

## HPSC0073

### Introduction to Science and Technology Studies

#### Course Syllabus

2019-20 session | Convenor: Prof. Andrew Gregory |  
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Science and Technology Studies (STS) is an interdisciplinary field in which science and technology is examined from a number of different perspectives. ("Science" here is broadly understood and can include science, technology, medicine or mathematics.) Broadly the perspectives are divided into History and Philosophy of Science (HPS) and Social Studies of Science. HPS includes history of science and philosophy of science, as well as integrated approaches to both. Social Studies of Science include sociology of science, science policy studies, and studies of science communication, engagement, and evaluation. This course introduces students to some of the key ideas, arguments and readings in HPS and Social Studies of Science, collectively STS. It acts as a bridge to the specialized option courses.

#### Course Information

##### Basic course information

Course website:	N/A
Moodle Web site:	<a href="https://moodle-1819.ucl.ac.uk/course/view.php?id=7476#section-7">https://moodle-1819.ucl.ac.uk/course/view.php?id=7476#section-7</a> Enrolment key 'darwin'
Assessment:	Four 1000 word essays
Timetable:	<a href="https://timetable.ucl.ac.uk/tt/homePage.do">https://timetable.ucl.ac.uk/tt/homePage.do</a>
Prerequisites:	None
Required texts:	No single required text – see readings for each session
Course tutor(s):	Convenor: Prof. Andrew Gregory
Contact:	<a href="mailto:andrew.gregory@ucl.ac.uk">andrew.gregory@ucl.ac.uk</a>
Web:	<a href="https://www.ucl.ac.uk/sts/people/prof-andrew-gregory">https://www.ucl.ac.uk/sts/people/prof-andrew-gregory</a>
Office location:	22 Gordon Square, Room 1.2
Office hours:	Tuesdays 11-12, Wednesdays 12-1

#### Schedule

UCL Week	Topic	Date	Activity
6	Introduction: What is a scientist? Dr. Phyllis Illari, Dr. Bill MacLehose, Dr. Jean-Baptiste Gouyon	30 Sept	Erikson 2005, Sismondo 2009, Chalmers 1999
7	Does science progress? Dr. Phyllis Illari	7 Oct	Lakatos 2013, Kuhn 2013
8	How does science produce knowledge? Dr. Emma Tobin	14 Oct	Lipton 1995, Van Fraassen, et al
9	Do the public need to understand science? Dr. Jean-Baptiste Gouyon	21 Oct	Wynne 1995, Irwin 2006
10	How is scientific evidence used in policy? Dr. Jack Stilgoe	28 Oct	Sarewitz 2003, Pielke 2007
<b>11</b>	<b>Reading Week</b>	<b>4 Nov</b>	
12	Can Science be separated from its social context? Dr. Tiago Mata	11 Nov	Merton 1973, Mulkay 1976, Bloor 1991, Latour
13	Science, Technology and Inequality. Dr. Melanie Smallman	18 Nov	Jasanoff 2007, Dawson 2018
14	Where has science come from? Prof. Andrew Gregory	25 Nov	Von Staden 1992
15	Are there different histories of science? Dr. Bill MacLehose	2 Dec	Schiebinger 2003, Raj 2013, Schaffer 2011.
16	Do artifacts have politics? Prof. Jon Agar	9 Dec	Winner 1985, MacKenzie and Wacjman, Edgerton 1999

## Assessments

Assessment consists of four 1000 words essays each contributing 25% of the final grade for the module. You must complete all the essays to pass the module.

Essays must be submitted electronically to Turnitin via moodle.

The aim of the essays is to assess your critical understanding of the literature and of key concepts in History, Philosophy and Social Studies of Science. The essays will also provide you with the opportunity to develop your academic writing and analytical skills in a gradual manner, receiving feedback throughout the module. The feedback will help you improve in the next piece of coursework. It will also help you develop your essay writing skills in preparation for longer assessments in other modules.

You will be able to choose between two or three essay titles for each essay. The essay titles for each session are available on Moodle, under the "Assessment" rubric. The assessment timetable and breakdown of which titles you can choose from for each piece of coursework is as follows:

	Description	Deadline	Word limit	Deadline for Tutors to provide Feedback
<b>Essay 1</b>	Philosophy of Science. Choose between essay title <b>1</b> (Ambrosio) and <b>2</b> (Clarke)	25 October, 5 pm	1000 words	23 November
<b>Essay 2</b>	STS Essay. Choose between essay title <b>3</b> (Gouyon) and <b>4</b> (Stilgoe)	15 November, 5pm	1000 words	13 December
<b>Essay 3</b>	STS Essay. Choose between essay title <b>5</b> (Mata) and <b>6</b> (Dawson)	13 December, 5pm.	1000 words	9 January
<b>Essay 4</b>	History of Science. Choose between essay title <b>7</b> (Maclehose), <b>8</b> (Werrett), <b>9</b> (Agar)	13 December, 5pm.	1000 words	9 January

### Essay feedback:

Your feedback and first marks on each essay will be accessible via the electronic submission system, two weeks (15 working days) after the submission of your essay. Please note that first marks are provisional and might change after second marking and external examiners' moderation (which happens in June). Make sure you focus on the feedback provided by the first marker, which is what will allow you to improve in the next piece of coursework.

If you have any questions or the feedback is not clear, feel free to discuss it with the lecturer of the relevant session/essay in their office hours, and/or with your personal tutors.

### Specific Criteria for Assessment for this Module:

The assessment for this course consists of four essays, designed to help students develop their essay-writing skills and demonstrate critical knowledge across the syllabus.

As the essays are only 1000 words each, we do not expect you to cover the full literature on a given topic. Focus instead on key ideas covered in the essential readings assigned for a given lecture, and use some selected further readings to deepen and refine your analysis.

The essays will also help you develop your academic writing style, which includes:

- organization of argument (how a case is built in the essay)
- structure (e.g. clear introduction, arguments, and conclusion; clear links between sections and paragraphs)
- clarity
- appropriate use of evidence/ quotations
- grammar and spelling
- consistent referencing (choose a journal article from the reading list and follow the way it

formats references, or follow the style in either of the journals *Isis* or *Social Studies of Science*).  
- complete bibliography (do not include bibliography in the word count)

The departmental marking guidelines for individual items of assessment can be found in the STS Student Handbook.

## **Aims & objectives**

### **Aims:**

The module has two specific aims. First, it introduces students to key ideas, arguments and readings in Science and Technology Studies, broadly defined to include history of science, philosophy of science, integrated history and philosophy of science, science policy, sociology of science and technology, studies of science communication and evaluation. Second, the module prepares students, in terms of key ideas, arguments and readings, to be able to start the specialist STS MSc option courses.

### **Objectives:**

By the end of this module students should be able to (1) demonstrate knowledge of key ideas, arguments and readings in STS, and (2) be able to critically analyse key ideas, arguments and readings in STS.

### **Reading list**

Please refer to Moodle for a detailed list of required and additional readings for each session.