Title (Units): **UCHL1065 E-sports and Health (2,2,0)**

Course Aims:

Playing computer/video games has become a common leisure activity for teenagers and adults. E-sports, which is a form of digital game playing elevated to a competitive level, can bring benefits to our health and fitness, including hand-eye coordination, speed of reaction, mental health, brains functions, etc. In addition, it can help players learn sportsmanship, as well as foster their strategy development and communication skills. Some E-sports and active video games also need players to be physically active when playing the games, making them essentially cardio or strength exercises.

This course aims at equipping students with the essential knowledge, proper skills, as well as healthy habit in playing E-sports and other active video games. It covers an overview of E-sports and introduces how a variety of game genres can bring benefits to the player's health. Students will also learn the essential knowledge of science and technologies and the health-related issues that an E-sports athlete should know so as to play well and safe. They will gain hands-on experiences during the classes so that they can practice what they have learned and appreciate the values and benefits brought by E-sports.

Prerequisite: Nil

Course Intended Learning Outcomes (CILOs):
Upon successful completion of this course, students should be able to:

No.	Course Intended Learning Outcomes (CILOs)
	Knowledge
1	Describe the health-related values and benefits developed via E-sports training.
2	Apply health practices such as warm-up exercises and correct postures which are essential for healthy E-sports.
3	Explain the value of sportsmanship, integrity, and ethics in E-sports.
4	Develop personalised strategies for managing life stresses through healthy playing of various genres of E-sports.

Calendar Description:

This course will first give the introduction to E-sports and some health-related benefits of E-sports. Then it will cover active video games followed by different genres of E-sports games including classic arcade games, fighting games, first-person shooters games, racing games, multiplayer online battle arean (MOBA) games, AR/VR active video games and puzzle games. During each lecture students will be exposed to (1) the health-related values and benefits gained by playing the games, (2) specific skills and strategies, and the underlying hardware/software knowledge possessed by professional E-sports players, and (3) health-related knowledge to be a healthy E-sports player. Students are expected to participate on some hands-on experiencing exercises during lectures.

Teaching and Learning Activities (TLAs):

CILOs	Type of TLA
1-3	Lectures will be given to introduce: · various healthy lifestyle practices related to E-sports supported by theories and demonstrations; · various healthy habits in gaming supported with real world examples. · the science of games and the health knowledge that an E-sports athlete should know; · some general code of ethics in E-sports.
1,4	Hands-on experience will allow students to: · experience various E-sports and active video games; · experience the benefits of healthy lifestyle practices such as warm-up exercises and correct postures; · relate a person's fitness to the healthy playing of active video games.
1,3	Group discussion will be used to: · address sportsmanship, integrity, and ethics in E-sports; · evaluate how well students recognize the health-related values and benefits which could be gained via E-sports.

Assessment:

No.	Assessment Methods	Weighting	CILOs to be addressed	Description of Assessment Tasks
1	Reflection of hands-on experience	30%	1,4	Reflection of hands-on experience, the deliverable of hands-on experience TLA, will be used to assess how well students perform healthy lifestyle practices in-class.
2	Case Study Assignments	20%	2,3	Case studies will be used to evaluate how well students relate E-sportsmanship taught in class to real life examples, and how well students can apply the strategy development skills taught in class.
3	Group Project Presentation	25%	1-4	Project (with individual assessment elements) will be used to evaluate how well students integrate the concepts that they have learned in the courses.
4	Group Project - Project Plans and Reports	15%	1-4	Project (with individual assessment elements) will be used to evaluate how well students integrate the concepts that they have learned in the courses.
5	Quiz	10%	1,3	This quiz is to assess their mastery of the essential knowledge of science and technology and the related health issues.

Assessment Rubrics:

Excellent (A)	• Demonstrate thorough ability to perform healthy lifestyle practices. • Fully capable of applying strategy development skills and relating E-sportsmanship to real life examples. • Able to identify the E-sports and health concepts in the real-life example with a high degree of effectiveness. • Demonstrate full understanding of the essential knowledge of science and technology and the related health issues.
Good (B)	• Demonstrate sufficient ability to perform healthy lifestyle practices. • Capable of applying most strategy development skills and relating most E-sportsmanship to real life examples. • Able to identify the E-sports and health concepts in the real-life example with a considerable degree of effectiveness. • Demonstrate sufficient understanding of the essential knowledge of science and technology and the related health issues.
Satisfactory (C)	• Demonstrate some ability to perform healthy lifestyle practices. • Capable of applying some strategy development skills and relating some E-sportsmanship to real life examples. • Able to identify the E-sports and health concepts in the real-life example with a some degree of effectiveness. • Demonstrate some understanding of the essential knowledge of science and technology and the related health issues.
Marginal Pass (D)	• Demonstrate limited ability to perform healthy lifestyle practices. • Capable of applying some strategy development skills and relating a few E-sportsmanship to real life examples with some minor mistakes. • Able to identify the E-sports and health concepts in the real-life example with a limited degree of effectiveness. • Demonstrate limited understanding of the essential knowledge of science and technology and the related health issues.
Fail (F)	• Demonstrate little or no ability to perform healthy lifestyle practices. • Unable to apply strategy development skills and relate E-sportsmanship to real life examples.

• Unable to identify the E-sports and health concepts in the real-life example. • Demonstrate little or no understanding of the essential knowledge of science and technology and the related health issues.

Course Content and CILOs Mapping:

Content		CILO No.
I	An overview of E-sports concepts and its benefits to health.	1-2
II	Essential knowledge of science and technologies and the health issues related to a variety of E-sports genres.	1-4

References:

• Happonen, A. & Minashkina, D. (2019). Professionalism in E-sport: Benefits in Skills and Health & Possible Downsides. 10.13140/RG.2.2.28958.59208/2.

• Polman, R., Trotter, M., Poulus, D., & Borkoles, E. (2018). eSport: Friend or Foe? In Serious Games (pp. 3–8). Springer International Publishing. https://doi.org/10.1007/978-3-030-02762-9_1

• Custer K. & Russell M. (2021). Gaming Concepts – A Video Gaming Curriculum for Schools. High School E-sports League. Retrieved October 8, 2021, from https://www.varsityesportsfoundation.org/curriculum

• Barnett, A., Cerin, E., & Baranowski, T. (2011). Active Video Games for Youth: A Systematic Review. Journal of Physical Activity & Health, 8 5, 724-37 .

• Yin, K., Zi, Y., Zhuang, W., Gao, Y., Tong, Y., Song, L., & Liu, Y. (2020). Linking E-sports to Health Risks and Benefits: Current Knowledge and Future Research Needs. Journal of Sport and Health Science, 9(6), 485–488. https://doi.org/10.1016/j.jshs.2020.04.006

Course Content:

Topic

I. An overview of E-sports concepts and its benefits to health.
   A. Introduction to E-sports
   B. Benefits of E-sports to brain development, coordination, and dexterity
   C. Benefits of E-sports to mental health
   D. Comparing video games with traditional sports

II. Essential knowledge of science and technologies and the health issues related to a variety of E-sports genres.
   A. Hand-eye coordination and muscle soreness recovery (classic arcade games)
   B. Healthy diet and gym routines (fighting games)
   C. Sportsmanship and ethics (first-person shooters games)
   D. Ways to identify addiction and self-control (racing games)
   E. Effective interpersonal communication (multiplayer online battle)
   F. Establish healthy active video gaming habits (active video games)
   G. Vital sign monitoring through E-sports (AR/VR gaming)
   H. Logic and maths in games (puzzle games)
   I. Strategy development