Proposed Common Core Courses for Introduction in Summer 2020-21 and Beyond (Courses serving as Common Core Courses only)

COMP 1944 Artificial Intelligence Ethics

3 credits

Course Description

Artificial intelligence (AI) is disrupting every sphere of our work and lives, bringing unprecedented risks to society. This introductory course surveys the explosive area of AI ethics, illuminating relevant AI concepts with no prior background needed. Fake news bots. AI driven social media displacing traditional journalism. Drone warfare. Elimination of traditional jobs. Privacy-violating advertising. Monopolistic network effects. Biased AI decision/recognition algorithms. Deepfakes. Autonomous vehicles. Automated hedge fund trading. No area remains untouched. Policy think tanks, governments, and tech companies around the world have started paying serious attention to AI ethics. How will human civilization survive the rise of AI? What are the new rules? What are the ethical frameworks needed to avoid extinction? What are engineers' and entrepreneurs' ethical responsibilities?

Contribution of course to Programs of Study

Common Core

Teaching Activity (weekly scheduled hours)

Lecture - 3 hours

Assessment Tasks (Proportion of Final Grade)

In-class test - 20% Written assignment - 20%

Mid-term test - 10% Presentation - 25%

Course participation - 25%

Effective Semester

Fall 2021-22

Rationale for introducing this course and the consultation process undertaken

This AI Ethics course was requested by the President, Provost, Dean, and DH for HKUST, and may also become a course for the HKUST Guangzhou campus. The pilot run earlier this year (Spring 2020) was listed as a 4000-level special topics course with no prerequisites (COMP 4901M) and a second run in Spring 2021 will be offered, with the objective of becoming a Common Core course.

Tech ethics in the AI era of unprecedented exponential disruptions of society is fast becoming the most important issue of our times. The scale of the disruptions will be even larger than the Industrial Revolution and society must race to catch up with the impending consequences. Many top universities are introducing courses because it is essential that the young engineers, scientists, entrepreneurs, and humanities and social scientists that universities train are fluent and conversant with these issues that were not even on the radar half a generation ago.

Having achieved international recognition as a prominent speaker in the AI ethics and society field for a number of years now, as well as being one of the eight inaugural members named by Google last year to its AI ethics council, it seems very timely to bring this new Common Core course to life at HKUST. The provocation for many of the modules will be TED/TEDx talks (a number of which were given by me) to act as a point of departure for highly interactive discussion.

HART 1047 Introduction to Chinese Landscape Painting

1 credit

Course Description

Of the three main categories of traditional Chinese painting, namely, landscape, flower-and-bird, and figure painting, landscape painting has developed a unique significance through history. Painters in every dynasty and epoch, whether official imperial court painters or literati painters in their cultural circles, have made brilliant achievements in this field. They may have different focuses, techniques and presentation methods of nature; nevertheless, what they always show is the inner scenery of the painter, the ideal world constructed by the painter.

Students will learn basic brush techniques, through which they will understand the creative process of Chinese painting with the focus on landscape painting. They will be encouraged to create their own works through the application of the techniques and attempts to reform this traditional art form.

中國繪畫以山水、花鳥、人物為三大主要分科。山水畫發展歷史悠久,經歷不同朝代及社會民生的變化,包含著複雜卻又千絲萬縷的關係。無論宮廷畫院,文人派系,甚至新中國時期以祖國建設為題的山水作品,都是以傳統基礎為依,堅守外師造化,卻不失時代環境的獨特個性。

透過學習山水畫‧通過臨摹、作品觀摩、範本挑選、課堂示範和練習等‧同學不但能學習相關技法‧也能對中國藝術的審美能力有所提升。

Contribution of Course to Programs of Study

Common Core

Teaching Activity (Weekly Scheduled Hours)

Others: Studio session - 2 hours

Assessment Tasks (Proportion of Final Grade)

Project report - 75% Others: Attendance - 10%

Course participation - 15%

Effective Semester

Summer 2020-21

Rationale for introducing this course and the consultation process undertaken

Offering students first-hand experience in artistic creation with traditional means will not only strengthen their understanding of the life and aesthetic views of our ancestors, and the value of our cultural root, it will also serve the purpose of discovering potential talents among our students.

The practice of brush works in Chinese painting is a cultivated activity that helps to release stress from daily life, thus maintaining harmony between the microcosm of the person and the living environment, and enhancing mental health and spiritual wholeness.

Justification of medium of Instruction/materials

The use of Chinese as the medium of instruction/materials is necessary because most of the jargons and concepts have no equivalent in foreign languages, e.g. English; and almost all learning materials are written in Chinese. When lectures have to be conducted in a foreign language, the effectiveness of explaining them will be impaired to the disadvantage of the students. Therefore, using Cantonese as the medium of instruction and Chinese as the language of teaching materials is more appropriate.

HART 1048

Fashion Art and Styling

1 credit

Course Description

In this course, students will explore the craft and visual expression of fashion design. Students will learn to work with fabrics and unconventional materials to produce mixed media fashion art and design. Sewing techniques and other material manipulation learned in the class will be applied to creating a finished garment, and at the end of the course, students will undertake a fashion photo-shooting exercise to promote their own work.

Contribution of course to Programs of Study

Common Core

Teaching Activity (Weekly Scheduled Hours)

Others: Studio session - 2 hours

Assessment Tasks (Proportion of Final Grade)

In-class exercises - 20%

Final project: Research and development - 30%

Final project: Finished garment and presentation - 40%

Others: Attendance - 10%

Effective Semester

Summer 2020-21

Rationale for introducing this course and the consultation process undertaken

Fashion is part of our daily life where there are no boundaries anymore between the conventional use of fabrics and the unconventional use of materials such as plastic, metals, gesso and acrylic. Fashion can guide us to produce new concepts in terms of re-using and recycling. In this course, students will learn to produce new designs, exploring new solutions in terms of shapes, volumes, details, embroidery and manipulation. Each element involved in making fashion product is changed, translated, fragmented and then reassembled. The main goal is to create new textiling process and to apply them on real garments.

^{*} Starred items NOT to be discussed at the meeting, unless they are un-starred per members' request.