CS-104T: COGNITIVE SCIENCE FICTION

Instructor Info:

Lee Spector
lasCCS@hampshire.edu
Office Extension: x5352
Office Hours: Regular office hours: Tuesdays 10:30–11:30, Wednesdays 1:00–2:30, and Thursdays 2:00–3:30. Other times can be set up by arrangement (in person or via email). Sign up for regular office hours, advising day meetings, and occasionally other signup times on Moodle here.

TA Info:

Justin Johnson
jaj10@hampshire.edu
Chelsea LaValley
cnl11@hampshire.edu
Aidan Piper
atp13@hampshire.edu

Term: 2013F

Meeting Info:

Tuesday 09:00 AM – 10:20 AM Adele Simmons Hall (ASH) 222
Thursday 09:00 AM – 10:20 AM Adele Simmons Hall (ASH) 222
Tuesday 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? Might we someday be able to buy memories, record dreams, or "read" books by eating pills? Cognitive science research can shed light on many of these questions, with answers 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 about 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.

Course Objectives:

- 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:**

1. Mandatory participation in class discussions. See below for details.
2. Three 5–8-page papers, due September 26, October 17, and November 14. 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
- *Stories of Your Life and Others*, by Ted Chiang
- 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/CS104TF13-schedule.html](http://hampshire.edu/lspector/courses/CS104TF13-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 way — 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 have the following general structure:

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/viewed for class to provide illustrations.
3. Summarize your evidence and conclusions.

Work time expectations

In this course, students are expected to spend six to eight hours a week of preparation and work outside of class time. This time includes reading, viewing, and listening to course materials along with preparing for class discussions and writing papers.

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-à-vis evaluation then come talk to me.

Policies in Regards to Illness, Epidemic, or Pandemic

If you have a fever, please stay home, take good care of yourself, and contact me by email or phone. When you are able to work at home you should be able to participate in classes and to submit work electronically. If your illness makes it impossible for you to meet the course deadlines then contact me and we will negotiate an accommodation.

Plagiarism Policy

All Hampshire College students and faculty, whether at Hampshire or at other institutions, are bound by the ethics of academic integrity. The entire description and college policy can be found in Non Satis Non Scire at handbook.hampshire.edu under Academic Policies/Ethics of Scholarship. Plagiarism is the representation of someone else’s work as one’s own. Both deliberate and inadvertent misrepresentations of another’s work as your own are considered plagiarism and are serious breaches of academic honesty and integrity. All sources used or consulted in the process of writing papers, examinations, preparing oral presentations, course assignments, artistic productions, and so on, must be cited. Sources include material from books, journals or any other printed source, the work of other students, faculty, or staff, information from the Internet, software programs and other electronic material, designs and ideas.

All cases of suspected plagiarism or academic dishonesty will be referred to the Dean of Advising who will review documentation and meet with student and faculty member. Individual faculty, in consultation with the Dean of Advising, will decide the most appropriate consequence in the context of the class. This can range from revising and resubmitting an assignment to failing the course. Beyond the consequence in the course, CASA considers first offenses as opportunities for education and official warning. Multiple or egregious offenses will have more serious consequences. Suspected instances of other breaches of the ethics of academic integrity, such as the falsification of data, will be treated with the same seriousness as plagiarism and will follow the same process.
Incompletes
Course incompletes are restricted and governed by College policy, and will be negotiated on an individual basis.

Links to course materials are included in Moodle's schedule below, but see http://hampshire.edu/lspector/courses/CS104TF13-schedule.html for the full schedule.

Tuesday, 3 September (09:00AM – 10:20AM)

Tuesday, 3 September (07:00PM – 09:00PM)

Thursday, 5 September (09:00AM – 10:20AM)

Beyond lies the wub

Tuesday, 10 September (09:00AM – 10:20AM)

Animal Consciousness: What Matters and Why

Tuesday, 10 September (07:00PM – 09:00PM)

Thursday, 12 September (09:00AM – 10:20AM)

Radiolab: Who Am I?

Tuesday, 17 September (09:00AM – 10:20AM)

First Person Experience of Body Transfer in Virtual Reality

Tuesday, 17 September (07:00PM – 09:00PM)

Thursday, 19 September (09:00AM – 10:20AM)

Tuesday, 24 September (09:00AM – 10:20AM)

Tuesday, 24 September (07:00PM – 09:00PM)

Thursday, 26 September (09:00AM – 10:20AM)

Radiolab: Memory and Forgetting

Tuesday, 1 October (09:00AM – 10:20AM)

Islands of memory: Autobiographical remembering in amnestics

Tuesday, 1 October (07:00PM – 09:00PM)

Thursday, 3 October (09:00AM – 10:20AM)

Radiolab: Deception

IT Conversations: Dan Simons – The Invisible Gorilla

Tuesday, 8 October (09:00AM – 10:20AM)

The persistence of false beliefs
<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Topic</th>
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<tbody>
<tr>
<td>Tuesday, 8 October</td>
<td>07:00PM - 09:00PM</td>
<td>All in the Mind: Brave New Mind: Smart drugs and the ethics of neuro-enhancement</td>
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<td>Tuesday, 22 October</td>
<td>07:00PM - 09:00PM</td>
<td>Minds, Brains, and Programs</td>
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<tr>
<td>Thursday, 10 October</td>
<td>09:00AM - 10:20AM</td>
<td>Computing Machinery and Intelligence</td>
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<tr>
<td>Tuesday, 15 October</td>
<td>09:00AM - 10:20AM</td>
<td>Minds, Brains, and Programs</td>
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<td>Tuesday, 15 October</td>
<td>07:00PM - 09:00PM</td>
<td>All in the Mind: Michael Gazzaniga: Split brains and other heady tales</td>
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<td>Thursday, 17 October</td>
<td>09:00AM - 10:20AM</td>
<td>All in the Mind: The Master &amp; his Emissary – the divided brain and the reshaping of Western civilisation</td>
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<td>Thursday, 24 October</td>
<td>09:00AM - 10:20AM</td>
<td>Radiolab: Emergence</td>
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<td>Tuesday, 29 October</td>
<td>09:00AM - 10:20AM</td>
<td>Radiolab: Emergence</td>
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<tr>
<td>Tuesday, 29 October</td>
<td>07:00PM - 09:00PM</td>
<td>Evolution of Artificial Intelligence</td>
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<td>Thursday, 31 October</td>
<td>09:00AM - 10:20AM</td>
<td>Evolution of Artificial Intelligence</td>
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<td>Tuesday, 5 November</td>
<td>09:00AM - 10:20AM</td>
<td>Radiolab: Emergence</td>
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<td>Tuesday, 5 November</td>
<td>07:00PM - 09:00PM</td>
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<td>Thursday, 7 November</td>
<td>09:00AM - 10:20AM</td>
<td>Radiolab: Emergence</td>
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<td>Tuesday, 12 November</td>
<td>09:00AM - 10:20AM</td>
<td>The Role of Sleep in Memory Consolidation and Brain Plasticity: Dream or Reality?</td>
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<td>Tuesday, 12 November</td>
<td>07:00PM - 09:00PM</td>
<td>Sleep and Dream Patterns of Political Liberals and Conservatives</td>
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<td>Thursday, 14 November</td>
<td>09:00AM - 10:20AM</td>
<td>All in the Mind: Dreams: the stuff memories are made of? (Part 2 of 2)</td>
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<td>Tuesday, 19 Nov</td>
<td>09:00AM – 10:20AM</td>
<td>Philosophy Bites: David Chalmers on the Singularity</td>
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<td>Tuesday, 19 Nov</td>
<td>07:00PM – 09:00PM</td>
<td>IT Conversations: Ray Kurzweil – The Future is Near</td>
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<td>Tuesday, 26 Nov</td>
<td>09:00AM – 10:20AM</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>Tuesday, 26 Nov</td>
<td>07:00PM – 09:00PM</td>
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<td>Thursday, 28 Nov</td>
<td>09:00AM – 10:20AM</td>
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<td>Tuesday, 3 Dec</td>
<td>09:00AM – 10:20AM</td>
<td>Discussion questions on the Waking Life page of the Philosophical Films website</td>
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<td>Tuesday, 3 Dec</td>
<td>07:00PM – 09:00PM</td>
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<tr>
<td>Thursday, 5 Dec</td>
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