## CHED 4961-3 / EDUC 4961-3: Games as Learning Systems

MidAmerica Nazarene University Undergraduate Honors Program

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- I. **University Position Statement:** As a Christian community in the Wesleyan-Holiness tradition, MidAmerica Nazarene University seeks to transform the individual through intellectual, spiritual, and personal development for a life of service to God, the church, the nation and the world.
- II. **Program Mission Statement:** The MNU Honors Program exists to enrich and equip exceptional students for a lifetime of servant-leadership and Christian scholarship.
- III. **Course Description:** This interdisciplinary course explores the medium of face-to-face games as multivalent systems for learning. Pairing the tools of game design with educational concerns such as collaborative learning, constructivism, critical citizenship, critical thinking, curriculum design, experiential learning, information literacy, and current conversations about video games and learning, the course will present a critical framework for understanding and designing games as learning systems. This course serves several student constituencies:
  - A. Honors students who need elective Honors credit
  - B. Education students who seek elective study in the subject area
  - C. Christian Education students who seek elective study in the subject area
  - D. All students who need upper division elective credit

### IV. Learning Goals:

- A. Students will consider a variety of design frameworks for understanding games.
- B. Students will consider a variety of educational concerns, including collaborative learning, constructivism, critical citizenship, critical thinking, curriculum design, experiential learning, information literacy, and current conversations about video games and learning,
- C. Students will understand the interconnections between game play and learning.
- D. Students will understand the elements of iterative game design.
- E. Students will design a face-to-face game as a learning system, through the iterative game design process.

V. **Course Resources:** Students who enroll for the course will read texts, watch video files, and play games. A \$50.00 materials fee will provide sufficient financial resources to purchase a games library for the course. At semester's end, the Mabee Library will receive all games purchased for this course in order to enrich its holdings for student use.

# Special thanks to 31<sup>st</sup> Century Games and Hobbies (our neighborhood game store) for supplying us with great games at a reasonable price!

Their store is located 3 minutes south of campus: 2113 E. 151<sup>st</sup> Street at Mur-Len Rd. You may contact them at (913) 397-7706 or through their Facebook page.

- A. Students taking the course for one-hour or two-hour credit will read 248 pages in the primary text:
  - Whitton, N., and A. Moseley. (2012). *Using games to enhance learning and teaching: a beginner's guide.* New York, NY: Routledge.
- B. **All students** will read from the following sources at their own discretion:
  - Brown, D. (Producer), and Cooper, D. (Director). (13 February 2011). Digital medianew learners of the 21st century [Television broadcast]. Chicago, IL: Mobile Digital Arts. Retrieved from http://video.pbs.org/program/digital-media-new-learners-21st-century/
  - Brown, L., and V. Lara. (2007). Professional development module on collaborative learning. Texas Collaborative for Teaching Excellence. Retrieved from http://www.texascollaborative.org/Collaborative\_Learning\_Module.htm#secto4
  - Dodge, B. (2003). First steps in board game design. Exploratory Learning through Educational Simulation & Games, San Diego State University course, Fall 2008. Retrieved from http://edweb.sdsu.edu/courses/edtec670/boardgame/BoardGameDesign1.html
  - Giroux, H. A. (1993). Schooling for critical citizenship. *Synthesis/Regeneration,* 5(Winter). Retrieved from http://www.greens.org/s-r/05/05-10.html
  - Honeycutt, B. (2012). Applying Bloom's taxonomy to game design. Flip It Consulting. Retrieved from http://www.flipitconsulting.com/2012/03/23/free-use-blooms-taxonomy-to-flip-your-training-session/
  - Hoover, W. A. (1996). The practice implications of constructivism. *SEDL Letter, IX*(3), August. Retrieved from http://www.sedl.org/pubs/sedletter/v09n03/practice.html

- Institute of Museum and Library Services. (2009). 21st Century Skills definitions. Retrieved from http://www.imls.gov/about/21st\_century\_skills\_list.aspx
- Institute of Play. (n.d.). Q school design pack. Q curriculum design pack. Q systems thinking design pack. Q games and learning design pack. Retrieved from http://www.instituteofplay.org/products-resources/
- Keramidas, K. (2010). What games have to teach us about teaching and learning: game design as a model for course and curricular development. *Currents in Electronic Literacy, 13*(Spring). Retrieved from http://currents.cwrl.utexas.edu/2010/keramidas\_what-games-have-to-teach-us-about-teaching-and-learning
- Kiili, K. (2005). Digital game-based learning: towards an experiential gaming model. Internet and Higher Education, 8, 13-25. Retrieved from http://fardinpour.info/node/11
- Quattrocchi, C. (2013). The secret heritage of game-based learning. *Playing Games in School: When Games Make a Difference in Education* (EdSurge guide). Retrieved from https://www.edsurge.com/n/2013-08-20-game-based-schools-classrooms-of-the-the-future-or-repackaging-what-s-been-done-before
- St. Petersburg College Critical Thinking Gateway. (n.d.). Critical thinking games.

  Retrieved from http://www.spcollege.edu/criticalthinking/resources/games.htm
- C. **Students taking the course for three-hour credit** will read Whitton and Moseley plus one of the following sources:
  - Gee, J. P. (2007). What video games have to teach us about learning and literacy.

    Revised and updated edition. New York, NY: Palgrave Macmillan. 256 pages.
  - Mayer, B., and C. Harris. (2010). *Libraries got game: aligned learning through modern board games*. Chicago, IL: American Library Association. 134 pages.
- D. Additional course material will be drawn from the following sources:
  - Fullerton, T. (2008). Game design workshop: a playcentric approach to creating innovative games. 2nd ed. Boca Raton, FL: CRC Press.
  - Schell, J. (2008). *The art of game design: a book of lenses.* Burlington, MA: Morgan Kaufmann Publishers.
  - Sheldon, L. (2011). *The multiplayer classroom: designing coursework as a game.* Boston, MA: Cengage Learning.

#### VI. Evaluation:

A. Class Attendance & Participation: The attendance policy for this course will follow the MNU Catalog, section "Academic Regulations, Class Attendance." As stated there, excessive absences will result in a reduction of grade and/or credit. Your final semester grade will receive a 30-point deduction for every absence after the first, regardless of reason. No make-up work is allowable in this course for class attendance and participation. More than three absences will result in automatic failure of the course, unless the Provost's Office makes special provision. Arriving late or leaving early may also result in a point deduction (at the discretion of the professor).

At each class session, the student must turn in a 3x5 note card, marking his/her attendance. The notecard format is prescribed below. Students must purchase their own note cards.

Your printed name

Class date

Discussion summary, critique, or question

I read Whitton and Moseley ch 1 carefully and completely.

Your signature

Participation in class means thoughtful attention during class lectures and engaged interaction during discussion and small group activities.

Use of Electronic Devices: Students will observe the following considerations of the professor and other class colleagues: all cell phones and handheld devices turned off. Laptop computers may be used only for note taking. Abuse of this policy may result in the class-wide disallowance of laptop usage.

Special Needs/Disability Accommodation: If you need special accommodation or have special circumstances, please see the professor following the first week of classes. MNU provides reasonable accommodations for students with properly documented disabilities to the extent that such accommodations do not interfere with the essential requirements of a particular course or program and do not create an undue hardship. Written notification to the course instructor from the Kresge Academic Support Center is required so please plan accordingly. Students who have questions about receiving accommodations are invited to contact the Kresge Center for a confidential discussion. The Kresge Center may be contacted by visiting Mabee Library on the Olathe campus or via email at Kresge@mnu.edu.

Academic Honesty: MNU promotes and adheres to the principle of unquestioned honesty among students, faculty, and staff, a standard that governs relationships and behavior in the classroom, residence halls, chapel, and other campus entities. As a Christian community, students and faculty have a moral and ethical responsibility to uphold this standard and refrain from any activity that would involve academic dishonesty or lack of personal integrity. Cheating or plagiarism will result in a zero for that specific assignment. A second instance of cheating or plagiarism will result in failure for the course. A third instance of cheating or plagiarism may result in expulsion from the university. Instances of cheating and plagiarism are catalogued in the Provost's office and are cumulative across your course of study at MidAmerica Nazarene University.

B. **Reading**: Students will complete assigned readings on time, according to the course calendar. Students are accountable to observe the above reading requirements (Section V, letters A-D). Turn in all reading reports on attendance note cards, as illustrated above. Choose from the following statements for all reading reports:

i.	I read carefully and completely (this statement will earn full credit).
ii.	I read quickly (this statement will earn half credit).
iii.	I read at least half of (this statement will earn half credit).
iv.	I read less than half of (this statement will earn no credit).

Complete all reading by the time that class begins on the day that it is due. You cannot earn credit for late reading, regardless of the reason

C. Writing: You will receive opportunity to demonstrate your grasp of the course content through written work. Papers must observe requirements of both form and content. Formatting requirements include double-spacing, a 12-point Ariel or Times New Roman font and 1" margins. The first page or title page should include your name, the course name, the name of the professor, and the date submitted. Papers submitted in formats other than Adobe Acrobat will not receive a grade. Submit all papers through Moodle by 11:55 p.m. on the due date. Late papers will receive a penalty of 10% per class day after the due date.

The rubric for writing will consider the following criteria:

Writing skills (spelling, grammar, punctuation, style)	10%
Format and organization (title, margins, font, double-space, professionalism)	10%
Length (meets the minimum word count)	20%
Content (objectives as assigned in the syllabus)	30%
Application (integration with course content)	30%

i. **Game Analysis:** Students will submit a five-page (1250 word), narrative analysis of one published game, drawing insights from game design frameworks and

educational concerns. The following criteria will determine the content and application grade for this assignment:

- 1. Bibliographic and publishing data for the game
- 2. Description of game mechanics and processes
- 3. Description of educational dynamics in the game
- 4. Personal gameplay narrative, i.e. subjective experience with the game
- ii. Game Journal: Students will keep a brief journal throughout the course. Each journal entry will consist of a one-page (250-500 words), single-spaced, bulleted list. The journal will report on students' game play experiences from the perspectives of game design and educational theories discussed in the course. Students who take the course for one hour must submit journal entries for two game play experiences. Students who take the course for two or three hours must submit journal entries for four or six game play experiences, respectively. The following criteria will determine the content and application grade for this assignment:
  - 1. Bibliographic and publishing data for games played
  - 2. Description of game mechanics and processes
  - 3. Description of educational dynamics in games played

Students should note that this assignment requires single-spaced writing, not double-spaced writing

- iii. **Game Design:** At the completion of the course, students will submit an original game, including all artifacts and instructions. The following criteria will determine the content and application grade for this assignment:
  - 1. Abstract (a cogent overview or description of the game)
  - 2. Artifacts (for example, all necessary pieces, cards, and boards)
  - 3. Instructions (a complete and clear walkthrough on how to play the game)
  - 4. Design narrative (a summary of the iterative game design process)
  - 5. Playtesting narrative (a summary of insights gained through the iterative game design process)
  - 6. Educational analysis (a narrative report on the educational dynamics in the game)
- D. **Additional Resources:** Please consider making use of the following services through the Mabee Library and Learning Commons:

Mabee Library and Learning Commons: All students have access to a vast array of information resources and services through the Mabee Library, as well as collaborative

study spaces and group/individual study rooms, a computer lab, and a coffee shop, "Dewey's Book & Bean." Library hours, helpful research guides, the library catalog, and other resources are found on the library website (http://library.mnu.edu). The library provides access to a large collection of print books, audiobooks, and music CDs. Additionally, the library provides 24/7 online access to a large collection of e-books and online reference databases. These online resources may be accessed from the campus portal and the library website, using your MNU login. Journal articles and books not found in the Mabee Library collections or online resources may be requested on interlibrary loan. For assistance, contact the library by phone (913-971-3485) or by online chat (on the library website). Library faculty and staff provide assistance in the use of the library's collections and e-resources, as well as APA, MLA, and Chicago/Turabian style formatting, and the development and composition of research papers.

Kresge Academic Support Center: All students have access to a variety of academic success services from the Kresge Center, located in the Mabee Library building. Kresge staff provide help with tutoring in prerequisite and developmental skills, as well as studying, note taking, and test taking. Peer instructors are also available to provide tutoring in many subject areas. Peer tutoring is available. Tutoring resources are also available online, 24/7, through an online service called "Smarthinking." The Kresge Center is also responsible for Institutional Testing services, and accommodations assistance for students with special needs. You may contact the center by phone (913-971-3387) or by visiting their website (http://library.mnu.edu/learning-commons/academic-support-center.html).

Online Tutoring (Smarthinking): Online tutoring services are available at no cost for all students in subjects such as math, science, business, and writing through a service called "Smarthinking." Papers may be submitted for writing assistance (grammar, format, and citation style). Smarthinking tutors will not review entire draft papers to provide proofreading and editorial services, but can respond to specific formatting and grammar questions. You may access this service through the campus portal.

E. **Grading Scale:** A final letter grade will be assigned in relation to the number of points earned in the course. Whether students take the course for one-hour, or two- or three-hours, the same grading scale will apply:

A = 940-1000 B = 830-869 C = 730-769 D = 630-669 A- = 900-939 B- = 800-829 C- = 700-729 D- = 600-629 B+ = 870-899 C+ = 770-799 D+ = 670-699 F = 0-599

Reading 150 points
Game Journal 150 points
Game Analysis 200 points
Game Design 400 points

Points allocated for the above assignments will be distributed across the designated course assignments, whether for one-hour, two-hour, or three-hour credit.

## VII. Course Calendar:

Date	Prospective Topics	Assignments Due
Week	Syllabus	
1	Definition of game	
	Introduction to the Quest to Learn: school	
	Systems thinking, learning, and game play	
	Game play: Carcassonne, Dixit	
Week	Game design as learning design	<i>WM</i> ch. 2, 9- 10
2	Game design as curriculum design	Quattrocchi
	Quest to Learn: games, learning, curriculum	<i>IP</i> Design Packs
	Game play: Incan Gold, Lost Cities, or Tumblin	
	Dice	
Week	Whitton & Moseley's five game principles for	<i>WM</i> ch. 3-7
3	learning	
	Game play: Once upon a Time or Rory's Story	
	Cubes	
Week	Authentic contexts for learning	WM ch 8
4	Experiential learning	Kiili
	Game play: Ticket to Ride or Wits and Wagers	
Week	Constructivism	Hoover
5	Collaborative learning	Brown & Lara
	Game play: Forbidden Island or Pandemic	
Week	Critical thinking	Honeycutt
6	Information literacy	SPC Critical Thinking
	Critical citizenship	Games
	Game play: Forbidden Island, Pandemic, Mr. X,	IMLS 21st Century Skills
	or Scotland Yard	Giroux
		Mayer & Harris
Week	Video games and learning	<i>WM</i> ch 12-14
7	Augmented reality games and learning	Keramidas
	Sheldon's multiplayer classroom	Brown & Cooper
34/ 1	Game play: To be determined	Gee
Week	Iterative design: outlining the process	<i>WM</i> ch 11
8	Taxonomy of games	Dodge
Week	Iterative design: conceptualization	
9	Taxonomy of game mechanics	
144	Spring Break (no class)	
Week	Iterative design: prototyping	Game Analysis
11		
Week	Iterative design: playtesting	
12		

Week	Iterative design:	
13	functionality/completeness/balance	
Week	Iterative design: fun/accessibility	
14		
Week	Iterative design: workshop/display	Game Journal
15		
Week	Iterative design: workshop/display	Game Design
16		