HPSC3045 Philosophy of Information

Course Syllabus

2017-18 session | Dr Phyllis Illari | Email Address phyllis.illari@ucl.ac.uk

Information is now a vitally important scientific concept, while changes in information and communication technologies have rapidly altered our personal and working lives. This course examines these changes. It looks at philosophical approaches to information, and the implications of the ‘information revolution’ for such issues as society, personal identity, and scientific knowledge.

Course Information

Basic course information

<table>
<thead>
<tr>
<th>Course website:</th>
<th>Moodle Web site:</th>
<th>Assessment:</th>
<th>Timetable:</th>
<th>Prerequisites:</th>
<th>Required texts:</th>
<th>Course tutor(s):</th>
<th>Contact:</th>
<th>Web:</th>
<th>Office location:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><a href="https://moodle.ucl.ac.uk/course/view.php?id=27869">https://moodle.ucl.ac.uk/course/view.php?id=27869</a></td>
<td>1 essay (4,000 words)</td>
<td><a href="http://www.ucl.ac.uk/timetable">www.ucl.ac.uk/timetable</a></td>
<td>None</td>
<td>See reading list for required reading each week</td>
<td>Dr Phyllis Illari</td>
<td><a href="mailto:phyllis.illari@ucl.ac.uk">phyllis.illari@ucl.ac.uk</a></td>
<td></td>
<td>22 Gordon Square, Room 1.2</td>
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Schedule

<table>
<thead>
<tr>
<th>UCL Week</th>
<th>Topic</th>
<th>Date</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>² The information revolution</td>
<td>Reading for class</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>The method of abstraction</td>
<td>Reading for class</td>
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<tr>
<td>8</td>
<td>Society: Organization and Trust</td>
<td>Reading for class</td>
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<tr>
<td>9</td>
<td>Personal identity</td>
<td>Reading for class, thinking about essay</td>
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<tr>
<td>10</td>
<td>Informational structural realism</td>
<td>Reading for class, choosing essay</td>
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<tr>
<td>11</td>
<td>Reading Week</td>
<td>No classes, work on essay</td>
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<tr>
<td>12</td>
<td>Knowledge</td>
<td>Reading for class, work on essay</td>
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<tr>
<td>13</td>
<td>Constructionism</td>
<td>Reading for class, work on essay</td>
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<td>14</td>
<td>Mind and cognition</td>
<td>Reading for class, work on essay</td>
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<tr>
<td>15</td>
<td>Information ethics</td>
<td>Reading for class, work on essay</td>
<td></td>
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<tr>
<td>16</td>
<td>Society: Information warfare</td>
<td>Reading for class, work on essay</td>
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Assessments

Summary

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<thead>
<tr>
<th>Description</th>
<th>Deadline</th>
<th>Word limit</th>
<th>Deadline for Tutors to provide Feedback</th>
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<tbody>
<tr>
<td>Essay plan Plan for feedback, including peer feedback, no grade</td>
<td>10th November 17</td>
<td>none</td>
<td>24 November 17</td>
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<tr>
<td>Essay 1 Essay, as discussed in class, 100% of final grade for course</td>
<td>13th December 17</td>
<td>4,000</td>
<td>2 January 18</td>
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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 the 4,000 word essay.

Specific Criteria for Assessment for this Module:

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
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](http://www.ucl.ac.uk/sts/handbook).

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

Course-specific guidance to be presented and discussed in class.

**Aims & objectives**

**Aims:**
To introduce students to the information revolution; allowing them to explore the philosophical consequences of the information revolution for timely topics such as personal identity, society, and scientific knowledge. A key focus of the course is on situating even esoteric philosophical issues in a context in which they are societally significant.

The course will contribute to skills development as for all philosophical courses: clarity and rigour in assessing and constructing arguments, and ability to take part in such arguments orally and in writing.

**Objectives:**

By the end of this module students should be able to:

- Explain the information revolution, and a little of the recent history of information and communication technologies, with a particular focus on its ethical and societal significance.

- Understand some of the conceptual difficulties in defining information, in spite of its extensive usefulness in multiple areas of science and technology.

- Understand and explain some of the philosophical issues caused by the rapid technological change of the information revolution, such as how we should conceive of personal identity, society and knowledge.

- Construct clear and rigorous arguments concerning all these topics.

**Reading list**

**Best General Introductions:**

See section on Moodle with Reading List links.

**Lecture Readings:**
1 The information revolution

Essential Reading
- Floridi: The Ethics of Information, OUP, 2013, Ch1 ‘Ethics after the information revolution’.

Questions
1. What does information mean to you?
2. What kinds of technological change are intended in talking of the ‘information revolution’? How do they compare with, for example, the technological change of the industrial revolution?
3. Is it really a revolution? In what sense?
4. In what ways are you a member of the new information society?
5. How is life different for those who cannot or do not participate in the new information society? Who are they?
6. How do you use Google/Wikipedia/apps/etc? When do they not help?

Extra Reading
- Anthony Beavers: In the Beginning Was the Word and Then Four Revolutions in the History of Information in H. Demir (ed), Luciano Floridi’s Philosophy of Technology: Critical Reflections, Springer, 2011.

2 The method of abstraction

Essential Reading

Questions
1. What kinds of things do we describe in terms of levels?
2. What’s an observable? What’s a level of abstraction?
3. What kinds of things do we describe using these new concepts?
4. What are the implications of thinking everything is described – and even interacted with – at some level of abstraction or other?

Extra Reading

3 Society: organization and trust

Essential Reading

Questions
1. What is cybernetics? What were its core ideas?
2. What were the main influences on Wiener?
3. How are those ideas still influential?
4. Why do we trust virtual agents in a network?
5. Are we more interactive than we used to be?

Extra reading
- Frank Webster: *Theories of the information society*, Routledge, 2006, especially Ch 2 ‘What is an information society?’

4 Personal Identity

Essential Reading

Questions
1. What are the biological and psychological criteria for personal identity? Do you think they capture personal identity?
2. What is an inforg? Are you an inforg? How could ICTs (Information and Communication Technologies) affect your identity?
3. What is the place of interpersonal relationships in the creation of personal identity?
4. What does narrative have to do with personal identity?

Extra Reading

5 Informational structural realism

Essential Reading

Questions
1. What does it mean to say that the world is made of information?
2. Could the world really be made of information?
3. How does this fit with Floridi’s constructionism?
4. In what ways is this a realist view? In what ways is it not?

**Extra Reading**


**6 Knowledge**

**Essential Reading**


**Questions**

1. What kinds of technologies have changed the way we build knowledge lately?
2. Think about information, and knowledge. How are they related? Do you think one notion is more fundamental?
3. What does Floridi mean by ‘integrated’? Do you think knowledge has to be integrated? Does it have to be ‘accounted for’?
4. What would the sceptic say? Does it matter?

**Extra reading**


**7 Constructionism**

**Essential Reading**

- Floridi: *The Ethics of Information*, OUP, 2013, Ch 8 ‘The constructionist values of homo poieticus’.

**Questions**

1. What is the infosphere? How is it created? Who or what controls it?
2. Is cyberspace completely free? How might it be restricted in hidden ways?
3. What does Floridi mean by poiesis’?
4. What is ‘maker’s knowledge’?
5. Why does Floridi say that philosophy is ‘conceptual engineering’ or ‘conceptual design’?

**Extra reading**

- Lawrence Lessig: *Code Version 2.0*, Basic Books 2006 (the rest!).
8 Mind and Cognition
Essential Reading

Questions
1. What is Turing trying to do?
2. Why is it important? What does it help us understand?
3. What are we doing when we construe the mind as an information-processor? Is it?
4. Does that even make sense?

Extra reading

9 Information ethics
Essential Reading

Questions
1. What is information as a resource, a product, or a target?
2. What is environmental ethics?
3. What does Floridi mean by the information cycle?
4. In what ways is Floridi’s information ethics all-embracing?
5. Does it really make sense to promote the flourishing of information?

Extra Reading
- Lucas: ‘Levels of Abstraction and morality’ in Demir (ed.) Floridi’s Philosophy of Technology (Springer, Forthcoming)

10 Society: acting technologies
Essential Reading

Questions
1. Is there a clear distinction between when a human being acts and when a piece of technology acts?
2. What is ‘information warfare’? Is it ethically better than traditional warfare?
3. In what sense are algorithms unbiased? In what sense might they still be biased?
4. What should we do when a piece of technology – robot or algorithm – makes a choice we wish
<table>
<thead>
<tr>
<th>Extra Reading</th>
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<tbody>
<tr>
<td>- Google’s self-driving car test: <a href="http://www.google.co.uk/about/careers/lifeatgoogle/self-driving-car-test-steve-mahan.html">http://www.google.co.uk/about/careers/lifeatgoogle/self-driving-car-test-steve-mahan.html</a></td>
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<table>
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<tr>
<th>Popular reading:</th>
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<tbody>
<tr>
<td>These are good quality popular books that might help you understand what is so exciting about studying information, as well as being resources for wonderful examples for thinking about information.</td>
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<tr>
<td>- Heather Brooke: The revolution will be digitized: dispatches from the information war, William Heinemann (2011)</td>
</tr>
<tr>
<td>- James Gleick: The Information: A history, a theory, a flood, Fourth Estate (2011)</td>
</tr>
<tr>
<td>- Seth Lloyd: Programming the Universe: a quantum computer scientist takes on the cosmos, Vintage (2007)</td>
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