

## ***SELF-REGULATED LEARNING IN SERIOUS EDUCATIONAL GAMES***

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### **COURSE DESCRIPTION**

This course provides an overview of topics related to self-regulated learning that may impact the development, performance, and outcomes of serious games. A primary emphasis will be placed upon cognitive, metacognitive, and motivational theories that are central to influential models of self-regulated learning. Information will be presented in a survey fashion with a topical overview rather than as an in- depth study of limited concepts.

### **TEXTS, READINGS AND INSTRUCTIONAL RESOURCES**

**Required Text:** Readings provided on course website

#### **Major Assignments:**

Class Format	
Article Responses	10 points
Classroom Topics Quiz	25 points
Project	65 points

The assessment for the course is Pass/Fail meaning that you must attend at least 70% of the sessions and achieve at least 70% of the total class points to pass.

#### ***Article Responses & Participation***

Before each of five class sessions (sessions #2-#6) you will read one journal article and complete an article response sheet. The articles are intended to provide you with background knowledge in the area of self-regulated learning and serious digital games. The article response sheet will help you organize the most important ideas from the paper and also to track questions you would like to discuss during class. Participation is highly encouraged during class so feel free to ask questions related to the articles or class topic. Also, additional readings are provided online to supplement class discussion to aid your comprehension and understanding of the course topics.

#### ***Classroom Topics Quiz***

The classroom topics quiz will be taken during the final week of class. The quiz will consist of 25 multiple-choice questions taken in an on-line format. Items will reflect information covered in the course sessions.

#### ***Project***

You have two options for the project, either preparing a Game Design Sketch or a Research Proposal. A description of each option is provided below:

#### *Game Design Sketch*

The goal of this project is to develop a proposal for a serious game that explicitly incorporates two or more self-regulated learning constructs. In other words, the game itself must be built to encourage the development of the user's skills in those constructs and/or include features/tools/scaffolds that represent these constructs to increase content learning. Consider the project as two parts: 1) constructing basic storyboards to describe features of the game, and 2) providing details and a rationale suitable for a grant proposal to fund the development of your game. Therefore, the objective of this project is for you to integrate information/concepts learned from the course with your existing interests in serious games to provide an 'argument' of sorts for why your serious game should be created. In order to do this, please include additional outside sources (journal articles, the internet, etc.) as needed. When selecting sources please make every effort to select those that have been formally reviewed and are not simply opinions by non-experts. You will present your preliminary version to the class (approx. 15 min.), receive feedback from your peers in order for you to make improvements, and then provide John with the final proposal. Please consider choosing a topic/idea that will benefit you outside of the realm of classwork (your job, future job, teaching, research, etc.). The project can be completed individually or in a small group (max 4 students). If completed in a group, the completion of a confidential "contribution sheet" will be required. Further project discussion and details will be provided in class.

#### *Research Proposal*

The goal of this project option is to develop an empirical research proposal that combines a central concept of self-regulated learning discussed in class with your personal scholarly interests in serious games. Preferably, your proposal should be one that you intend to actually conduct, thereby making it more meaningful. Also, you can receive valuable feedback from your peers and John in the process as you present your proposal to the class (approx. 15 min.). The final form of the project will include a written paper 10 pages in length (a rubric and format guidelines are provided online). Research proposals should conform to APA style. The paper should center on a study that could conceivably be conducted and submitted this following year to a national or international conference. Format guidelines for the paper will be provided. ***\*No plagiarism, cutting and pasting chunks of text (even if cited), nor significant space dedicated to quotes will be considered as your unique contribution in assessing the proposal. Please focus on summarizing and synthesizing your research in your own words.***

\*\*Five points will be deducted from the project score for each day a project is submitted after the submission deadline so make sure to plan ahead.

#### *Class Discussion*

I strongly encourage you to participate in classroom discussion and to ask questions when you do not understand something. I hope to encourage a class with a relaxed atmosphere in which all students feel comfortable participating. The class will be more interesting and thought provoking if the whole class is engaged in the discussion. Therefore, it is very important that you complete any readings to be discussed *before* class. Finally, I hope that this class is enjoyable and rewarding for you and useful to your future career. My goal is for you, as a student, to be able to look back at this class and feel as though it made a significant contribution to your professional and personal development.

## Tentative Schedule

May 23 - Introduction & Cognitive Theories of Learning

May 24 - Cognitive Theories of Learning

May 25 - Metacognition

May 29 - Motivation

May 30 – Discussing the development of Game-Based Learning Environments and incorporation self-regulated learning from actual GBLE projects

May 31 – Present Student Projects & Summary