**Course Outline**

**Course Description**

Have you played games with friends and family? Do you have rewards points on your credit cards? Have you ever thought what it means to “game” the system or have you studied “game theory”? Playing games is, and always has been, a basic attribute of humans at all stages of life and across all cultures. Games and their applications – for example, My Starbucks Rewards, NikeiD and Facebook – have been used to enrich our lives in many different contexts, including business, education, and pleasure. However, games can also associate with negative consequences, such as addiction, which can greatly affect our health and social life.

**Aims**

This course will cover the theoretical and practical foundations of game application and its social consequences using design techniques that originate from the field of psychology and the study of motivation. You will:

* experience our gamified teaching style,
* explore various scenarios about playing/using games,
* recognize the psychological, social, economic, and educational benefits of game application,
* be alert to the potential harms and risks,
* understand how games are applied in different contexts, and
* critically evaluate game and gamification projects.

**Pre-requisites and Co-requisites**

There are no pre-requisites and co-requisites for this module.

**Course Learning Outcomes**

|  |  |  |  |
| --- | --- | --- | --- |
|  | *Course Learning Outcomes – On completing the course, students will be able to:* | *Alignment with the NEW*  *Common Corse Programme Learning Outcomes* | *Related Assessment Task(s)* |
| *1* | *Describe and explain the historical, societal and cultural significance of games in our society* | CC PLO: 1, 2 | 1, 2 |
| *2* | *Recognize the various ways in which games and their applications can be used to motivate others, foster interpersonal relationships, facilitate communications, as well as increase awareness of social and global issues and concerns.* | CC PLO: 1, 2, 3 | 1, 2 |
| *3* | *Analyze the impact of games within the individual and societal levels in modern society* | CC PLO: 1, 2 | 1, 2 |
| *4* | *Collaborate and coordinate with others, in tutorial meetings, and in a group project involving the use of design techniques and the consideration of moral and ethical issues* | CC PLO: 2, 3, 4 | 1, 2 |

*\*Please refer to* [***http://www.cdqa.hku.hk/doc/PLO2012/University/PLO\_CCC.pdf***](http://www.cdqa.hku.hk/doc/PLO2012/University/PLO_CCC.pdf) *for the new set of Common Core Programme Learning Outcomes (CC PLOs).*

**Course Facilitators**

|  |  |  |
| --- | --- | --- |
| **Dr Samuel K.W. CHU & Dr Thomas K. F. CHIU** | | |
| http://www.eee.hku.hk/online_reg/iwbi/img/hku_logo_1d.jpg | Faculty of Education The University Hong Kong  Room 111B, 1/F, Runme Shaw  Pokfulam Road, Hong Kong  Phone: 2241-5894 Email: [samchu@hku.hk](mailto:samchu@hku.hk)  <http://web.edu.hku.hk/staff/academic/samchu> | Faculty of Education The University Hong Kong  Room 210, Runme Shaw Pokfulam Road, Hong Kong  Phone: 2241-5455  Email: [tchiu@hku.hk](mailto:fymkong@hku.hk)  <http://web.edu.hku.hk/staff/academic/tchiu> |

**Study Load**

|  |  |
| --- | --- |
| *Activities* | *Number of hours* |
| Lectures | 24 |
| Tutorials | 12 |
| Seminars | 4 |
| Fieldwork/ Visits | 4 |
| Reading/ Self-study | 41 |
| Assessment: Report writing | 25 |
| Assessment: Presentation (incl preparation) | 35 |
| Total: | 145 |

**Lectures Schedule**

Course Period: 18 Jan 2017 – 26 Apr 2016

Day & Time: Wednesday, 2:30-4:20pm

Venue: LE2, LG1/F, Library Extension Building, HKU

|  |  |  |
| --- | --- | --- |
| *Session No.*  *Date* | *Session* | *Related Los\** |
| **Session 1**  *Jan 18 -* Dr Chu | **Unit 1 History and Development**  Topics:   * Introduction to games   + describe history, definition and categories of game * Culture, gender and games   + explain how culture and gender influence people’s perception on and interaction with games * Development of games   + explain the application of games in different contexts   + introduce design techniques, and the basic principles of games   Reading:   * McGonigal, J. (2011). *Reality is broken: Why games make us better and how they can change the world.*   + Chapter 1 - What Exactly Is a Game? | 1 |
| **Session 2**  *Jan 25 -* Dr Chiu | **Unit 1 History and Development**  Topics:   * Human brain on games   o   explain our neural responses to gameplay, in the context of motivation and emotion   * Psychology and motivation   o   explain the benefits of a behavioural approach to game development, and identify risks and alternatives  Reading:   * McGonigal, J. (2011). *Reality is broken: Why games make us better and how they can change the world.*   o  Chapter 2 - The Rise of the Happiness Engineers | 1, 3 |
| **Session 3**  *Feb 15 -* Dr Chu | **Unit 2 Application and Impact on Individuals and Society**  Topics:   * **What are the applications of games?**   Reading:   * McGonigal, J. (2011). *Reality is broken: Why games make us better and how they can change the world.*   o  **Chapter 3 -** [**More Satisfying Work**](http://web.a.ebscohost.com.eproxy2.lib.hku.hk/ehost/ebookviewer/ebook/bmxlYmtfXzExMjI1ODBfX0FO0?sid=37de21e8-261b-43ac-928e-116512b2095a@sessionmgr4007&vid=0&format=EK&lpid=navPoint8&rid=0) | 1, 2, 3 |
| **Session 4**  *Feb 22 –* Dr Chu | **Unit 2 Application and Impact on Individuals and Society**  Topics:   * **What is game addiction?**   Reading:   * McGonigal, J. (2011). *Reality is broken: Why games make us better and how they can change the world.*   o  **Chapter 4 - Fun Failure and Better Odds of Success** | 2, 3 |
| **Session 5**  *Mar 1 -* Dr Chu | **Unit 2 Application and Impact on Individuals and Society**  Topics:   * **Games in cognitive and behavioural development, particularly in children and the aging**   Reading:   * McGonigal, J. (2011). *Reality is broken: Why games make us better and how they can change the world.*   o  Chapter 5 - Stronger Social Connectivity  o  Chapter 6 - Becoming a Part of Something Bigger Than Ourselves | 2, 3 |
| **Session 6**  *Mar 15 -* Dr Chu | **Unit 2 Application and Impact on Individuals and Society**  Topics:   * **Motivation,** engagement and education   Reading:   * McGonigal, J. (2011). *Reality is broken: Why games make us better and how they can change the world.*   o  Chapter 7 - The Benefits of Alternate Realities  o Chapter 8 - Leveling Up in Life | 1, 2, 3 |
| **Session 7**  *Mar 22 -* Dr Chiu | **Unit 2 Application and Impact on Individuals and Society**  Topics:   * **Loyalty and business**   Reading:   * McGonigal, J. (2011). *Reality is broken: Why games make us better and how they can change the world.*   o  **Chapter 11 -** [**The Engagement Economy**](http://web.a.ebscohost.com.eproxy2.lib.hku.hk/ehost/ebookviewer/ebook/bmxlYmtfXzExMjI1ODBfX0FO0?sid=37de21e8-261b-43ac-928e-116512b2095a@sessionmgr4007&vid=0&format=EK&lpid=navPoint8&rid=0) | 1, 2, 3 |
| **Session 8**  *Mar 29 -* Dr Chiu | **Unit 2 Application and Impact on Individuals and Society**  Topics:   * **Satisfaction, achievement and public services, such as healthcare and electronic consumption** * **Communication and social media**   Reading:   * McGonigal, J. (2011). *Reality is broken: Why games make us better and how they can change the world.*   o  Chapter 9 - Fun with Strangers  o  Chapter 10 - Happiness Hacking | 1, 2, 3 |
| **Session 9**  *Apr 5 -* Dr Chiu | **Unit 3 Reflection and Evaluation**  Topics:   * **Gamifying our daily lives**   o   Share ideas on how to use design techniques to  (i) motivate people in the daily activities, and  (ii) communicate with people.  Reading:   * McGonigal, J. (2011). *Reality is broken: Why games make us better and how they can change the world.*   o  Chapter 12 - Mission Impossible | 2, 3 |
| **Session 10**  *Apr 12 -* Dr Chiu | **Unit 3 Reflection and Evaluation**  Topics:   * Other society or global issues   o   Discusses the limitations, concerns and dangers of playing/using games  o    Concludes with a look towards the future  o    Suggest preventative activites if possible  Reading:   * McGonigal, J. (2011). *Reality is broken: Why games make us better and how they can change the world.*   o  Chapter 13 - Collaboration Superpowers  o  Chapter 14 - Saving the Real World Together | 2, 3, |
| **Session 11**  *Apr 19 -*  Dr Chiu | **Unit 3 Reflection and Evaluation**  Topics:   * Group project presentation Session 1 | 4 |
| **Session 12**  *Apr 26 -*  Dr Chu | **Unit 3 Reflection and Evaluation**  Topics:   * Group project presentation Session 2 | 4 |

**Tutorials Schedule**

8 sessions x 1.5 hours (12 hours in total)

**Tutorial Class A**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| *Session* | *Date* | *Weekday* | *Time* | *Venue* |
| 1 | Jan 19 | Thursday | 09:30-10:50am | EH102 |
| 2 | Feb 9 |
| 3 | Feb 16 |
| 4 | Feb 23 |
| 5 | Mar 2 |
| 6 | Mar 16 |
| 7 | Mar 23 |
| 8 | Mar 30 |

**Tutorial Class B**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| *Session* | *Date* | *Weekday* | *Time* | *Venue* |
| 1 | Jan 19 | Thursday | 11am-12:20pm | EH102 |
| 2 | Feb 9 |
| 3 | Feb 16 |
| 4 | Feb 23 |
| 5 | Mar 2 |
| 6 | Mar 16 |
| 7 | Mar 23 |
| 8 | Mar 30 |

**Tutorial Class C**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| *Session* | *Date* | *Weekday* | *Time* | *Venue* |
| 1 | Jan 20 | Friday | 2:30-3:50pm | MW324 |
| 2 | Feb 10 |
| 3 | Feb 17 |
| 4 | Feb 24 |
| 5 | Mar 3 |
| 6 | Mar 17 |
| 7 | Mar 24 |
| 8 | Mar 31 |

**Tutorial Class D**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| *Session* | *Date* | *Weekday* | *Time* | *Venue* |
| 1 | Jan 20 | Friday | 4-5:20pm | MW324 |
| 2 | Feb 10 |
| 3 | Feb 17 |
| 4 | Feb 24 |
| 5 | Mar 3 |
| 6 | Mar 17 |
| 7 | Mar 24 |
| 8 | Mar 31 |

**Fieldwork/ Visits**

* 4 hours of fieldwork/ visits
* Complete within Jan-March
* Reflection: write a short reflection of your visit in 200-300 words
* Post your reflection in the Moodle forum

Suggestions:

* ACGHK 香港動漫電玩節 (www.ani-com.hk/2016ver)
* Global Game Jam Hong Kong 2017 (http://ggjhongkong.blogspot.hk/)
* #21CLHK - Annual Education Conference in Hong Kong (www.21clhk.org)
* Hong Kong Toys & Games Fair (http://m.hktdc.com/fair/hktoyfair-en/HKTDC-Hong-Kong-Toys-and-Games-Fair.html)
* Visiting Local Game Companies

**Assessment Tasks**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| *Task No* | *Assessment Method* | *Details of Assignment* | *Total*  *Points* | *Related CLO* |
| 1 | **Individual continuous assessment** | -Each student is required to finish weekly tasks which include pre-class activities, case analysis and self-reflection assignments. The assignments will help students to complete their group project e.g.,  -Create and answer questions on the required reading | 50% | CC PLO: 1, 2, 3 |
| 2 | **Group project and presentation** | Each group will design and evaluate a game or gamification project. Peer-review on members’ contribution and group presentation will be conducted. | 35% | CC PLO: 3, 4 |
| 3 | **Participations** | In class and outside class participations e.g.,  -Participate in Moodle forum  -Attend guest seminars  -Go to fieldwork/visits | 15% | CC PLO: 3, 4 |

**Key References and Resources**

**Required Reading (hard copy & e-copy available in the HKU library)**

McGonigal, J. (2011). Reality is broken: Why games make us better and how they can change the world. Penguin. [*http://library.hku.hk/record=b5749068*](http://library.hku.hk/record=b5749068)

**Recommended Reading (available in the HKU library)**

* Adams, E. (2014). Fundamentals of game design (3rd Ed.). New Riders.
* Bishop, J. (2014). Gamification for Human Factors Integration: Social, Education, and Psychological Issues. IGI Global.
* Bissell, T. (2011) Extra Lives: Why Video Games Matter. Vintage
* Bogost, I. (2011) How to Do Things with Videogames (Electronic Mediations). Univ Of Minnesota Press
* Borowski, B. (2014) Gamification - engage customers in your business.: The hottest marketing trend in 2014. CreateSpace Independent Publishing Platform
* Burke, B. (2014) Gamify: How Gamification Motivates People to Do Extraordinary Things. Routledge
* Denmeade, N. (2015) Gamification with Moodle: use game elements in Moodle courses to build learner resilience and motivation. Packt Publishing
* Dymek, M. & Zackariasson, P. (2016) The Business of Gamification: A Critical Analysis. Routledge
* [Edery](http://discovery.lib.hku.hk/primo_library/libweb/action/search.do?vl(freeText0)=David+Edery+1976-&vl(84329437UI0)=creator&vl(118429026UI1)=all_items&fn=search&tab=default_tab&mode=Basic&vid=HKUL&scp.scps=scope%3a(HKU)%2cprimo_central_multiple_fe), D. (2009) Changing the game: how video games are transforiming the future of business. Upper Saddle River
* Egenfeldt-Nielsen, S. (2004). Playing With Fire: How Do Computer Games Influence the Player?. Goteborgs Universitet Ekonomisk
* Fencott, C., Lockyer, M., Clay, J., & Massey, P. (2012). Game invaders: the theory and understanding of computer games. Wiley-IEEE Computer Society.
* Gee, J. (2007). What video games have to teach us about learning and literacy (2 nd Ed.). New York: Palgrave Macmillan.
* Gee, J. (2013). Good Video Games and Good Learning: Collected Essays on Video Games, Learning and Literacy, 2nd Edition. Peter Lang Inc., International Academic Publishers
* Gibson, D., Aldrich, C., & Prensky, M. (2007). Games and simulations in online learning: research and development frameworks. Hershey, PA: Information Science Pub.
* Goldberg, H. (2011) All Your Base Are Belong to Us: How Fifty Years of Videogames Conquered Pop Culture. Three Rivers Press
* [Hanse](https://www.amazon.com/s/ref=dp_byline_sr_book_1?ie=UTF8&text=Dustin+Hansen&search-alias=books&field-author=Dustin+Hansen&sort=relevancerank), E. (2016). Game On!: Video Game History from Pong and Pac-Man to Mario, Minecraft, and More. Feiwel & Friends
* Harrison, J. (2015) Mastering The Game: What Video Games Can Teach Us About Success In Life. CreateSpace Independent Publishing Platform
* Herger, M. (2014) Enterprise Gamification: Engaging people by letting them have fun. CreateSpace Independent Publishing Platform
* Holmes, D. (2012) A Mind Forever Voyaging: A History of Storytelling in Video Games. CreateSpace Independent Publishing Platform
* Hugos, M. (2012) Enterprise Games: Using Game Mechanics to Build a Better Business. O'Reilly Media
* Kapp, K. (2012) The Gamification of Learning and Instruction: Game-based Methods and Strategies for Training and Education. Pfeiffer
* Kapp, K. (2013) The Gamification of Learning and Instruction Fieldbook: Ideas into Practice. Pfeiffer
* Kohler, C. (2004) Power-Up: How Japanese Video Games Gave the World an Extra Life. BradyGames
* Kowert, R., & Quandt, T. (Eds.). (2015). The Video Game Debate: Unravelling the Physical, Social, and Psychological Effects of Video Games. Routledge.
* Kumar, J. & Herger, M. (2013) Gamification at Work: Designing Engaging Business Software. The Interaction Design Foundation
* Kwan, A.C.M., Chu, S.K.W., Hong, A.W.L., Tam, F., Lee, G.M.Y. & Mellker, R. (2015). Making Smart Choices: A Serious Game for Sex Education for Young Adolescents. International Journal of Game Based Learning, 5(1), 18-30.
* Madigan, J. (2015) Getting Gamers: The Psychology of Video Games and Their Impact on the People who Play Them. Rowman & Littlefield Publishers
* McGonigal, J. (2015) SuperBetter: a revolutionary approach to getting stronger, happier, braver, and more resilient\*. Penguin Press 2015
* Melissinos, C. (2012) The Art of Video Games: From Pac-Man to Mass Effect. Welcome Books
* Niman, N. (2014) The gamification of higher education: developing a game-based business strategy in a disrupted marketplace. Palgrave Macmillan
* [Novák](https://www.amazon.com/s/ref=dp_byline_sr_book_1?ie=UTF8&text=Daniel+Nov%C3%A1k&search-alias=books&field-author=Daniel+Nov%C3%A1k&sort=relevancerank), D. (2016) Handbook of Research on Holistic Perspectives in Gamification for Clinical Practice. IGI Global
* Paharia, R. (2013) Loyalty 3.0: How to Revolutionize Customer and Employee Engagement with Big Data and Gamification. McGraw-Hill Education
* Prensky, M. (2006). Don't bother me, Mom-- I'm learning! : How computer and video games are preparing your kids for twenty-first century success, and how you can help!. Paragon House.
* Prensky, M. (2007). Digital game-based learning. St. Paul, Minn: Paragon House.
* Radoff, J. (2011) Game On: Energize Your Business with Social Media Games. Wiley
* Routledge, H. (2016) Why Games Are Good For Business: How to Leverage the Power of Serious Games, Gamification and Simulations. Palgrave Macmillan
* Rutter, J., & Bryce, J. (2006). Understanding digital games. SAGE Publications.
* Shaffer, D. (2006). How computer games help children learn. Palgrave Macmillan.
* Thompson, K. (2015) A Systematic Guide To Game-based Learning (GBL) In Organizational Teams: Transform Performance Through Experiential Learning, Social Learning and Team Dynamics. CreateSpace Independent Publishing Platform
* Tobias, S., & Fletcher, J. (Eds.) (2011). Computer games and instruction. Information Age Publisher.
* Wu, W.W.Y., Chu, S.K.W., Chan, H., Wong, J., Tse, S.K., Tavares, N. & Mok, S. (2014).

Strengthening students’ reading comprehension ability (both Chinese and English) through developing children’s literature e-quiz bank on the cloud. Paper presented at 19th International Education & Technology Conference, Hong Kong. (<https://hub.hku.hk/handle/10722/204504>)

* Zagal, J. (2010). Ludoliteracy: defining, understanding, and supporting games education. ETC Press.
* Zichermann, G. (2013) The Gamification Revolution: How Leaders Leverage Game Mechanics to Crush the Competition. McGraw-Hill Education

**Recommended Reading (available soon – in library purchase)**

* Boinodiris, P., Fingar, P. & Grant, T. (2014) Serious Games for Business: Using Gamification to Fully Engage Customers, Employees and Partners. Meghan-Kiffer Press
* Chou, Y.K. (2015) Actionable Gamification - Beyond Points, Badges, and Leaderboards. Octalysis Media
* Collins, C. (2015) Gamification: Playing For Profits: A Book of Sales Games and Motivational Tools. CreateSpace Independent Publishing Platform
* Doan, A. P., Strickland, B. & Gentile, D. A. (2012). Hooked on Games: The Lure and Cost of Video Games and Internet Addiction. FEP International, Incorporated.
* Egenfeldt-Nielsen, S. (2011). Serious Games in Education. Aarhus University Press
* Harrison, L. (2014) Gamification for Business. Motivational Press
* Isbister, K. (2016) How Games Move Us: Emotion by Design (Playful Thinking).  The MIT Press
* McGonigal, J. (2016) SuperBetter: The Power of Living Gamefully. Penguin Books
* Narayanan, A. (2014) Gamification for Employee Engagement. Impackt Publishing
* Owen, P. (2013) How Gamification Can Help Your Business Engage in Sustainability. Greenleaf
* Rogers, R. (2016) How Video Games Impact Players: The Pitfalls and Benefits of a Gaming Society. Lexington Books
* Ruggill, J., McAllister, K., Nichols, R. & Kaufman, R. (2016) Inside the Video Game Industry: Game Developers Talk About the Business of Play. Routledge
* Viana, Y., Vianna, M., Medina, B. & Tanaka, S. (2014) Gamification, Inc. - Recreating Companies Through Games. MJV Press
* Werbach, K. & Hunter, D. (2012). For the win: How game thinking can revolutionize your business. Wharton Digital Press.
* Witt, C. (2016) Gaming to Innovate - The Innovation Game: How to Leverage Gamification to Unleash the Breakthrough Beast in Your Organization and Create an Unstoppable Innovative Culture. CreateSpace Independent Publishing Platform

**Recommended Website(s**)

* Video Game Addiction No Fun

<http://www.webmd.com/mental-health/addiction/features/video-game-addiction-no-fun>

* Video Game Addiction Symptoms, Causes and Effects

<http://www.psychguides.com/guides/video-game-addiction-symptoms-causes-and-effects/>

* Gamification wiki

<https://badgeville.com/wiki/>

**Referencing**

You should list all sources you used for your assignments by the American Psychological Association (APA) referencing format (http://www.apastyle.org/). The details and examples of APA formatting and style can be found at http://owl.english.purdue.edu/owl/resource/560/01/. You may use endnote to create your references.

**Academic Conduct**

Plagiarism (http://www.rss.hku.hk/plagiarism/page2s.htm) involves the use of quotations without quotation marks, the use of quotations without indication of the source, the use of another’s idea without acknowledging the source, the submission of a paper, report, project, or class assignment (any portion of such) prepared by another person, or incorrect paraphrasing.

Any student who fails due to plagiarism may be referred to the University Disciplinary Committee, which may then recommend discontinuation. Plagiarism is a serious matter. If you have any doubts about whether or not your use of sources constitutes plagiarism, ask your lecturer or course coordinator.

The students are required to use the tool Turnitin to check your assignment for correct scholarly practice in citing other's work. You will be provided with a “class ID” and “password” to enable you to check your assignments via appropriate “class” in Turnitin. Further details about Turnitin and how it works are obtainable from http://www.turnitin.com.