GE4102: VIDEO GAME: HISTORY, INDUSTRY, SOCIETY, AND CREATIVITY

Effective Term

Semester A 2022/23

Part I Course Overview

Course Title

Video Game: History, Industry, Society, and Creativity

Subject Code

GE - Gateway Education

Course Number

4102

Academic Unit

School of Creative Media (SM)

College/School

School of Creative Media (SM)

Course Duration

One Semester

Credit Units

3

Level

B1, B2, B3, B4 - Bachelor's Degree

GE Area (Primary)

Area 1 - Arts and Humanities

Medium of Instruction

English

Medium of Assessment

English

Prerequisites

Nil

Precursors

Nil

Equivalent Courses

Nil

Exclusive Courses

Nil

Part II Course Details

Abstract

This course covers video game from four different perspectives: 1.) Historical perspective. 2.) Industry perspective. 3.) Social Impact. 4.) Creative perspective. Student will be exposed to game in the context of its history, design, social impact, and industry. The course will consist of lectures and workshops. Student need to complete 4 reports, 2 written assignments, and 1 group project with presentation.

This course aims to explore the many facets of video game and its impact on our society in term of historical, industrial, and societal aspect.

Video games had entered in our daily life as one of the most popular form of digital entertainment. Due to its popularity, video game creates an industry which is worth of the USD \$54 billion (2008) worldwide. It tops both the movie and music industry in term of market value. Video game is also the subject of intense research activities within the academic world in the recent years. This course aims to facilitate the students to have deeper understanding of this new form of digital media by studying its history, industry, social impact, and the creative process of making video game. The course is designed with the above mentioned four perspectives in mind.

- 1.) Historical perspective: Video game has colourful history. Starting from the day of "Pong" with nothing more than few pixels on screen per second to the current incarnation with millions of polygon per every 0.02 second, many talented people made their very best effort in order to make this progress and create this industry. Those are the pioneers in this industry and each of the pioneers has their own interesting story that is still worth of learning. We will follow the footsteps of those pioneers and share with their stories. In the class, we will talk about the the historical events like the introduction of "Pong", rise of Mario (Nintendo), PS2 and Sony, Xbox and Microsoft, development of online games and many others. The stories not only illustrate the fascinating adventures of those creative people involved in the industry and they also illustrate business strategy in this highly competitive market. Student will study the history of video games through assigned readings and by actually playing some of the classical video games.
- 2.) Industry perspective: Video game business is a global business worth of USD \$54 billion annually. It is a serious business by any scale. In studying video business, we discuss the famous business cases within video game industry. Famous cases include the rise of Nintendo, SONY strategy on PS and PS 2, Microsoft development of XBOX, and many other cases. Student will be asked to select one of those cases and make a detailed study. They will present their finding in a group presentation.
- 3.) Social Impact: Like all forms of popular media in our society, video games have been the subject of frequent controversy. A large number of studies had been conducted in order to determine its impact on children and adolescents. The positive impact of video games include it improves a player manual dexterity and computer literacy. E.g. The US Navy is using video game to train their helicopter pilots. It achieves very good result in term of cost saving and makes those pilots more adaptable to ever-increasing computer centric operational environment.

The negative impact of video games is usually related to the amount of time that a player spent on video games per week and the type of content used in video game. Studies* had shown "Adolescent girls played video games for 5 hours/week, whereas boys averaged 13 hours/week" . The same study also pointed out that teens who play violent content video game for extended periods of time:

- Tend to be more aggressive.
- Are more prone to confrontation with their teachers.
- May engage in fights with their peers.
- See a decline in school achievements.

Video games are also frequently criticized for too narrowly using only violence, sexual themes, consumption of drug/alcohol/tobacco, and profanity as the elements of game themes even though all of these can be found in all forms of entertainment and media. The critics of video games often include parent's group, politicians, and organized religious group. The gaming industry responses to those critics by establishing video game content rating organization. One of such organizations in North America is Entertainment Software Rating Board (ESRB). The organization rates video game software for certain age groups and with certain content warnings. In some other countries, e.g. China, the regulator limits the amount of the consecutive hours a player can any online video game to be 3 hours and the player must take a break after 5 hours of consecutive hours of playing.

However all those critics and regulation to video games has their own criticism and controversy against them too. The social impact perspective of this course tries to discuss the social and ethical impacts of the video games and guides the students to analyze and criticize controversy issues on video games.

- 4.) Creativity perspective: The reason we like games is simply we like to play. The reason that games are appealing to us is because games can give us good play through a form of challenge. Games pose interesting challenges for us to overcome and we have very enjoyable experience by overcoming the challenges. There are many types (genres) of challenge (video game) that appeal to different people. Broadly speaking, we have games challenged us on spatial reasoning, on pattern recognition, on sequential reasoning, on numerical reasoning, on resource management, and on social reasoning. They are translated into First Person Shooter (FPS), Board Games, War Games, Role-Play Games (with computer helping the number crunching), Strategy Games, and Games like "The Sims". We are going to discuss those genres and dissect the structure within typical commercial games. We will take a hand on approach to teach the students about the design of one of typical genres of video game: the Role Play Game (RPG). It will include writing a story for the game, design the game characters, design the encounter events in the game, and the game rule system. The students will eventually create a paper prototype of their own design which is playable for other students to determine how good their design is.
- * Gentile, D. A., Lynch, P., Linder, J. & Walsh, D. (2004). The effects of violent video game habits on adolescent hostility, aggressive behaviours, and school performance. Journal of Adolescence, 27, 5-22.

Course Intended Learning Outcomes (CILOs)

	CILOs	Weighting (if app.)	DEC-A1	DEC-A2	DEC-A3
1	To identify and discuss the root and history of video games as a new form of entertainment.	10	X	X	
2	To analyze and critically evaluate the formal elements in game system. I.e. Have a good understanding of design rules to create a self contained game system.	20	х	X	
3	To analyze and integrate various forms of folk culture as a form of art to create the narrative background and formal rules for a game system. I.e. to make the student to understand a good game is a reflection of our everyday experience. The purpose is to make a student to be a good observer of daily events as it is a source of inspiration for a game.	20	X	X	X
4	To apply the knowledge of iterative design approach to polish a game system. The purpose is to let the student to understand nobody can get their initial design right at the first try. It takes multiple iterative times in order to get something right and it takes a team effort to create a great design.	30		X	X
5	To criticize the positive and negative social impact of the video games. The proponent of video games argues that video games can increase the manual dexterity and computer literacy. The dominated themes of using graphic violence, sexual elements, and profanity within video games content draw many criticisms from various interest groups in the society, however. The key is not banning video games altogether but find a balance point where video games can be a media to promote good ethical behaviour and socially responsible action.	20	X	x	X

A1: Attitude

Develop an attitude of discovery/innovation/creativity, as demonstrated by students possessing a strong sense of curiosity, asking questions actively, challenging assumptions or engaging in inquiry together with teachers.

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A2: Ability

Develop the ability/skill needed to discover/innovate/create, as demonstrated by students possessing critical thinking skills to assess ideas, acquiring research skills, synthesizing knowledge across disciplines or applying academic knowledge to real-life problems.

A3: Accomplishments

Demonstrate accomplishment of discovery/innovation/creativity through producing /constructing creative works/new artefacts, effective solutions to real-life problems or new processes.

Teaching and Learning Activities (TLAs)

	TLAs	Brief Description	CILO No.	Hours/week (if applicable)
1	Lecture	Lectures: the instructor will lecture and discuss various classical video games and history of important video game designers and companies.	1	1-1.5 hrs/week
2	Analysis report	Class discussion and game play sessions: At the beginning student will play some classical card or board game like Tie-Tac-Tao and Go-Fish!. The students will then write down various formal elements discussed in the lecture in those games. Both the classical games the Settlers of Catan and Diplomacy can be played during the discussion session if the source is available to purchase the above games.	1, 2	1.5-2 hrs/week
3	Analysis report	Hands on design sessions: Student will be asked to modify and augment existing games with various folk cultures. E.g. add a war background story to Tie-Tac-Tao or create a narrative background for Go-Fish!	3, 5	4 short reports / course

4	Group Project	Play test sessions and presentation: Group will exchange their design with other group and have a play test session to other group's game design. Each group needs to give feedback for the game design they played after the sessions. The original group will then modify their design based on other group feedback.	3, 4, 5	1 group project and presentation / course
5	Group Project	Group blog: Each group should maintain a blog to document their progress on the group game design. The blog should allow other groups to give comment and suggestion	3, 4, 5	1 group blog / course

Assessment Tasks / Activities (ATs)

ATs	CILO No.	Weighting (%)	Remarks (e.g. Parameter for GenAI use)
Short report (4)	1, 2, 3	20	The four short report assignments are: 1.) Discuss and dissect the formal elements (rules) of the game Tie-Tac-Tao and Go-Fish! 2.) Discuss and dissect the dramatic elements (story) of the Nintendo classic Donkey Kong. Write report about it and design a new level of this game by extending the game story. 3.) Do a research report on the historical background of WWII Midway battle and then incorporate this narrative background into a paper based sea battle game. 4.) Modify a well known game genre based on the principle of Disruptive Innovation. E.g. Creating a taking care of dolls game that a teenage male customer will be interested.

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2	Written Assignments (2)	1, 2, 3, 5	20	1.) The first written assignment will be review and analysis report on one of the student all time favourite games. 2.) The second written assignment will ask students to do a case study on following games: 1. GTA – Violent and criminal theme. 2. Catherine – Sexual theme. 3. South Park – Profanity. 4. Silent Hill – Horror theme.
				The student needs to criticise both the game play system of the game and the theme in the game. The student needs to discuss the reason of the particular themes are used in those games, their implication to player and society, and the possibility of using alternative less offending theme without the change of the game play system.
3	Group project (1)	2, 3, 4	40	Students will work as a team to design a table top RPG game. The game will have various components: rules play, characters, story, and background.
4	Presentation (1)	4	10	Students will present their original ideas of this particular RPG, the reason they write the particular story, the characters, and the background. The students will also discuss the feedback their received during play test sessions and the corresponding modifications they made for those feedbacks.

5	Participation in class	4	10	Marks will be assigned
	discussion and test play			to the degree of
	sessions			participation in
				discussion session, play
				test session, and blog
				comment.

Continuous Assessment (%)

100

Examination (%)

0

Assessment Rubrics (AR)

Assessment Task

1. Short Reports (4)

Criterion

1.1 CAPACITY for SELF-DIRECTED LEARNING to understand of basic game rules system.

Excellent (A+, A, A-)

Evidence of thorough understanding and critical application of formal elements and dramatic elements within a video game. The student can demonstrate a creative use of those elements in analysis and design of a game. All the reports are written in structured, well-organized, and fluent manner.

Good (B+, B, B-)

Evidence of good understanding and successful application of formal elements and dramatic elements within a video game. The student can demonstrate a good use of those elements in analysis and design of a game.

Fair (C+, C, C-)

Evidence of adequate understanding and successful application of formal elements and dramatic elements within a video game. The student can demonstrate an adequate use of those elements in analysis and design of a game.

Marginal (D)

Limited understanding and successful application of formal elements and dramatic elements within a video game. The student can demonstrate only a very limited use of those elements in analysis and design of a game.

Assessment Task

2. Written Assignment (2)

Criterion

2.1 ABILITY to EXPLAIN in DETAIL and with ACCURACY of the social and industrial aspect of video game industry.

Excellent (A+, A, A-)

For the favorite game review assignment, the student can demonstrate his/her own independent views on the strength and weakness of the game under review. Both the strength and weakness of the game are throughout analyzed in the framework of game design principles that we had discussed in the classes. The assignments should be written with structured, well-organized, fluent and interesting manner.

For the game theme and social implication assignment, the student can demonstrate his/her own independent views on the strength and weakness of the game and the relationship between the game system and the selected theme is throughout analyzed. The influence of the game theme to the player after prolonged game play is critically discussed and the social

implication of the selected is also fully articulated. The student can support his/her view with solid statistical evidence and give good reference of their finding by either good research method or information in the existing literature.

Good (B+, B, B-)

For the favorite game review assignment, the student can demonstrate his/her own independent views on the strength and weakness of the game under review. Both the strength and weakness of the game are analyzed in the framework of game design principles that we had discussed in the classes. The assignments should be written with structured, well-organized, and fluent manner.

For the game theme and social implication assignment, the student can demonstrate his/her own independent views on the strength and weakness of the game and the relationship between the game system and the selected theme is discussed. The influence of the game theme to the player after prolonged game play is critically discussed and the social implication of the selected is also articulated in adequate manner. The student can support his/her view with solid statistical evidence.

Fair (C+, C, C-)

For the favorite game review assignment, the student can demonstrate his/her own only little independent views on the strength and weakness of the game under review. Both the strength and weakness of the game are somehow analyzed in the framework of game design principles that we had discussed in the classes.

For the game theme and social implication assignment, the student can demonstrate his/her views on the strength and weakness of the game and the relationship between the game system and the selected theme is partly but adequately discussed. The influence of the game theme to the player after prolonged game play and the social implication of the selected are mentioned.

Marginal (D)

For the favorite game review assignment, the student can demonstrate his/her own not independent views on the strength and weakness of the game under review. Both the strength and weakness of the game are not analyzed in the framework of game design principles that we had discussed in the classes.

For the game designers work review assignment, the student can demonstrate his/her very limited independent views on the strength and weakness of the designer works. Both the strength and weakness of the works are only partially analyzed in the framework of game design principles that we had discussed in the classes. The student can also demonstrate not research on the designer's background.

For the game theme and social implication assignment, the student can demonstrate only very limited his/her own views on the strength and weakness of the game and the relationship between the game system and the selected theme is mentioned. The influence of the game theme to the player after prolonged game play is critically discussed and the social implication of the selected is mentioned,

Assessment Task

3. Project and Presentation

Criterion

- 3.1 ABILITY to EXPLAIN in DETAIL and with ACCURACY and with ORIGINALITY of the design goals and rules of the project game systems.
- 3.2 ABILITY to EXPLAIN in DETAIL the social and cultural structure of the project game system.

Excellent (A+, A, A-)

For the project, the students can demonstrate to create a unique, fun, interesting, polished RPG game with engaging story line, memorable characters design, and intriguing encounter events. The design shows strong evidence of being throughout play tested and seriously effects have been put into every aspect of the design.

For the presentation, the students can demonstrate a professional polished presentation with excellence command of communication skills.

Good (B+, B, B-)

For the project, the students can demonstrate to create a fun, interesting, nearly polished RPG game with good story line, good characters design, and intriguing encounter events. The design shows good evidence of being throughout play tested and lot of effects have been put into every aspect of the design.

For the presentation, the students can demonstrate a good polished presentation with good command of communication skills.

Fair (C+, C, C-)

For the project, the students can demonstrate to create a fun and workable RPG game with story line, characters design, and encounter events. The design shows some evidence of being play tested and some effects have been put into some aspect of the design.

For the presentation, the students can demonstrate a presentation with adequate command of communication skills.

Marginal (D)

For the project, the students create RPG game with weak story line, weak characters design, and weak encounter events. The design shows limited evidence of being play tested and limited effects have been put into the design.

For the presentation, the students demonstrate a presentation with little preparation and weak communication skills.

Additional Information for AR

All A+/A/A- grade assignment should comply with the highest performance of Discovery-oriented learning.

Part III Other Information

Keyword Syllabus

System Design, Values in Play, Mobility, Portability, Playability, Ludology, SONY, Nintendo, Microsoft, PSP, PS2, Wii, 2D Engine, 3D Engine, DirectX, OpenGL, Nvidia, ATI, Intel, RPG, AD&D, RTS, Console, PC, MMORPG, Electronic Arts

Reading List

Compulsory Readings

	Title
1	Egenfeldt-Nielsen, S. Smith, J.H. & Tosca, S. P. (2008) Understanding Video Games: The Essential Introduction. Taylor & Francis.
2	Tracy Fullerton (2008). Game Design Workshop Morgan Kaufmann.
3	Steven Kent (2010), The Ultimate History of Video Game, Crown Publishing
4	Chris Kohler, (2004) Power-Up: How Japanese Video Games Gave the World an Extra Life. BRADY GAMES.
5	Steven Levy (2010), Hackers: Heroes of the Computer Revolution. O'RELLY.
6	David Sheff, (1999). Game Over Press Start to Continue. Cyberactive Media Group.
7	History of Video Game. Wikipedia link: http://en.wikipedia.org/wiki/History_of_video_games
8	History of Video Game. GameSpot Feature Article link: http://www.gamespot.com/gamespot/features/video/hov/
9	Pong in Wikipedia. The wiki link: http://en.wikipedia.org/wiki/Pong
10	Console Wars. Wikipedia Link: http://en.wikipedia.org/wiki/Console_wars
11	Story background of World of Warcraft. http://www.worldofwarcraft.com/info/story/index.html

12	Wii in http://www.nintendo.co.jp
13	PS3 in http://www.playstation.com
14	Microsoft Kinect in: http://www.xbox.com/en-US/kinect/

Additional Readings

	Title
1	K.S. Tekinbas & E. Zimmerman (2003), Rules of Play: Game Design Fundamentals, MIT Press

Annex (for GE courses only)

A. Please specify the Gateway Education Programme Intended Learning Outcomes (PILOs) that the course is aligned to and relate them to the CILOs stated in Part II, Section 2 of this form:

Please indicate which CILO(s) is/are related to this PILO, if any (can be more than one CILOs in each PILO)

PILO 1: Demonstrate the capacity for self-directed learning

1, 2, 3, 4

PILO 2: Explain the basic methodologies and techniques of inquiry of the arts and humanities, social sciences, business, and science and technology

2, 3, 4

PILO 3: Demonstrate critical thinking skills

2

PILO 4: Interpret information and numerical data

4

PILO 9: Value ethical and socially responsible actions

5

PILO 10: Demonstrate the attitude and/or ability to accomplish discovery and/or innovation

4, 5

B. Please select an assessment task for collecting evidence of student achievement for quality assurance purposes. Please retain at least one sample of student achievement across a period of three years.

Selected Assessment Task

Short Reports, Short Reports, Project and presentation