

GSP175e Technology and World Change

Level: 1

Credit Units: 2.5 Credit Units

Language: ENGLISH

Presentation Pattern: EVERY SEMESTER

E-Learning: BLENDED - Learning is done MAINLY online using interactive study materials in Canvas. Students receive guidance and support from online instructors via discussion forums and emails. This is supplemented with SOME face-to-face sessions. If the course has an exam component, this will be administered on-campus.

Synopsis:

There is a direct and inseparable link between human civilization and technology. However, this link is not always immediately apparent and comprehensible. To fully understand how the world changes and how human society and civilization develop, appreciation of this link with technology is critical.

This course is suitable for all students, regardless of their academic discipline. The subject aims to broaden students' ways of thinking to consider the many aspects of their daily life and work which are directly related to and strongly influenced by technology. These include:

- Economics
- Politics and ideology
- Religion
- Environment
- Lifestyle
- Ethics
- Social issues

The technologies that will be covered in this course include (but are not limited to): the steam engine, printing technologies, electricity, the semiconductor, medical technologies, communication technologies, the internet and digital technologies.

The course will enable students to draw connections between many seemingly unrelated subjects, and understand the pivotal role that technology plays in the development of human society. It is, after all, humankind's ability to fashion and adapt tools from the environment that gives rise to technology.

Topics:

- Course overview and introduction
- Early human civilizations
- The Digital Age
- Technological innovations in early civilizations
- Early changes in the world as a result of technological discoveries such as paper, gunpowder, printing, etc.
- Instances of change in the modern world
- The Reformation as a result of printing technology, and its consequences on European and American history
- Rapid world change brought about by the Industrial Revolution
- The colonization of the world by European powers
- The Industrial Revolution

Learning Outcome:

- Identify the basic categories of technology and technological development
- Describe the contributions that technology and engineering have made, and are making, to world change
- Explain the role of technology in the mediation between humanity and the environment
- Demonstrate an awareness of the dangers that technology may pose to the future of humanity
- Appreciate the intricacies and complexities of the world today as a result of technological advances
- Grasp the opportunities offered by new technologies
- Comment on the potential and possible contributions that technology can make towards human civilization
- Interpret basic scientific processes that lie at the heart of technology
- Think out of the box and turn technological advances into business opportunities

Assessment Strategies:

Continuous Assessment Component	Weightage (%)
PRE-CLASS QUIZ	20
TUTOR-MARKED ASSIGNMENT	40
TUTOR-MARKED ASSIGNMENT	40
Sub-Total	100

Examinable Component	Weightage (%)
Sub-Total	

Weightage Total **100**