

English 389  
Emory University  
Fall 2012  
TTh 11:30-12:45  
Callaway Center S105

Professor Laura Otis  
N302D Callaway Center  
727-2234  
[lotis@emory.edu](mailto:lotis@emory.edu)  
Office Hours: Tues & Thurs 6-7 PM

Teaching Assistant  
Nisha Raj  
Neuroscience  
[nisha.raj@emory.edu](mailto:nisha.raj@emory.edu)

Teaching Assistant  
Tze-Yin Teo  
Comparative Literature  
[tteo@emory.edu](mailto:tteo@emory.edu)

## Cognitive Science and Fiction

“We represent other people’s minds using simulations of our own minds”

--Lawrence Barsalou

“A never-before-danced dance inside your brain, launched by a unique set of squiggly shapes, makes you feel almost as if you had been there.”

--Douglas Hofstadter

### Course Objectives:

By juxtaposing innovative literature and cutting-edge scientific studies, this course will analyze productive insights that run two ways: scientific observations that will help people understand how good literature works, and intuitive breakthroughs that suggest interesting new experiments to try. Although this is not a creative writing class, the literary emphasis will be on how memorable stories are actively made. We will discuss point of view, narration, creative metaphors, the representation of space and time, and the formation of empathy and visual mental imagery in readers. Three distinguished guest scientists and at least one distinguished creative writer will visit to discuss their work.

### Course Texts Available in the Bookstore:

Jean Dominique Bauby, *The Diving Bell and the Butterfly*, Vintage  
Jorge Luis Borges, *Labyrinths: Selected Stories and Other Writings*, New Directions Books  
Italo Calvino, *Invisible Cities*, Harvest-Harcourt  
Lewis Carroll, *Alice in Wonderland and Through the Looking Glass*  
Philip K. Dick, *Blade Runner (Do Androids Dream of Electric Sheep?)*, Del Rey  
Charlotte Perkins Gilman, *The Yellow Wallpaper*, BookSurge  
Mark Haddon, *The Curious Incident of the Dog in the Night-Time*, Vintage-Random House

Eric Kandel, *In Search of Memory*, Norton  
Ian McEwan, *Saturday*, Anchor  
Herman Melville, *Benito Cereno*, *Bartleby: The Scrivener*, and *The Encantadas*, Digireads.com  
Chuck Palahniuk, *Fight Club*, Norton  
Virginia Woolf, *Mrs. Dalloway*, Harcourt

**Technology:** A Blackboard site will be established for the class where all article-length or excerpted readings will be available and students can post their assignments. This will be a paperless class. Students are encouraged to post any interesting discoveries they make relevant to our interests, such as newspaper or journal articles.

**Course Requirements:** Active, energetic participation in discussion, weekly 1-2 page reading responses, and two 8-10 page analytical-argumentative essays analyzing the literary and/or scientific works we are studying. Reading response topics will vary from week to week and will be designed to encourage the development of ideas for your essays. You will be provided with suggested topics for the 8-10 page essays but are strongly encouraged to develop your own. If you would like, the instructors will meet with you to devise paper topics custom designed for your interests. Ideally, we would like to see you write on interdisciplinary topics relating aspects of cognitive science, psychology, or neuroscience to literary works. You are welcome to relate the stories, novels, and scientific articles you are reading for this course to issues you are learning about in your other classes.

\*\*Attendance at the three guest scientists' CMBC 4 PM public lectures is mandatory unless you have another class scheduled during this time.

**Grading:** Grades will be based on your two essays (30% each), weekly reading responses (20% total) and your class participation (20%). Because the essays are such a vital part of the learning process, they must each be revised one time in response to the instructors' comments and suggestions. The grade you receive on the revision will replace the grade you received on the first draft.

**Absence and Lateness Penalties:** Because this course can only work if each student consistently and energetically participates, students will be penalized half a letter grade for more than two unexcused absences. Illnesses, family emergencies, and travel for interviews and extracurricular activities important in your life are all excused absences. Having an exam later in the day or having too much work in general are not excused absences. Neither are existential crises. Since late arrivals are distracting, significant lateness will count as half an unexcused absence. Mental presence is just as important as physical! If you bring your laptop and cell phone to class, you are welcome to take notes and look up weird things we are talking about on Wikipedia, but you will be on your honor NOT to tweet or update your Facebook page. People whose cell phones go off in class will be subject to as-yet-to-be assigned penalties.

**Honor Code:**

All students in this class are expected to conform to the Emory College Honor Code. Take pride in your writing, and treat other people's writing with the same respect you would want them to show your own. No matter how exhausted or desperate you are, don't yield to temptation and copy material from the internet. People who do this cheat themselves as much as the people who wrote it. Writing and rewriting essays is an intense learning experience, and in ten or twenty years, you will probably still remember what you wrote your essays about.

**Special Note:** This course brings together students with diverse backgrounds and perspectives in order to drive the learning process. Don't be surprised if you know much more or much less about some subjects than your fellow students do. Don't worry about it, and don't expect them to know everything that you know. Look on this course as an opportunity to teach as well as learn, and be sure to respect students who lack your knowledge in some areas but may exceed it in others.

### Schedule of Classes

#### Unit I: How Do You Tell a Story? Point of View and Theory of Mind

- Aug 30 Introduction: An Exercise on Points of View
- Sept 4 Jim Grimsley, "Wendy"  
Wolfgang Iser, *The Implied Reader* (excerpt)  
Guest writer: Jim Grimsley
- Sept 6 Herman Melville, "Bartleby the Scrivener"  
Lawrence Barsalou, "Grounded Cognition"
- Sept 11 Herman Melville, "Benito Cereno"  
Lisa Zunshine, "Why Jane Austen was Different"
- Sept 13 Ian McEwan, *Saturday*, parts one and two
- Sept 18 Ian McEwan, *Saturday*, parts three to five

#### Unit II: How Do You Tell a Life Story?

- Sept 20 Eric Kandel, *In Search of Memory*, ch 1-3  
Mark Freeman, "Charting the Narrative Unconscious" (2002)
- Sept 25 Eric Kandel, *In Search of Memory*, ch 28-30
- Sept 27 No class (not an Emory holiday)

- Oct 2 Jean-Dominique Bauby, *The Diving Bell and the Butterfly*, up to “My Lucky Day”
- Oct 4 Jean-Dominique Bauby, *The Diving Bell and the Butterfly*, remaining episodes

### **Unit III: Mental Images and Suggestive Metaphors**

- Oct 9 Edgar Allan Poe, “The Masque of the Red Death” and “The Tell-Tale Heart”  
Blazhenkova & Kozhevnikov, “Visual-Object Ability”  
Guest scientist: Maria Kozhevnikov, Harvard University; University of Singapore
- Oct 10 4 PM Lecture by Maria Kozhevnikov
- Oct 11 No class (not an Emory holiday)
- Oct 16 Fall Break
- Oct 18 Santiago Ramón y Cajal, “The Corrected Pessimist”  
Elaine Scarry, *Dreaming by the Book* (excerpt)  
**First draft of first essay due**
- Oct 23 Jorge Luis Borges, “The Circular Ruins” and “The Garden of Forking Paths”  
Lakoff and Johnson, *Metaphors We Live By* (excerpt)

### **Unit IV: Representing Space and Time**

- Oct 25 Jorge Luis Borges, “The Library of Babel” and “The God’s Script”  
Article TBA by Teenie Matlock  
Guest scientist: Teenie Matlock, University of California, Merced
- Oct 25 4 PM Lecture by Teenie Matlock
- Oct 30 Lewis Carroll, *Alice’s Adventures in Wonderland*  
Lera Boroditsky, “Metaphoric Structuring: Understanding Time through Spatial Metaphors” (2000)
- Nov 1 Lewis Carroll, *Through the Looking Glass*

### **Unit V: Emotions, Pain, and Empathy**

- Nov 5 4 PM Lecture by Suparna Choudhury
- Nov 6 Chuck Palahniuk, *Fight Club*, ch. 1-14  
Article TBA by Suparna Choudhury

Guest scientist: Suparna Choudhury, McGill University

- Nov 8           Chuck Palahniuk, *Fight Club*, ch. 15-22  
Elaine Scarry, *The Body in Pain* (excerpt)
- Nov 13           Philip K. Dick, *Do Androids Dream of Electric Sheep?* ch. 1-10  
Giacomo Rizzolatti, *Mirrors in the Brain* (excerpt)  
**Revision of first essay due**
- Nov 15           Philip K. Dick, *Do Androids Dream of Electric Sheep?* ch. 11-22  
Damasio & Meyer, “Behind the Looking Glass”

**Unit VI:        Representing Consciousness**

- Nov 20           Virginia Woolf, *Mrs. Dalloway*, up to p. 90
- Nov 22           **Thanksgiving: No class**
- Nov 27           Virginia Woolf, *Mrs. Dalloway*, rest of novel  
Antonio Damasio, *Self Comes to Mind* (excerpt)  
**First draft of second essay due**

**Unit VII: When the Narrator Has Issues**

- Nov 29           Haddon, *The Curious Incident of the Dog in the Night-Time*  
Rosemary Garland-Thomson, *Extraordinary Bodies* (excerpt)
- Dec 4            Haddon, *The Curious Incident of the Dog in the Night-Time*  
Margaret Price, *Mad at School* (excerpt)
- Dec 6            Charlotte Perkins Gilman, “The Yellow Wallpaper”
- Dec 11           Conclusion: Building Knowledge from Stories  
Katherine Montgomery Hunter, *Doctors’ Stories* (excerpts)  
**Revision of second essay due**

Cognitive science, the interdisciplinary scientific investigation of the mind and intelligence. It encompasses the ideas and methods of psychology, linguistics, philosophy, computer science, artificial intelligence (AI), neuroscience (see neurology), and anthropology. The term cognition, as used by. The term itself, however, was not coined until the 1970s, when the interdisciplinary field became more formally organized. During this period the Cognitive Science Society and the journal Cognitive Science were founded, and programs and departments of cognitive science were established at many universities. Enhancing Cognitive Science Evaluating Cognitive Science Theories The Role of Integration Integration Across Levels of Description Integration Across Disciplines Integration Across Methodologies. 412 413 414 414 415 416 419 420 423 425 426 429 429. 433. An introduction to cognitive science and summary overview of different perspectives. Chapter/Approach Summary. The Psychological Approach. Cognitive estrangement, the purposeful or determined separation of a person from the rest of human society, was present in the science fiction literature since Wells'. In this direction of the sci-fi genre, the main protagonist develops his or her character by either drifting away from the rest of the human race, or returning to it, like the prodigal son of the Bible. However, since this was science fiction, some evidence of science - technology, pharmacy, etc. - was also present to emphasize the protagonist's struggle with his or her changing personality. Philip K. Dick's "