Cognitive Science Fiction

Instructor Info:  
Lee Spector  
lspector@hampshire.edu  
Office Extension:  x5352

Office Hours:  Regular office hours: Mondays 2:30–4:00, Wednesdays 10:30–12:00, Thursdays 2:00–3:30. Other times can be set up by arrangement (in person or via email). Sign up for regular office hours and advising day meetings on Hampedia here.

TA Info:  
Courtney Dozetos  
cgd07@hampshire.edu

Charles Pope  
cmp07@hampshire.edu  
Office Extension:  x5054

Sarah Gordon  
smg09@hampshire.edu  
Office Extension:  x4302

Term:  2010F

Meeting Info:  
Monday  10:30 AM – 11:50 AM Adele Simmons Hall (ASH) 111

Wednesday  10:30 AM – 11:50 AM Adele Simmons Hall (ASH) 111

Monday  07:00 PM – 09:00 PM Adele Simmons Hall (ASH) 112

Description:  
Can androids fall in love? Could a planet have a mind of its own? How might we communicate with alien life forms? Will it ever be possible for two people to "swap minds"? How about a person and a robot? And what would it feel like to engage in a Vulcan "mind meld"? Cognitive science research can shed light on many of these questions, with results that are often as strange and as wonderful as the inventions of science fiction authors. In this course we will read and view science fiction while simultaneously reading current scientific literature on the mind, the brain, and intelligent machines. The science fiction will provide a framework for our discussions, but the real goal of the course is to provide a tour of issues in cognitive science that will prepare students for more advanced cognitive science courses. PRS, QUA, REA

Course Objectives:  
- To gain familiarity with a range of current topics, issues, and problems
To gain familiarity with a range of current topics, issues, and approaches in cognitive science.

To learn to ask questions about the nature of the mind, understanding that one is always doing this with a mind!

To develop skill in reading primary scientific research literature.

To develop skill connecting scientific issues to life experience and literature.

To develop improved writing skills.

Evaluation Criteria:
Each student will be evaluated on the basis of:

1. Mandatory participation in class discussions. See below for details.
2. Three 5–8-page papers, due September 27, October 20, and November 15. See below for details.
3. A 10–12 page paper, which may be a revision/expansion of an earlier paper, due at the end of the semester.

Additional Info:

Materials
- *The Futurological Congress*, by Stanislaw Lem
- *Blindsight*, by Peter Watts
- additional text, audio, and video available from the course web site or presented in evening screenings.

Schedule
See detailed schedule here:
http://hampshire.edu/lspector/courses/CS104TF10-schedule.html

Discussions
There will be no lectures in this class. All class time, aside from screening time, will be devoted to discussion. You must come prepared to discuss the readings/screenings to every discussion session.

How to prepare for a discussion session:

1. Do all of the reading and attend the screenings.
2. Take notes while reading/viewing, including science-related issues to raise in discussion.

I will expect each student to have several items to discuss, on paper (though you don’t have to turn it in), each day.

Papers
Each paper should make and defend a significant scientific/philosophical point with respect to an issue discussed in class. It may do so explicitly, in expository form, or it may do so implicitly, through a work of science fiction, or it may even do it in some other --- such as describing a plot for a work of science fiction --- but in any event the paper must clearly make and defend a significant scientific/philosophical point. It should also demonstrate engagement with the issues and materials covered in class.

Expository papers should generally follow the following general form:

1. Introduce the issue and clearly state the point that you are making in the first paragraph.
2. Elaborate the issue and defend your position, possibly drawing on examples from the fiction read/used for class.
drawing on examples from the fiction read/viewed for class to provide illustrations.
3. Summarize your evidence and conclusions.

How to get an evaluation for this course

1. Do all of the reading, **always before** the day for which the reading is assigned.
2. Attend every class and screening and participate in most discussions.
3. Turn in all of the required work on time.

You should not expect to receive an evaluation unless you have met these expectations, or unless the ways in which you fall short are: 1) minor and/or unavoidable (e.g. because of illness), AND 2) well-explained both when the lapses occur and in your final self evaluation. If you are ever in doubt about your status in the class vis-a-vis evaluation then come talk to me.

Course website: [https://moodle.hampshire.edu/course/view.php?id=1199](https://moodle.hampshire.edu/course/view.php?id=1199)

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### Schedule

#### Wednesday, 8 September (10:30AM – 11:50AM)
- **Beyond lies the wub**

#### Monday, 13 September (10:30AM – 11:50AM)
- **Animal Consciousness**

#### Monday, 13 September (07:00PM – 09:00PM)

#### Wednesday, 15 September (10:30AM – 11:50AM)
- [RadioLab: Who am I?](https://www.radiolab.org/episode/who-am-i/)

#### Monday, 20 September (10:30AM – 11:50AM)
- **First Person Experience of Body Transfer in Virtual Reality**

#### Monday, 20 September (07:00PM – 09:00PM)

#### Wednesday, 22 September (10:30AM – 11:50AM)

#### Monday, 27 September (10:30AM – 11:50AM)
- [RadioLab: Memory and Forgetting](https://www.radiolab.org/episode/memory-and-forgetting/)

#### Monday, 27 September (07:00PM – 09:00PM)

#### Wednesday, 29 September (10:30AM – 11:50AM)
- **Islands of memory: Autobiographical remembering in amnestics**

#### Monday, 4 October (10:30AM – 11:50AM)
- [RadioLab: Deception](https://www.radiolab.org/episode/deception/)
- [IT Conversations: Dan Simons – The Invisible Gorilla](https://itconversations.epizy.com/entry/8692)

#### Monday, 4 October (07:00PM – 09:00PM)
Wednesday, 6 October (10:30AM – 11:50AM)
- The persistence of false beliefs

Monday, 11 October (10:30AM – 11:50AM)

Monday, 11 October (07:00PM – 09:00PM)

Wednesday, 13 October (10:30AM – 11:50AM)
- All in the Mind: Brave New Mind: Smart drugs and the ethics of neuro-enhancement

Monday, 18 October (10:30AM – 11:50AM)

Monday, 18 October (07:00PM – 09:00PM)

Wednesday, 20 October (10:30AM – 11:50AM)

Monday, 25 October (10:30AM – 11:50AM)
- Computing Machinery and Intelligence (scan)

Monday, 25 October (07:00PM – 09:00PM)

Wednesday, 27 October (10:30AM – 11:50AM)
- Evolution of Artificial Intelligence

Monday, 1 November (10:30AM – 11:50AM)
- Minds, Brains, and Programs

Monday, 1 November (07:00PM – 09:00PM)

Wednesday, 3 November (10:30AM – 11:50AM)

Monday, 8 November (10:30AM – 11:50AM)
- Radiolab: Emergence

Monday, 8 November (07:00PM – 09:00PM)

Wednesday, 10 November (10:30AM – 11:50AM)

Monday, 15 November (10:30AM – 11:50AM)
- All in the Mind: Michael Gazzaniga: Split brains and other heady tales
- All in the Mind: The Master & his Emissary – the divided brain and the reshaping of Western civilisation.

Monday, 15 November (07:00PM – 09:00PM)

Wednesday, 17 November (10:30AM – 11:50AM)
- The Role of Sleep in Memory Consolidation and Brain Plasticity: Dream or Reality?
- Sleep and Dream Patterns of Political Liberals and Conservatives
- All in the Mind: Dreams: the stuff memories are made of? (Part 2 of 2)

Monday, 22 November (10:30AM – 11:50AM)
- Philosophy Bites: David Chalmers on the Singularity
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<th>Date</th>
<th>Time</th>
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<tr>
<td>Monday, 22 November</td>
<td>07:00PM - 09:00PM</td>
<td>IT Conversations: Ray Kurzweil – The Future is Near</td>
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<td>Wednesday, 24 November</td>
<td>10:30AM - 11:50AM</td>
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<td>Monday, 29 November</td>
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<td>Blindsight depends on the lateral geniculate nucleus</td>
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<td>Monday, 29 November</td>
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<td>Wednesday, 1 December</td>
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<td>Monday, 6 December</td>
<td>10:30AM - 11:50AM</td>
<td>Talk of genetics and vice versa</td>
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<td>From Squeak to Syntax: Language's Incremental Evolution</td>
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<td>Radiolab: Musical Language</td>
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<td>Monday, 6 December</td>
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<td>Wednesday, 8 December</td>
<td>10:30AM - 11:50AM</td>
<td>Last class</td>
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You are logged in as Lee Spector (Logout)