

HPSC0017

Science and Ethics

Course Syllabus

2021-2022 session | Dr Rory Jubber | rory.jubber@ucl.ac.uk

Course Information

An exploration of ethical challenges arising in recent scientific activity. Some challenges will focus on the results of research. Others will concern the process of research itself and science and society's efforts at self-regulation. This is a practical, issues-based course. Emphasis also will be on current events and fundamental principles. No prerequisites.

Basic course information

Course website:	n/a
Moodle Web site:	HPSC0017
Assessment:	0% Formative Essay plan 100% Essay
Timetable:	Check UCL Common Timetable
Prerequisites:	none
Required texts:	Torbjorn Tannsjo: <i>Understanding Ethics</i> (3rd Edn.). Other readings available via Moodle.
Course tutor(s):	Dr Rory Jubber (Lecturer) Santiago Guzman Gamez (Tutor) Dario De Queiroz Galveo Neto (Tutor)
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Office location:	22 Gordon Square, Room 1.1

Schedule

UCL Week	Topic	Activity
20	Introduction: ethics and consequences in science	Reading and searching for case studies.
21	Consequentialism: what about ethical rules?	Reading and searching for case studies.
22	Deontology: are some acts wrong whatever the consequences?	Reading before class.
23	Deontology: how far can rules help us?	Reading before class. Think about essay plan.
24	Virtue ethics: what should the virtuous agent do?	Reading before class. Write essay plan.
25	Reading Week	no classes
26	Virtue ethics: what is integrity?	Reading before class. Reading about essay.
27	Environmental ethics: is ethics only about people?	Reading before class. Planning for essay.
28	Environmental ethics: are we collectively responsible?	Reading before class. Writing essay.
29	Information ethics: can you really steal information?	Reading before class.
30	Information ethics: science, ethics and change	Reading before class.

Assessments¹

Summary

	Description	Deadline	Word limit	Deadline for Tutors to provide Feedback
Plan (Formative, 0%)	Essay plan	21 February 17:00	1,500	21 March
Essay (100%)	Essay	22 April 17:00	3,000 Level 6/iBSc students: 3,500 words	22 May

Assignments

Essays must be submitted via Moodle. Essay topics to be distributed on Moodle. In order to be deemed 'complete' on this module students must attempt both the essay plan and the essay.

¹ For further information regarding assessments (including word counts, late submissions and possible penalties) please refer to the STS appropriate programme page i.e B.Sc or M.Sc., or the equivalent for your department.

Specific Criteria for Assessment for this Module:

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

Details of college and departmental policies relating to modules and assessments can be found in the STS Student Handbook www.ucl.ac.uk/sts/handbook

All students taking modules in the STS department are expected to read these policies.

Guidance on how to interpret the departmental marking criteria for this course will be shared later.

Aims & objectives

Aims:

- Build knowledge of three basic foundational theories in ethics, and two newer theories.
- Encourage reflection on ethical issues in science.
- Increase skills to apply ethical theories to issues arising in science.
- Increase skills of analytical essay writing and verbal discussion.

Objectives:

By the end of this module:

- Students will be able to explain and evaluate five key philosophical ethical theories.
- Students will be able systematically to explore and discuss ethical issues arising in the sciences.
- Students will be able to express and defend ethical views.
- Students will be able to write philosophically cohesive essays, where ethical theories are explained, applications explored, and arguments for each critically evaluated.

Course expectations

Students are expected to attend lectures, read the required reading in advance of seminars, attend seminars and participate in class activities, particularly discussions. Students should be active in pursuing the questions for discussion, searching the internet for information on unfamiliar ideas, and for interesting ethical cases in science for discussion in class.

Reading list

Best General Introductions:

We will extensively use **Tannsjo: Understanding Ethics (3rd Edition)** (2013, Edinburgh University Press). The library has copies, and also ebook access using your login.

There are some marvelous resources available through UCL's online services for you to browse for interesting cases and discussions. Make sure you have a look at:

- Ford and Duzinski (eds): *Complex Ethics Consultations – Cases that Haunt Us*, CUP, 2008 <http://ebooks.cambridge.org/ebook.jsf?bid=CBO9780511663437>
- The journal *Science and Engineering Ethics*
<http://link.springer.com/journal/volumesAndIssues/11948>
- The *Journal of Bioethical Inquiry*
<http://link.springer.com.libproxy.ucl.ac.uk/journal/volumesAndIssues/11673>

And let the class know about anything good you find!

Lecture Readings:

Week 1 Introduction: ethics and consequences in science

Required Reading:

Briggle and Mitcham: *Ethics and Science*, Chapter 1 'Introduction and Overview'

Required Seminar Reading:

Browse recent issues of *New Scientist*:

<http://www.lexisnexis.com/uk/nexis/search/homesubmitForm.do>

Have a look at the Journal *Science and Engineering Ethics*

<http://link.springer.com/journal/volumesAndIssues/11948>

Think about what ethical issues in science you would like to discuss on this course, and come to the seminar with at least one idea of a case you have found to suggest to the class.

(If the links here or on the reading list don't work, you can access the ejournals directly by logging in to MetaLib.)

Questions for discussion:

- What are the interesting ethical issues in science?
- Is there anything distinctive about ethical issues in science?
- Should we leave science alone?
- What are moral theories?
- Is ethics objective or subjective? Does it matter?
- What are the consequences of our actions?
- How do we know what the consequences of our actions will be?
- Is there anything special about the consequences or potential consequences of science?

Week 2 Consequentialism: what about ethical rules?

Required Reading:

Tannsjo: Chapter 2 'Utilitarianism'
Case study reading

Additional Readings:

Wendy Donner: 'Mill's Utilitarianism' in Skorupski (ed) *The Cambridge Companion to Mill*, CUP.

Questions for discussion:

- Should we follow ethical rules?
- Can a consequentialist explain ethical rules?
- What is 'rule-utilitarianism'? Does it work?
- Can we formulate ethical rules for science?

Week 3 Deontology: are some acts wrong *whatever* the consequences?

Required Reading:

Tannsjo: Chapter 4 'Deontological Ethics'
Case study reading

Additional Reading:

Timothy Chappell: 'Intuition, system, and the "paradox" of deontology' in Lost and Wuerth (eds) *Perfecting Virtue*, CUP, 271-88.

Questions for discussion:

- Is ethics universal?
- Is it ever permitted to prioritise a loved one over a stranger?
- Is it required to prioritise a loved one over a stranger?
- Is it ever required *not* to prioritise a loved one over a stranger?
- Can rules conflict?
- How do you decide what rule to apply?
- What are ethics boards in science? Why do they exist?

Week 4 Deontology: rules and rights

Required Reading:

Tannsjo: Chapter 5 'Moral Rights'
Case study reading

Additional Reading:

Michael Slote: 'The problem we all have with deontology', in Lost and Wuerth (eds) *Perfecting Virtue*, CUP, pp260-70.

Questions for discussion:

- What is a duty?
- What is a right?
- Do we have a duty not to violate the rights of others?
- Do scientists have any special duties? Or rights?
- Are there any moral absolutes?
- Do human rights exist whatever society says?

Week 5 Virtue ethics: what about integrity?

Required Reading:

Tannsjo: Chapter 6 'Virtue Ethics'
Case study reading

Additional Reading:

Daniel Russell: 'Virtue ethics, happiness, and the good life' in Russell (ed) *The Cambridge Companion to Virtue Ethics*, CUP

Phillipa Foot: 'Virtues and Vices' in her *Virtues and Vices: Essays in moral philosophy*, OUP, 2002

Questions for discussion:

- 'It's against the rules, but if I don't do it there will be terrible consequences. Help! What should I do?'
- Is acting ethically a skill?
- If ethics requires skill, does that mean the less skilled are ethically less good?
- What is integrity?

Week 6 Virtue ethics: what should the virtuous agent do?

Required Reading:

Rosalind Hursthouse: 'Normative Virtue Ethics' in Crisp (ed) *How should one live?* OUP, 1998.
Case study reading

Additional Reading:

Justin Oakley: 'Virtue ethics and bioethics' in Russell (ed) *The Cambridge Companion to Virtue Ethics*, CUP

Gopal Sreenivasan: 'The situationist critique of virtue ethics' in Russell (ed) *The Cambridge Companion to Virtue Ethics*, CUP

Questions for discussion:

- 'It's not my fault, I followed the rules!' Is this a good defense?
- Do scientists need any special virtues?
- Is there such a thing as intellectual virtue? Is it different from ordinary virtue?
- Do scientists need any special intellectual virtues?

Week 7 Environmental ethics: is ethics only about people?

Required Reading:

Tannsjo: Chapter 8 'Environmental Ethics'
Case study reading

Additional Reading:

Sahotra Sarkar: 'Multiple Criteria and Trade-Offs in Environmental Ethics' in *Bioethical Inquiry* (2013) 10:533 – 537

Questions for discussion:

- What is intrinsic value?
- What is instrumental value?
- Do only people have intrinsic value?

- Are things other than people valuable? Just animals? Plants too? Why?
- Is it morally acceptable to experiment on animals? Why?

Week 8 Environmental ethics: are we collectively responsible?

Required Reading:

Zwolinski and Schmidt: 'Environmental virtue ethics' in Russell (ed) *The Cambridge Companion to Virtue Ethics*, CUP

Case study reading

Additional Reading:

Mackie Chapter 9: Determinism, responsibility, and choice

Mackie Chapter 3 Obligations and reasons

Questions for discussion:

- 'I didn't cause climate change, it was everybody else!' Can this ever be true?
- Is it just as bad to *let something happen* as to do it?
- Are we responsible for what other people do?
- Are we responsible for what institutions we are part of do? For what our university does? For what our country does?
- Are we collectively responsible for science?
- What is a social contract?
- Are we collectively involved in a social contract?

Week 9 Information ethics: can you really steal information?

Required Reading:

The PI Research Network: *The Philosophy of Information: An Introduction*, Chapter 4, 'Ethics'.

Case study reading

Additional Readings:

Alison Adam: 'Ethics for things' in *Ethics and Information Technology* (2008) 10:149–154

Floridi: 'Information ethics' in Floridi (ed) *The Cambridge Handbook of Computer and Information Ethics*, CUP,

The PI Research Network: *The Philosophy of Information: An Introduction*, Chapter 5, 'Society'.

Questions for discussion:

- Do we need to re-think ethics when the world changes?
- Is the unauthorized copying of a digital object really theft?
- Does someone looking at photos of you without permission violate your privacy? Does that violate one of your human rights?
- Why? Does it harm you?

Week 10 Information ethics: science, ethics and change

Required Reading:

Floridi: 'The ethics of the information society in a globalized world' in Floridi (ed) *The Cambridge Handbook of Computer and Information Ethics*, CUP, p271-83

Case study reading

Additional Readings:

Louise Bezuidenhout: 'Data Sharing and Dual-Use Issues' in *Science and Engineering Ethics* (2013) 19:83–92

The PI Research Network: *The Philosophy of Information: An Introduction*, Chapter 15, 'Personal identity'.

Questions for discussion:

- How does science change the world?
- How does science change how we see ourselves?
- Is change good or bad?
- Does change impact on different people in different ways?
- How does science create particularly urgent ethical debates?