CO1094 Computers and Society

Credits: 20 Convenor: Dr. E. Law Semester: 2nd

Prerequisites: none

Assessment: Coursework: 50% Three Hour Examination in May/June:

50%

Lectures: 40 hours Problem Classes: 10 hours Private Study: 100 hours

Subject Knowledge

Aims The aim of this module is to explain the notion of an Information Society and the impact and effects on society as a whole.

Learning Outcomes Students should be able to describe the Information Society and Information Revolution; explain the effect that computers and IT have had employment in general and both individuals' jobs and corporate organisations; examine the impact of the computer revolution on the conditions of work and life in contemporary society such as the usage of social networking sites; explain the issues of access to computers such as privacy and security, the inequality that can arise, and the impacts on society; describe the issues surrounding information access rights; examine human-computer interaction issues and their impacts on different IT-enhanced sectors such as healthcare, education, electronic commerce and environment; be able to outline a brief history of digital computing.

Methods Class sessions together with course notes, recommended textbooks, worksheets, additional handouts and web support.

Assessment Marked coursework, class test, traditional written examination.

Skills

Aims To teach students scientific writing and critical thinking.

Learning Outcomes Students will be able to: write short, clear, note based summaries of general knowledge and present ideas orally.

Methods Class sessions together with discussions.

Assessment Marked essays on specific topics, in-class presentation, a class test, traditional written examination.

Explanation of Prerequisites While there are no formal essential prerequisites, students should already have a basic knowledge of computing, the use of computers in society, and idieally some appreciation of coding.

Course Description The module examines the historical development of computing technologies, the impact of the computer revolution on the conditions on work and life in contemporary society. It discusses ethical, legal, and professional issues in computer uses. It also analyses relevant theoretical frameworks to understand the dynamic and dialectical interactions between humans and technologies. Critical thinking is essential to reflect deeply on the ever-evolving human-technology relationships.

Detailed Syllabus

Topic 1: History of Digital Computing

Topic 2: Social Change and Technology

Topic 3: Open Source Movement

Topic 4: Computer-mediated Social Networks

Topic 5: Digital Identity

Topic 6: Human-computer Interaction: Usability and User Experience

Topic 7: Computers and Education Topic 8: Privacy and Security

Topic 9: Digital Dilemma

Resources Web page, study guide, worksheets, handouts, lecture rooms.

Module Evaluation Course questionnaires, course review.