Module Details

Module Title	Technology, Violence and War
Module Code	PES6027-B
Academic Year	2021/2
Credits	20
School	School of Social Sciences
FHEQ Level	FHEQ Level 6

Contact Hours

Type	Hours
Directed Study	178
Lectures	16
Seminars	6

Availability

Occurrence	Location / Period
BDA	University of Bradford / Semester 2

Module Aims

This module is concerned to engage with current debates on the relationship between society, science, technology and violence. It builds (but is also self-contained with no prerequisites required) on the Level 5 Security Module and it encourages reflection on methodological, theoretical and analytical issues that shape the ways in which security is thought about and practiced in contemporary global politics. The principal focus of the module will be on state and sub-state security implications of contemporary scientific and technological innovations, an approach that facilitates in-depth investigation into fields such as drone warfare, nanotechnology, cyberwarfare, dual-use, neuroscience, biotechnology as well as developments relating to biological, chemical and nuclear weapons. The module will include a visit to the Royal Armouries in Leeds to explore the early history of military-technological innovation.

It aims to develop a detailed and sophisticated understanding of the academic and policy literature on the relationship between society and science and technology.

To encourage you to critically analyse the processes by which understandings of science and technology are socially constructed.

To encourage you to critically analyse and evaluate the different processes by which new scientific and technological developments are adopted and used by security actors.

To encourage sophisticated critical reflection on the role of norms and law in the governance of weapons technologies.

To encourage critical engagement with a wide range of historical and contemporary sources.

To encourage sophisticated critical reflection on the distinction between dominant and subordinate voices and narratives.

To encourage the application of detailed subject specific knowledge and critical analysis to a relevant topic.

To encourage and foster independent research.

To encourage and foster collaboration with peers.

Outline Syllabus

The module will include a visit to the Royal Armouries in Leeds in order to explore the early history of militarytechnological innovation. The module will begin by analysing the Security Studies literature examining how science and technology shape societies and how societies shape technology. This will include consideration of the way societies influence the emergence, and application of particular scientific and technological developments and the way understandings of military technological categories (e.g. military precision) have been socially constructed. It will also include consideration of contemporary debates on the economic and social implications of innovations in fields such as robotics, AI and 3D printing as well as the associated security challenges they may resolve, aggravate or produce.

The module will then examine how states and societies have responded to the policy, security and governance challenges presented by such developments. The remainder of the module will be devoted to exploring the legal, normative and strategic debates over the use of modern and emerging technologies by security actors (e.g. state militaries, state intelligence services, insurgents, terrorist or criminal groups). This will include examination of the security, policy and governance implications of new developments in fields such as drone warfare, nanotechnology, cyberwarfare, dual-use, neuroscience, biotechnology as well as developmens relating to biological, chemical and nuclear weapons..

Students will be required to work in groups to produce an assessed group presentation examining a real-life example of the aggressive use of a particular technology. Different groups will be asked to examine different issues and questions raised (e.g. the ethical, legal, normative, policy, human security, economic, geo-strategic issues raised.

Learning Outcomes

Outcome Number	Description
01	Identify, explain and critically analyse the relationship between developments in Secuirty theorising about the links between science, technology, society, violence and war and their historical context.
02	Apply and critically analyse security studies and other theories, concepts and methods relevant to studying the relationship between science, technology, society, violence and war.
03	Apply and critically analyse concepts, theories and methods used in the academic and policy literature on the development, implementation and effectiveness of the normative, legal and institutional frameworks of arms governance.
04	Explain and critically analyse complex concepts and theories in a concise, confident and accurate manner.
05	Systematically review academic debates, clearly distinguishing and explaining the main contending theoretical perspectives, showing awareness of key differences in reasoning.
06	Exercise sophisticated critical judgement, through distinguishing strengths and limitations in academic theories and research evidence.
07	Recognise and discuss relationships between knowledge practices and the forms and operations of power.
08	Use concepts and theories to investigate a case study that amplifies relevant issues and debates pertinent to the study of science, technology, violence and war.

Learning, Teaching and Assessment Strategy

Learning will emerge through:

lectures, discussion seminars, group work, assessed presentations and extensive reading.
Formative assessment will be undertaken through class and individual discussions of plans for assessed presentations and essays.

Summative assessment will be through

(i) an assessed group presentation
(ii) an essay on a topic covered in the module.

Mode of Assessment

Type	Method	Description	Weighting
Summative	Presentation	Group Presentation (20 Mins) (SUPPLEMENTARY: Individual 10 min presentation)	20%
Summative	Coursework - Written	Essay (3400-3600 words)	80%

Reading List

To access the reading list for this module, please visit https://bradford.rl.talis.com/index.html