternative formats or need any special accommodations, please notify your course instructor and contact the Disability Resource Center immediately at 520-621-3268 or get information from DRC web site [<http://drc.arizona.edu>].

Final note: With the exception of grade and absence policies, information in this syllabus may be subject to change with reasonable advance notice, as deemed appropriate by the instructor.

Class Participation/ Professionalism & Discussions (30 points):
Participation in online class discussions.

Game Analysis Project (20 points) Due September 19

--Using the "Game (Simulation) Evaluation Form" provided on Moodle under the Game Analysis Project section, evaluate a game for its educational value. Provide a brief explanation about how this game can be used in K-20, military, government or corporate setting to support any learning or training object. You can pick any game of your choice or select one from the following list (if you decide to evaluate a game/simulation that is not on the following list, make sure to include a hyperlink in your submission).

Game List

1. America's Army - <http://www.americasarmy.com>
2. Animal Crossing - <http://www.animal-crossing.com/cityfolk/#>
3. Bully – <http://www.rockstargames.com/bully>
4. Capitalism II- <http://www.enlight.com/capitalism2/>
5. CDX Game- <http://cdx-thegame.com/>
6. City of Heroes – www.ncsoft.com
7. Civilization IV – <http://www.2kgames.com/civ4/home.htm>
8. Earthquake in Zipland - <http://www.ziplandinteractive.com>
9. Fable or Fable II - <http://lionhead.com/>
10. Harvest Moon - http://www.natsume.com/currentgames_frameset.html
11. Life and Death - <http://www.abandonia.com/games/483/download/LifeDeath.htm>
12. Mind Rover - <http://www.mindrover.com/>
13. Number Munchers - http://www.virtualapple.org/J_numbermunchersdisk.html
14. Rise of Nations -<http://www.microsoft.com/games/riseofnations/>
15. Rock Band 2 or Guitar Hero World Tour – <http://www.rockband.com> or <http://www.guitarhero.com>
16. Runescape -<http://www.runescape.com>
17. SimCity - http://www.simcity.com/en_US/beta/info
18. Sim Health - <http://www.mobygames.com/game/simhealth/>
19. Sims 2 - <http://thesims2.ea.com>
20. Spore – <http://www.spore.com/>
21. Thinking Worlds - <http://www.thinkingworlds.com/>
22. Zoo Tycoon 2 - <http://zootycoon.com/default.htm>

Literature/Article Review Paper (25 points) **Due October 21 (Part 1); Due October 28 (Part 2); Final version due: November 5.**

Part 1: For this project, conduct a literature review on educational gaming and simulations (20 points). For the topic of your literature review, pick from one of the following categories:

- Gaming/Simulation Concepts (Theory): Some of the topics that fall

under this category are: Evolution of gaming in the past two decades; research on significant changes; future of gaming; benefits of gaming to education.

- Gaming/Simulation Experience (Practice): Some of the topics that fall under this category are: Research on gaming for early childhood (teen, adult, different age and gender groups); child's exposure to teen, adult games; applications of gaming/simulation in content areas; market age shift.

This paper shouldn't exceed more than 12 pages –cover page or references are not included. Try to use scholarly publications as much as you can. Send your literature review topic in advance for approval.

Part 2: Peer Review: Provide a peer review to at least one student. (5 points).

Integrating Games/Simulations in Curriculum Project (20 points) Draft due November 14, Final project due December 7

For this project, you will design a teaching plan, where use of game/simulation is the main tool. The instructor will provide the instructional design template (Please see technology-rich lesson plan template under 'Final Project Submission' block in Moodle. You can adapt this template to your teaching setting and learning scenario) where the game/ simulation will be integrated. For this project:

- Purpose of the game or learning objectives should be stated clearly.
- A supplemental explanation should accompany this lesson plan. Two things that needs to be discussed in this explanation are:
 - a. A rationale for why this game was chosen for this curriculum, especially over other options if any was relevant. For instance, "This game aligns with the curriculum I teach about XYZ in the

following ways... I chose this game over these other two games that cover some of the same ground in terms of either content or mechanics for the following reasons...”

- b. Descriptions of at least two hypothetical learning scenarios. While creating these scenarios think about what it would be like to have *your* students using this game or simulation in a real-world situation. These scenarios might be occasions in which the game is very useful—For example, a teacher using a civilization-building game could have a situation like “I would have the game playing on my laptop, hooked up to the overhead projector. I would ask students to tell me where to move. Once we encountered a computer-controlled character, I would use that as a jumping-off point to start talking about international relations...,” etc. An obstacle might be something like a particularly difficult portion or aspect of the game that the teachers themselves encountered. What’s the solution? Do you try to help each student as they run into trouble, or do you try to have them avoid playing that part of the game?

- An assessment plan about how the learning will be evaluated after completing lesson or unit.

Documents to be submitted for the final project are:

- Overview (General Information about the game/simulation such as name, URL, brief introduction; Purpose/Objectives)
- Technology Plan
- Supporting Explanation (Rationale; Learning Scenarios)
- Assessment Plan

Reflection Paper (5 points) **Due December 7**

This paper addresses following points:

- Skills, knowledge and insights that are gained during this course,
- Most successfully accomplished tasks,
- Least successful tasks,
- What related tasks/topics/projects are of interest in the future.