

**UNIVERSITY OF NEBRASKA AT OMAHA
COURSE SYLLABUS**

Department and Course Number	<i>CSCI 1510</i>
Course Title	<i>Culture and History of Gaming</i>
Course Coordinator	<i>Patrick Cavanaugh</i>
Total Credits	<i>3</i>
Repeat for Credit?	<i>No</i>
Date of Last Revision	<i>June 7, 2012</i>

1.0 Course Description Information

1.1 Catalog description:

This course is an overview of the history of video gaming; its evolution, genres, and how games and gaming relate to their audience and the world in which we live. Topics include Project Management, HCI, GUI Design, Pattern Language(s,) game design, console evolution, gaming/industry milestones, gaming cultures and subcultures, and the profound impact gaming has had on life in the modern world.

1.2 Prerequisites of the course:

None.

1.3 Overview of content and purpose of the course:

This course is intended for those interested in game design and game programming, or those wishing to explore the phenomenon that has infiltrated into and made changes in virtually every culture in the modern tech-enabled world. The students who will take this course come from fields as diverse as programming, art, design, mathematics, drama, creative writing, technical writing, and many others. Students will gain a deeper understanding of video games, how their fields may be involved in the creation and dissemination of the games they play, how their fields will interact with an IT department on an active project, and the way their culture, lifestyle, and their lives are affected by the changes wrought almost daily in this world by video gaming.

1.4 Unusual circumstances of the course.

- Students should have access to a current generation gaming system, (Playstation 3, Wii, or Xbox360.)
- Students may be asked to gain access to certain games (possibly by rental.)
- Alternative assignments will be created for those students without console access.

2.0 Course Justification Information

2.1 Anticipated audience / demand:

This course presents CS majors, and others interested in Video Game design, who want to examine the relationship between the games they will build and the affect of those games on the culture in which they live, an opportunity to do so in a relatively non-technical environment. The course focuses on the history of the field and compares events in the timeline of gaming history against other contemporary issues. The course builds on basic techniques in Project Management that are universally applicable to any field in the projects they take on in the class as game designers.

2.2 Indicate how often this course will be offered and the anticipated enrollment:

It is anticipated that this course would most likely draw 25 - 30 students each semester it is offered, and possibly be able to maintain that level in both Fall and Spring semesters.

2.3 If it is a significant change to an existing course, please explain why it is needed:

The original purpose of this course was to provide those interested in video game design and programming an historical understanding of where the industry came from prior to their employment in the field. This version explores basic planning tools and techniques, and cultural changes related to gaming, as well as the history; and places history, technology, and culture in context with each other.

3.0 List of performance objectives stated in learning outcomes in a student's perspective:

- 3.1 Students will demonstrate the ability to perform basic academic research, to codify that research into cohesive arguments based on a stated position (or positions,) and to use basic planning and management techniques from the Project Management discipline to formalize and present those arguments in their concept game project
- 3.2 Students will utilize technology to present their findings both visually and orally to their peers and instructor, gaining and/or expanding their knowledge of public speaking, presentation software, and text editors, skills required by every modern workplace
- 3.3 Students will be able to explain the origins of the video game industry and discourse knowledgably on that history and upon the ways that gaming has influenced world culture at various points in recent history and to utilize that knowledge to shape the construction and design of their concept game
- 3.4 Students will learn to use critical analysis to present an objective review of a finished IT project (in this course a video game) and to apply those criticisms to their own game designs as a way to build upon existing content in a constructive manner
- 3.5 Students will gain a very basic overview of project management and development by the creation and presentation of a concept game as members of an IT development team
- 3.6 In creating their game students will learn basic techniques and problem solving in GUI design, HCI, and ethics among others, while ensuring cultural relevancy for their concept, and practicing critical thinking as developers rather than as players of games
- 3.7 Students will discover the interdisciplinary nature of video game creation and design, that IT projects do not exist in a vacuum devoid of input from other areas in the organization, and will acquire new skills and knowledge that will assist them in dealing with IT departments in their future careers regardless of their degree program

4.0 Content and Organization Information

4.1 List of major topics to be covered in chronological sequence

- 4.1.1 Video Game Origins (1.0 hours) - *students will learn the origins of video games where they came from and how technology was created and adapted for new use*
- 4.1.2 Patterns (1.0 hours) - *Christopher Alexander is the author of a seminal work in architecture called A Pattern Language, we will use the concept of Pattern Language(s,) as has Tidwell and others, throughout the semester as an introduction into Game Planning, HCI, and Interaction Design.*

- 4.1.3 Games for the Consumer (1.0 hour) - *students will delve into the earliest electronic consoles and their capabilities*
- 4.1.4 The Founding of Atari (1.5 hours) - *one of the biggest players in the early game industry - students will explore a company that influenced the industry from its conception and whose contribution is still felt today*
- 4.1.5 Loiterers, Lay-a-bouts, and Reprobates (1.0 hour) - *students will discuss the beginnings of the video game detractors and the first inklings of the controversies to come surrounding video games*
- 4.1.6 Return of Home Gaming (3.0 hours) - *a new generation of consoles with advanced capabilities is discussed and placed in context*
- 4.1.7 HCI (1.5 hours) - *the students will explore the ways early console games discovered HCI via trial and error and how the science as a whole has evolved to make the interface between human and machine a much easier place to explore*
- 4.1.8 Arcade Evolution (3.0 hours) - *students explore the relationships between arcade games, the home market, and the developing gamer culture/subculture*
- 4.1.9 The Fall of the Industry (1.5 hours) - *students will discover the reasons behind the changes that caused the industry to nearly collapse*
- 4.1.10 Project Management (2.0 hours) - *we uncover the science of project management not through success but via the failures of the early industry often building projects off-the-cuff; and will set up the basics of good project management by discussing several PM techniques to assist in the Concept Game Project*
- 4.1.11 Nintendo (1.0 hours) - *a new player with new technology changes the way game enthusiasts look at video gaming and arguably sets the standard for the rest of the industry*
- 4.1.12 Video Game Genres (1.5 hour) - *different types of games appeal to different persons and this exposes the student to a discussion of the many genres and their appeal to individuals and groups*
- 4.1.13 Sega (1.0 hours) - *another company enters the market with a new technology that begins to challenge the industry to evolve*
- 4.1.14 Console Wars (1.5 hours) - *students will see the origins of the "console wars" that still exist today between Nintendo, Microsoft, and Sony and will pursue a discussion of electronics-related industries following Moore's Law and rapid obsolescence of technological objects*
- 4.1.15 The Lensmen (1.5 hours) - *Interaction Design, GUI Design, this section will explore the science of the screen, we'll get a bird's-eye view of the tech involved in making our interaction with the world behind the screen as painless as possible by using different lenses, different viewpoints, player, designer, programmer, etc.*
- 4.1.16 Future Trends (6.0 hours) - *an exploration of issues affecting the industry as a whole and the IT profession as well, including intellectual property, piracy, digital rights management, online gaming, and content delivery systems*
- 4.1.17 Gaming Culture (4.0 hours) - *do games reflect reality, is it the opposite, is there a schism between "normal" and "gamer" mindsets, the student delves into the good and the bad of gaming with a critical eye, exploring issues such as hypersexualization, grievers, and other modern gaming topics*
- 4.1.18 Presentation and Discussion: Concept Games (4.0 hours) - *the students will present their concept games for public review to learn from others the flaws they did not see, again to have their work seen through a different lens*
- 4.1.19 Presentation and Discussion: Culture Paper (3.0 hours) - *the student will see their subject from many different perspectives in the ensuing discussions*

5.0 Teaching Methodology Information

5.1 Methods:

This course presents primarily through lecture. The projects are based on individual research and critique for the Culture and Review papers; small group research and development for the Concept Game. Classroom discussion over current topics in the news will also be used where appropriate to foster a deeper understanding of how the history of the industry is still influencing current games, attitudes, and technologies. Occasional classroom activities will allow students to access some examples of early game technology. Pattern Languages and HCI will be used to foster innovative thinking in interface design for the students' projects. Project Management techniques will be used throughout as appropriate to facilitate the projects, especially the Concept Game.

5.2 Student role:

The student is expected to be an active participant in the classroom discussion and activity sessions. As discussion is to be an important part of the learning process, attendance will be considered an essential part of the student's success. The student will also be expected to be somewhat self-reliant in that their success in out-of-class Projects will be largely based upon their own ability to work independently (or in their Concept Group) to meet self-defined goals within a set timeframe. They must meet their milestones on time and deliver their Projects as planned.

6.0 Evaluation Information

6.1 Describe the typical types of student projects that will be the basis for evaluating student performance:

6.1.1 Project: Culture Paper (3 weeks) - Researching topics of gaming history and evolution and how the games and the industry have affected world culture

6.1.2 Project: Game Review (3 weeks) - In-depth discussion of a single game in an instructor-chosen genre, reflecting on topics from class

6.1.3 Project: Game Concept (6 - 8 weeks) - The student must sell their game to the instructor and class, as if he or she were pitching a game to a group of industry executives. They must keep in mind topics such as target audience, content, rating, selling points, foreseeable problems, innovation, impact on the target audience, and when in the history of gaming it would be best suitable for release. This will be a small group project making use of both the technical and non-technical subjects explored throughout the semester

6.1.4 Periodic tests will also be given after major topics

6.1.5 Participation, in classroom discussion and activities, is used as a learning tool

6.2 Describe the typical basis for determining the final grade (e.g. weighting of various student projects):

Type/Topic	Weight
Tests:	30%
Projects:	60%
Participation:	10%

Weighted Grading Percentages

6.3 Grading type:

Points	Grade
97 – 100%	A+
93 – 96%	A
90 – 92%	A-
87 – 89%	B+
83 – 86%	B
80 – 82%	B-
77 – 79%	C+
73 – 76%	C
70 – 72%	C-
67 – 69%	D+
63 – 66%	D
60 – 62%	D-
0 – 59%	F

7.0 Resource Material Information

7.1 Textbooks and/or other required readings used in course:

Kent, Steven L. (2001). *Ultimate History of Video Games*. Roseville, CA: Three Rivers Press.

Niven, Larry, & Barnes, Steven (2010). *Dream Park*. New York: TOR (MacMillan).

7.2 Other student suggested reading materials:

American Psychological Association (2009). *Publication Manual of the American Psychological Association, Sixth Edition*. Washington, D.C.: American Psychological Association.

Mäyrä, Frans (2008). *An Introduction to Game Studies, Games and Culture*. London: Sage Publications.

McGonigal, Jane (2011). *Reality is Broken: Why Games Make Us Better and How They Can Change the World*. New York: Penguin Press HC.

Modern Language Association (2008). *MLA Handbook for Writers of Research Papers 7th Edition*. New York: Modern Language Association of America.

Tidwell, Jennifer (2011). *Designing Interfaces*. Sebastapool, California: O'Reilly Media.

7.3 Current bibliography and other resources:

Alexander, Christopher, et al. (1975). *A Pattern Language: Towns, Buildings, Construction*. Oxford University Press.

Bogost, Ian (2007). *Persuasive Games, The Expressive Power of Video Games*. Cambridge, MA: The MIT Press.

- Brathwaite, Brenda & Schreiber, Ian (2008). *Challenges for Game Designers*. Florence, KY: Charles River Media (Cengage Learning).
- Chan, Phillip, & Rabinowitz, Terry (2006). A cross-sectional analysis of video games and attention deficit hyperactivity disorder symptoms in adolescents. *Annals of General Psychiatry: BioMed Central - Open Access*. August 10, 2011. <http://www.biomedcentral.com/content/pdf/1744-859X-5-16.pdf>
- Denniston, Maxine M; Swahn, Monica H.; Feldman, Marci; & Romero, Lisa (2011). Associations between Electronic Media Use and Involvement in Violence, Alcohol and Drug Use among United States High School Students. *Western Journal of Emergency Medicine*, 12(3). Department of Emergency Medicine, UC Irvine. <http://escholarship.org/uc/item/66s8b252>
- Ducheneaut, Nicolas; Yee, Nicholas; Nickell, Eric; & Moore, Robert J (2006). "Alone Together?" Exploring the Social Dynamics of Massively Multiplayer Online Games. *ACM Conference on Human Factors in Computing Systems (CHI 2006)*; 2006 April 22-27; Montreal; Canada. NY: ACM; 2006; 407-416.
- Ermi, Laura, & Mäyrä, Frans (2005). *Fundamental Components of the Gameplay Experience, Analyzing Immersion*. University of Tampere, Finland. August 10, 2011. http://www.uta.fi/~tlilma/gameplay_experience.pdf
- Gee, James Paul. *Good Games and Good Learning*. University of Wisconsin Extension, University of Wisconsin - Madison. August 10, 2011. http://www.academiccolab.org/resources/documents/Good_Learning.pdf
- Hopson, John (2001). *Behavioral Game Design. Gamasutra*. August 10, 2011. http://www.gamasutra.com/view/feature/3085/behavioral_game_design.php
- Horowitz, Steven J.(2007). *Competing Lockean Claims to Virtual Property. Harvard Journal of Law & Technology*, Volume 20, Number 2 Spring 2007.
- Hunter, Dan & Lastowka, F. Gregory (2004). *The Laws of the Virtual Worlds. California Law Review*, Vol. 92, No. 1 (Jan., 2004), pp. 1-73. JSTOR. <http://www.jstor.org/stable/3481444>.
- Hunter, Dan & Lastowka, F. Gregory (2003). *Virtual Property*. August 10, 2011. http://www.nyls.edu/user_files/1/2/23/144/216/217/218/hunter_lastowka.pdf
- Jenkins, Peter S., *The Virtual World as a Company Town - Freedom of Speech in Massively Multiple Online Role Playing Games. Journal of Internet Law*, Vol. 8, No. 1, July 2004. August 10, 2011. <http://ssrn.com/abstract=565181>
- Mäyrä, Frans (2008). *An Introduction to Game Studies, Games and Culture*. London: Sage Publications.
- McGonigal, Jane (2011). *Reality is Broken: Why Games Make Us Better and How They Can Change the World*. New York: Penguin Press HC.

Moore, R. J. ; Ducheneaut, N. ; Nickell, E. ; Yee, N. Helping your fellow wizard: collaborative learning in massively multiplayer online games. Society for Applied Anthropology Conference; 2006 March 28-April 2; Vancouver; Canada. Palo Alto Research Center: Palo Alto: CA. August 10, 2011. http://www.parc.com/content/attachments/alone_together_exploring_5599_parc.pdf

Muratet, Mathieu; Torguet, Patrice; Jessel, Jean-Pierre; & Viallet, Fabienne (2009). Towards a Serious Game to Help Students Learn Computer Programming. *International Journal of Computer Games Technology*, vol. 2009, Article ID 470590, 12 pages, 2009. doi:10.1155/2009/470590

Pearce, Celia & Artemesia (2009). *Communities of Play, Emergent Cultures in Multiplayer Games and Virtual Worlds*. Cambridge, MA: The MIT Press.

Rouse, Richard (2011). *Game Design: Theory and Practice*. Sudbury, MA: Jones & Bartlett Learning.

Salen, Katie & Zimmerman, Richard (2003). *Rules of Play: Game Design Fundamentals*. Cambridge, MA: The MIT Press.

Schell, Jesse (2008). *The Art of Game Design - A Book of Lenses*. Burlington, MA Morgan Kaufmann (Elsevier)

Singer, Dorothy G & Singer, Jerome L (2007). *Imagination and play in the Electronic Age*. London: Harvard University Press.

Tidwell, Jennifer (1999). Common Ground: a Pattern Language for Human-Computer Interface Design. October 27, 2011. http://www.mit.edu/~jtidwell/common_ground_onefile.html

Yee, Nicholas (2001). The Norrathian Scrolls: A Study of EverQuest. August 10, 2011. <http://www.nickyee.com/eqt/report.html>

8.0 Other Information:

8.1 Accommodations statement:

8.2 Other:

8.3 Author(s):

Jeff Blackmore

9.0 Computer Science Accreditation Board (CSAB) Category Content (class time in hours):

<i>CSAB Category</i>	<i>Core</i>	<i>Advanced</i>
Data structures	0	0
Computer organization and architecture	0	0
Algorithms and software design	0	0
Concepts of programming languages	0	0

10.0 Oral and Written Communications:

Every student is required to submit at least **3** written reports (not including exams, tests, quizzes, or commented programs) to typically **5 - 12** pages and to make **2** oral presentations of typically **5 - 10** minutes duration. These include only material graded for grammar, spelling, style, and so forth, as well as for technical content, completeness, and accuracy.

11.0 Social and Ethical Issues:

Video games and their influence on modern cultures are discussed in many different aspects from the initial backlash by many against arcades to the controversy surrounding the supposed "addictiveness" of modern video gaming. The course delves into these issues and explores the controversies and the kudos surrounding the use of video gaming in the modern world.

12.0 Theoretical content:

This course discusses the issues surrounding what is arguably the most high profile IT project in the eye of the public, the video game. It explores the creation of games and the decision-making processes crucial to success in the marketplace, as well as the effects the games and the industry allegedly have on society as a whole. While the focus is not on the most technical aspects of the industry, we do explore some design and management concepts, both in lecture and in the course of assigned projects.

Subject Covered	Estimated Time
HCI	2.0 hours
GUI Design/Interaction Design	2.0 hours
CS Pattern Language(s)	2.0 hours
Project Management	4.0 hours

13.0 Problem analysis:

Please describe the analysis experiences common to all course sections.

Critical analysis is a focal point of this course. While this is a course in the computer sciences, rather than focus on programming it instead focuses on the product of the programming process and the effects that product has on society. The student will delve in depth into existing game content as well as forge their own concept game to meet any inherent issues in their own design head-on and confront problems intrinsic to the industry with their own ideas and values.

14.0 Solution design:

Please describe the design experiences common to all course sections.

Again, this course eschews programming and focuses instead on planning, creativity, and logic. It demands the student approach their projects with a critical eye for detail. Solid reasoning and research in issues involving IT and society creates an opportunity for the student to argue for or against a position in their projects, discussions, and papers, and to back those arguments with knowledge of both the technical and non-technical aspects of game design. The use of techniques in HCI/GUI Design will give the student a preview of the importance of those topics in the overall planning of an application as the students construct the preliminary design for a video game. Project Management techniques, used to guide the semester project, will stress the importance of organization and structure to the software development process at large. The history portion of the coursework is fundamental in that it provides a backdrop/timeline against which the students create and present their projects and places events into cultural relevance within the time in which they occurred.

CHANGE HISTORY

<i>Date</i>	<i>Change</i>	<i>By whom</i>	<i>Comments</i>
5/01/2006	Initial development as CSCI 2980	Cavanaugh	Original Date is approximate
8/19/2011	Redeveloped course for possible submission as an Humanities General Education Requirement, name change to reflect broader focus, updated to new CCMS format	Blackmore	
9/01/2011	Minor clean up as directed by UPC prior to CCMS submission	Blackmore	
10/28/2011	Adjustments as directed by Academic Committee to address technical subject material and content/style issues	Blackmore	Sections modified: 1.1, 1.3, 3.1, 3.3, 3.4, 4.1.2, 4.1.7, 4.1.10, 4.1.15, 4.1.18, 4.1.19, 7.1, 7.3, 12.0, 14.0
02/03/2012	Minor clarifications in language and content to more fully meet section requirements	Blackmore	2.1 and 2.2
06/07/2012	Revised required textbooks to reflect only the actual textbooks used by students not those from which readings will be drawn, moved Designing Interfaces from 7.3 to 7.2, fixed minor punctuation errors	Blackmore	7.1, 7.2, 7.3
02/25/2014	Reviewed document, eliminated a grammar error in section 3.4	Blackmore	3.4

This table is used to relate performance objectives (in section 3 of the syllabus) to the ABET program outcomes. List the appropriate performance objectives in the left column. In the body of the table, use S and X to indicate the relationship between the performance objective and the ABET program outcomes. Leave cells blank if there is no relationship. Add additional rows to the table as needed.

S – Strong relationship

X – Contributing relationship

Course objective	(a) knowledge of discipline	(b) analyze problem, define requirements	(c) design and implement solution	(d) function on a team	(e) ethical issues	(f) communicate effectively	(g) analyze impact of computing	(h) continued professional development	(i) Current techniques and tools	(j) apply foundations	(k) apply design and development principles
3.1 - Research	S	S	S	X	S	S	S	S	X	X	S
3.2 - Presentation	X	X	X	X	S	S	X		X		X
3.3 - Discourse	S	S	X		S	S	S	X	X		
3.4 - Analysis	S	S	S	X	S	X	S	X	X		X
3.5 - Concept Dev.	X	S	S	S	S	S	X	X	X		S
3.6 - Solutions	X	X	S	S	X	S	X	X	X	X	X
3.7 - Interdisciplinary	X	X		X	X	S	S	S	X	X	X