

**GEORGE MASON UNIVERSITY  
COLLEGE OF EDUCATION AND HUMAN DEVELOPMENT  
GRADUATE SCHOOL OF EDUCATION  
Instructional Design and Technology (IDT) Program**

EDIT 772 DL2: Serious Games and Gamification  
2 credits, Fall 2018  
October 15, 2018 through December 19, 2018; Asynchronous

**FACULTY**

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**PREREQUISITES/COREQUISITES**

None

**UNIVERSITY CATALOG COURSE DESCRIPTION**

Provides basic knowledge of available applications and platforms for creating contextually based learning environments such as immersive virtual worlds, simulated worlds, alternate reality games, and massive multiplayer online role-playing games for e-learning.

**COURSE OVERVIEW**

Welcome to Serious Games and Gamification. This course provides basic knowledge of the range of capabilities of gaming and gamification techniques. Students learn to cultivate and identify effective game design practices for creating instructional products.

For our purposes, a *Serious Game* is defined to be a game designed for the purpose of solving a learning need. Although serious games can be entertaining, their main purpose is to train or educate. *Gamification* is the application of typical elements of game playing (e.g., point scoring, competition with others, rules of play) to activity in a non-game environment.

Throughout history people have taught, learned, entertained and communicated with games, and this has held constant across platforms. From board games to customized digital body-gear of today, games can convey information and transfer experience in a very engaging way, offering perspective, motivation, and a powerful autonomous learning experience.

Our focus will be the intersection of technology, gameplay and pedagogy.

- We will not be focusing primarily on technical game development or production, although that is important.
- We will not be focusing primarily on gameplay or seemingly addictive aspects of games, although that is important.
- We Will be focusing specifically on the science of serious game constructs and techniques that help inform and how they apply to teaching and learning.

As educators, it is understood that it is simply not enough to take a traditional, face-to-face course and merely upload the course material to the web and call it a distance-learning course. A well-designed web course requires specific design changes and interactions in order for the course to be effective for teaching and learning online. Similarly, it is understood that effectively incorporating technology into education requires much more than employing hardware or software in a classroom. The same is true for a serious game, and that is where we will spend our time. We will be exploring that space for teaching and learning.

This is a fun, creative class but serious work. This course calls for a discovery-based approach for learning.

No prior experience with formal game development, coding or software editing is necessary. Yet since this is a course that incorporates technology, students are expected to have a working knowledge of the using the web, understanding basic technical aspects of digital games, and technology platforms (mobile, web, thick and thin client, standalone).

## **COURSE DELIVERY METHOD**

This course is completely asynchronous and structured on weekly readings, game reviews, and independent assignments. The discussion forums on Blackboard will be open as a place to post questions and answers about coursework. You will log in to the Blackboard course site using your Mason email name (everything before "@masonlive.gmu.edu) and email password. The course site will be available on the Monday, one week prior to the start of class.

Each week's list of assignments will be posted at the course web site by noon Monday EST along with the material for the week. Assignments will be due on the following Sunday evening by 11:59pm. Assignments posted after 11:59pm will be considered late, and possible point loss will reflect the late submission.

**Under no circumstances, may candidates/students participate in online class sessions (either by phone or Internet) while operating motor vehicles. Further, as expected in a face-to-face class meeting, such online participation requires undivided attention to course content and communication.**

## TECHNICAL REQUIREMENTS

To participate in this course, students will need to satisfy the following technical requirements:

- High-speed Internet access with standard up-to-date browsers. To get a list of Blackboard's supported browsers see: [https://help.blackboard.com/Learn/Student/Getting\\_Started/Browser\\_Support#supported-browsers](https://help.blackboard.com/Learn/Student/Getting_Started/Browser_Support#supported-browsers)  
To get a list of supported operation systems on different devices see: [https://help.blackboard.com/Learn/Student/Getting\\_Started/Browser\\_Support#tested-devices-and-operating-systems](https://help.blackboard.com/Learn/Student/Getting_Started/Browser_Support#tested-devices-and-operating-systems)
- Students must maintain consistent and reliable access to their GMU email and Blackboard, as these are the official methods of communication for this course.
- Students will need a headset microphone for use with the Blackboard Collaborate web conferencing tool.
- Students may be asked to create logins and passwords on supplemental websites and/or to download trial software to their computer or tablet as part of course requirements.
- The following software plug-ins for PCs and Macs, respectively, are available for free download:
  - Adobe Acrobat Reader: <https://get.adobe.com/reader/>
  - Windows Media Player: <https://support.microsoft.com/en-us/help/14209/get-windows-media-player>
  - Apple Quick Time Player: [www.apple.com/quicktime/download/](http://www.apple.com/quicktime/download/)

## EXPECTATIONS

**Course Week:** Because asynchronous courses do not have a "fixed" meeting day, our week will **start** on Monday, and **finish** on Sunday.

**Log-in Frequency:** Students must actively check the Blackboard course site and their GMU email for communications from the instructor. This should be **daily** given the short duration of this course.

**Participation:** Students are expected to actively engage in all course activities throughout the semester, which includes viewing all course materials, completing course activities and assignments, and participating in course discussions and group interactions. Please see the description of each assignment for the late submission penalties.

**Technical Competence:** Students are expected to demonstrate competence in the use of all course technology. Students are expected to seek assistance if they are struggling with technical components of the course.

**Technical Issues:** Students should expect that they could experience some technical difficulties at some point in the course and should, therefore, budget their time accordingly. Late work will not be accepted based on individual technical issues.

**Workload:** Although much of this course is self-paced, there are **specific deadlines** and **due dates** listed in the **COURSE SCHEDULE** section of this syllabus to which you are expected to adhere. It is the student's responsibility to keep track of the daily course schedule of topics, readings, activities and assignments due.

**Instructor Support:** If you would like to schedule a one-on-one meeting to discuss course requirements, content or other course-related issues, and you are unable to come to the Mason campus, we can meet via telephone or web conference. Send me an email to schedule your one-on-one session and include your preferred meeting method and suggested dates/times.

**Netiquette:** The course environment is a collaborative space. Experience shows that even an innocent remark typed in the online environment can be misconstrued. Students must always re-read their responses carefully before posting them, so as others do not consider them as personal offenses. *Be positive in your approach with others and diplomatic in selecting your words.* Remember that you are not competing with classmates, but sharing information and learning from others. All faculty are similarly expected to be respectful in all communications.

**Accommodations:** Online learners who require effective accommodations to insure accessibility must be registered with George Mason University Disability Services.

## LEARNER OUTCOMES

This course is designed to enable students to:

- Apply a working knowledge of instructional systems design (ISD) to the design of serious games and gamification;
- Research and explain the elements and characteristics of serious games and gamification;
- Research different genres of serious games and gamification, and their specific applications;
- Explore and highlight serious game exemplars;
- Critically examine and critique serious games for purpose, design, and effect;
- Apply the aspects of gamification to a myriad of applications;
- Design a serious game using a variety of media, formats, and communications.

## PROFESSIONAL STANDARDS

The course is designed to meet many of the essential Instructional Design Competencies as specified by The International Board of Standards for Training, Performance and Instruction (ibstpi®):

- Communicate effectively in visual, oral and written form.
- Select and use a variety of techniques for determining instructional content.
- Analyze the characteristics of existing and emerging technologies and their use in an instructional environment.

- Select or modify existing instructional materials or develop original instructional materials.
- Provide for the effective implementation of instructional products and programs.
- Identify and resolve ethical and legal implications of design in the work place.

## **REQUIRED TEXTS**

This course has no required textbook. Weekly online readings, videos, and audio files will be assigned via the course Blackboard web site.

## **COURSE OBJECTIVES**

The objective of the class is to prepare students on how to incorporate serious games and gamification into an instructional environment as an effective pedagogical tool to support teaching and to effectively stimulate learning.

Students will learn about the components of serious games and how they differ from casual games. Students will learn how to compose serious games and will gain practice in evaluating serious games, particularly through a pedagogical lens. Additionally, students will find resources and leverage tools to utilize appropriate mediums, to enhance the educational game process.

Upon completion of this course, students will be able to:

- Develop critical skills to explore serious games, including understanding properties and characteristic differences among various game constructs, game design, and gamification;
- Choose game constructs and design appropriately as a delivery option for game-based instruction;
- Formulate an effective strategy for design and creation, from conceptualization and planning to development and execution;
- Create narrative projects with game constructs that reflect teaching practices;
- Offer critiques and their own perspective in analyzing different works.

## **COURSE ASSIGNMENTS AND DELIVERABLES**

Assignments include performance-based assessments.

Introduction (10 Points)

Weekly Game Analysis, Evidence and Process (50 Points)

Final Project - Game Design (25 Points)

Active Participation (15 Points)

Total Possible Points: 100

## **GRADING POLICIES**

Successful completion in this course is predicated on active participation. Grades are based on participation, assignments, and review. It is important to complete each assignment on time.

### **Grading Scale**

The grading scale used in this course is the official George Mason University scale for graduate-level courses:

A+	97-100%
A	94-96%
A-	90-93%
B+	86-89%
B	83-85%
B-	80-82%
C	70-79%
F	69 or below

## QUESTIONS ABOUT MATERIAL OR ASSIGNMENTS

If you have any questions, comments, concerns throughout the course, please either email me, or post them in the **Q&A** section of our Blackboard course. I do my best to answer questions within 24 hours. Students are also welcome and encouraged to respond to questions posted if applicable. This is a peer-centric class with a collaborative learning focus.

## PROFESSIONAL DISPOSITIONS

See <https://cehd.gmu.edu/students/policies-procedures/>.

## GMU POLICIES AND RESOURCES FOR STUDENTS

1. Students must adhere to the guidelines of the Mason Honor Code (see <https://catalog.gmu.edu/policies/honor-code-system/>).
2. Students must follow the university policy for Responsible Use of Computing (see <http://universitypolicy.gmu.edu/policies/responsible-use-of-computing/>).
3. Students are responsible for the content of university communications sent to their Mason email account and are required to activate their account and check it regularly. All communication from the university, college, school, and program will be sent to students **solely** through their Mason email account.
4. Students with disabilities who seek accommodations in a course must be registered with George Mason University Disability Services. Approved accommodations will begin at the time the written letter from Disability Services is received by the instructor (see <https://ds.gmu.edu/>).
5. Students must follow the university policy stating that all sound emitting devices shall be turned off during class unless otherwise authorized by the instructor.

### *Campus Resources*

1. Support for submission of assignments to Tk20 should be directed to [tk20help@gmu.edu](mailto:tk20help@gmu.edu) or <https://cehd.gmu.edu/aero/tk20>. Questions or concerns regarding use of Blackboard should be directed to <http://coursessupport.gmu.edu/>.
2. For information on student support resources on campus, see <https://ctfe.gmu.edu/teaching/student-support-resources-on-campus>

For additional information on the College of Education and Human Development, please visit our website <http://cehd.gmu.edu/>.