PHIL 8340/NEUR 8770: Concepts and cognitive architecture CRN 17843/18250 25 Park Place Rm. 1642, Wed. 4:30-7:00 Spring 2016

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Office hours: Wed. 10:00–12:00, or by appointment

Course description

Concepts are the building blocks of thoughts and other higher cognitive states. They are the mental representations that we deploy in categorization, reasoning and theorizing, decision-making, planning, and other processes by which we attempt to understand and change the world. In this seminar we will investigate the nature of concepts from the point of view of philosophy, psychology, linguistics, and neuroscience. We'll survey the major theories of concepts with an eye towards understanding their structure, content, acquisition, and processing, paying special attention to how concepts interact with other mental systems such as perception, language, and memory.

Course objectives

The goal of this course is to acquaint students with a portion of the contemporary discourse concerning concepts, mental representation, and cognitive architecture. Students will be expected to know the contents of the readings, and be able to explain and critique them orally and in writing. The aim is to equip students with the skills of writing and critical analysis necessary to conduct independent research into any of the topics covered.

Prerequisites

Graduate standing or permission of instructor.

Readings

The readings, as well as other course materials, will be available from the course webpage, which is located on Brightspace. The course syllabus provides a general plan for the course; deviations may be necessary.

Assignments

The points available for the class break down as follows (no extra credit):

Attendance & participation 5% Reading responses 20%

Final paper 75% (5% meeting, 70% paper)

Seminars are discussion-based. Accordingly, you will be graded on your *attendance and participation*. You are expected to arrive ready to talk about the readings in some depth, and to be a thoughtful, regular participant in discussion. I expect you to attend every class. *Note*: Failure to attend the first four class meetings may result in your being dropped for non-attendance!

Reading responses are short written reactions to the texts assigned. They are to be no more than two pages long (in a normal 12-point font, double-spaced, with one-inch margins), and may take any form that reflects critical engagement with the material. For instance, you might sketch an objection to a line of argument, present a critical analysis of some term or concept that is central to a text, compare different texts in terms of their treatment of the same subject matter, or raise and explore possible questions for in-class discussion. You must submit at least 10 of these during the semester. They will be due no later than 5pm on the Monday prior to our class meetings.

The *final paper* is a research paper of between 3000 and 5000 words. In this paper you are expected to motivate, develop, and defend a substantial position of your own. The topic may be anything that we have covered in class, or that bears a plausible, well-motivated relation to the course content. Paper topics must be cleared with me in advance, and you must meet with me to discuss your proposed final paper topic no later than Wed., 3/29. This meeting will be worth 5% of your paper grade.

Lateness policy

Late assignments will not be accepted without prior permission. In case of illness, family medical emergency, or other major extenuating circumstances, arrangements can be made to adjust due dates. These arrangements must be made in advance, where possible. You must also provide adequate documentation when you are requesting permission to turn in an assignment late. If you hand in an assignment late without requesting prior permission, or without providing adequate documentation, I reserve the right not to accept the assignment. Assignments that are turned in late will be graded down by 1/3 of a letter grade per day.

Special accommodations

All efforts will be made to accommodate students with special needs, so long as sufficient notice is given. If you require special accommodations for lectures, papers, exams, or any other course component, you must notify Disability Services and contact me within the first week of class. See the General Syllabus statement at the end for more details.

Attendance

We will meet for the entire scheduled time unless otherwise noted. Sale of recordings or transcripts of lectures and discussions is not permitted, although you may make such recordings for your own personal use. If you need to miss class for religious observances, you must notify me in advance. I expect you to adhere to normal standards of good classroom behavior: cellphones silent, no loud personal conversations, no snoring, etc.

Laptops and other electronic devices

Laptops and related electronic devices (iPads, Kindles, etc.) are permitted during class for course-related uses only.

Contact outside of class

Email is the main means of out-of-class communication. I will be sending updates on readings and assignments to your GSU email account throughout the semester. You are expected to check

this account regularly. For in-person meetings I have regular office hours. If you cannot attend my scheduled office hours, email your question or comment, or schedule a meeting at another time. I will try to respond to email within a reasonable amount of time; however, immediate replies aren't guaranteed. If I haven't replied within 48 hours, re-send your message. Put the course name or number in the subject line of your emails.

Academic honesty

Plagiarism and other violations of the University's code of academic honesty will not be tolerated. *The penalty for such violations is failure of the course.* Further disciplinary action may also be pursued. If you are not certain what constitutes a violation of the code of academic honesty, it is *your* responsibility to consult the full text of the code, which is available at: http://codeofconduct.gsu.edu/.

Schedule of readings

Works marked with an '*' are optional.

1/13 What is a concept?

Margolis and Laurence, The ontology of concepts: Abstract objects or mental representations?

Camp, Logical concepts and associative conceptions

*Rey, A not merely empirical argument for the language of thought

1/20 Prototypes and statistical reasoning

Rosch, Principles of categorization

Sloutsky, The role of similarity in the development of categorization

Gauker, A critique of the similarity space theory of concepts

*Hampton, Similarity-based categorization: The development of the prototype theory

1/27 Theories and causal reasoning

Murphy & Medin, The role of theories in conceptual coherence [just skim this]

Strevens, The essentialist aspect of naïve theories

Ahn et al., Why essences are essential in the psychology of concepts

*Rehder, The causal status effect in categorization: A review

2/3 Functions and teleological reasoning

Keleman & Carey, The essence of artifacts: Developing the design stance

Sloman & Malt, Artifacts are not ascribed essences, nor are they treated as belonging to kinds

*Bloom, Intention, history, and artifact concepts

*olajeto, Waxman, & Medin, Teleological reasoning about nature: Intentional design or relational perspectives?

2/10 Norms and deontic reasoning

Sripada & Stich, A framework for the psychology of norms

Knobe, Person as scientist, person as moralist

*Cushman & Young, Patterns of moral judgment derive from nonmoral psychological representations

*Bucciarelli, Khemlani, & Johnson-Laird, The psychology of moral reasoning

2/17 Conceptual atomism

Fodor, Concepts: A potboiler

Millikan, A common structure for concepts of individuals, stuffs, and real kinds: More mama, more milk, and more mouse

*Sainsbury & Tye, An originalist theory of concepts

2/24 Pluralism and eliminativism

Weiskopf, The plurality of concepts

Machery, Précis of Doing Without Concepts

*Weiskopf, Atomism, pluralism, and conceptual content

*Rice, Concepts as pluralistic hybrids

3/2 Nativism and acquisition

Fodor, The present status of the innateness controversy

Carey, Why theories of concepts should not ignore the problem of acquisition

*Weiskopf, The origins of concepts

*Weiskopf, Observational concepts

3/9 Concept empiricism and embodied cognition

Barsalou, Situated simulation in the human conceptual system

Mahon & Caramazza, A critical look at the embodied cognition hypothesis and a new proposal for grounding conceptual content

*Weiskopf, Concept empiricism and the vehicles of thought

*Weiskopf, Embodied cognition and linguistic comprehension

3/16 ** No class; Spring break **

3/23 Domain specificity

Boyer, How natural selection shapes conceptual structure: Human intuitions and concepts of ownership

Sperber, Modularity and relevance: How can a massively modular mind be flexible and context-sensitive?

*Hurley, Animal action in the space of reasons

3/30 Central cognition

Carruthers, On central cognition

Shanahan & Baars, Applying global workspace theory to the frame problem

*Weiskopf, Concepts and the modularity of thought

*Weiskopf, The architecture of higher thought

4/6 Concept combination

Fodor & Lepore, The pet fish and the red herring

Pietroski, Concepts, meaning, and truth: First nature, second nature, and hard work

*Hurford, The neural basis of predicate-argument structure

4/13 Creativity and novelty

Boden, What is creativity?

Stokes, Minimally creative thought

Smith, Fixation, incubation, and insight in memory and creative thinking

*Mumford, Mobley, Uhlman, Reiter-Palmon, & Doares, Process analytic models of creative capacities

4/20 Metaphor and thought

Camp, Metaphor and that certain '*je ne sais quoi*'
Carston, Metaphor: Ad hoc concepts, literal meaning, and mental images
*Nettle, A module for metaphor? The site of imagination in the architecture of the mind

Department of Philosophy General Syllabus Statement Spring 2016

- This syllabus provides a general plan for the course. Deviations may be necessary.
- The last day to **withdraw** from a course with the possibility of receiving a W is **Tuesday, March 1.**
- Students are responsible for confirming that they are attending the course section for which they are registered. Failure to do so may result in an F for the course.
- By University policy and to respect the confidentiality of all students, **final grades** may not be posted or given out over the phone. To see your grades, use PAWS.
- The customary penalty for a violation of the academic honesty rules is an "F" in the course. See the University Policy on Academic Honesty on the reverse of this sheet. Copying or using material from the internet without citation is a violation of the academic honesty rules.
- A student may be awarded a grade of "W" no more than 6 times in their careers at Georgia State. After 6 Ws, a withdrawal is recorded as a WF on the student's record. A WF counts as an F in a GPA.
- Your constructive assessment of this course plays an indispensable role in shaping education at Georgia State University. Upon completing the course, please take the time to fill out the online course evaluation.
- Students who wish to request accommodation for a disability must do so by registering with the Office of Disability Services in Suite 230 of the Student Center. Students may only be accommodated upon issuance by the Office of Disability Services of a singed Accommodation Plan and are responsible for providing a copy of that plan to instructors of all classes in which an accommodation is sought.

Subscribe to one of our department listservs for current information and events:

Undergraduate Students: http://philosophy.gsu.edu/undergraduate/listserv
 Graduate Students: http://philosophy.gsu.edu/graduate/listserv

For more information on the philosophy program visit:

http://philosophy.gsu.edu

Policy on Academic Honesty, from the GSU Catalog

As members of the academic community, students are expected to recognize and uphold standards of intellectual and academic integrity. The university assumes as a basic and minimum standard of conduct in academic matters that students be honest and that they submit for credit only the products of their own efforts. Both the ideals of scholarship and the need for fairness require that all dishonest work be rejected as a basis for academic credit. They also require that students refrain from any and all forms of dishonor-able or unethical conduct related to their academic work.

The university's policy on academic honesty is published in the *Faculty Handbook* and *On Campus: The Student Handbook* and is available to all members of the university community. The policy represents a core value of the university, and all members of the university community are responsible for abiding by its tenets. Lack of knowledge of this policy is not an acceptable defense to any charge of academic dishonesty. All members of the academic community—students, faculty, and staff—are expected to report violations of these standards of academic conduct to the appropriate authorities. The procedures for such reporting are on file in the offices of the deans of each college, the office of the dean of students, and the office of the provost.

In an effort to foster an environment of academic integrity and to prevent academic dishonesty, students are expected to discuss with faculty the expectations regarding course assignments and standards of conduct. Students are encouraged to discuss freely with faculty, academic advisers, and other members of the university community any questions pertaining to the provisions of this policy. In addition, students are encouraged to avail themselves of programs in establishing personal standards and ethics offered through the university's Counseling Center.

Definitions and Examples

The examples and definitions given below are intended to clarify the standards by which academic honesty and academically honorable conduct are to be judged. The list is merely illustrative of the kinds of infractions that may occur, and it is not intended to be exhaustive. Moreover, the definitions and examples suggest conditions under which unacceptable behavior of the indicated types normally occurs; however, there may be unusual cases that fall outside these conditions that also will be judged unacceptable by the academic community.

Plagiarism: Plagiarism is presenting another person's work as one's own. Plagiarism includes any para-phrasing or summarizing of the works of another person without acknowledgment, including the submitting of another student's work as one's own. Plagiarism frequently involves a failure to acknowledge in the text, notes, or footnotes the quotation of the paragraphs, sentences, or even a few phrases written or spoken by someone else.

The submission of research or completed papers or projects by someone else is plagiarism, as is the unacknow-ledged use of research sources gathered by someone else when that use is specifically forbidden by the faculty member. Failure to indicate the extent and nature of one's reliance on other sources is also a form of plagiarism. Any work, in whole or in part, taken from the Internet or other computer-based resource without properly referencing the source (for example, the URL) is considered plagiarism. A complete reference is required in order that all parties may locate and view the original source. Finally, there may be forms of plagiarism that are unique to an individual discipline or course, examples of which should be provided in advance by the faculty member. The student is responsible for understanding the legitimate use of sources, the appropriate ways of acknowledging academic, scholarly or creative indebtedness, and the consequences of violating this responsibility.

Cheating on Examinations: Cheating on examinations involves giving or receiving unauthorized help before, during, or after an examination. Examples of unauthorized help include the use of notes, computer-based resources, texts, or "crib sheets" during an examination (unless specifically approved by the faculty member), or sharing information with another student during an examination (unless specifically approved by the faculty member). Other examples include intentionally allowing another student to view one's own examination and collaboration before or after an examination if such collaboration is specifically forbidden by the faculty member.

Unauthorized Collaboration: Submission for academic credit of a work product, or a part thereof, represented as its being one's own effort, which has been developed in substantial collaboration with another person or source or with a computer-based resource is a violation of academic honesty. It is also a violation of academic honesty knowingly to provide such assistance. Collaborative work specifically authorized by a faculty member is allowed.

Falsification: It is a violation of academic honesty to misrepresent material or fabricate information in an academic exercise, assignment or proceeding (e.g., false or misleading citation of sources, falsification of the results of experiments or computer data, false or misleading information in an academic context in order to gain an unfair advantage).

Multiple Submissions: It is a violation of academic honesty to submit substantial portions of the same work for credit more than once without the explicit consent of the faculty member(s) to whom the material is submitted for additional credit. In cases in which there is a natural development of research or knowledge in a sequence of courses, use of prior work may be desirable, even required; however the student is responsible for indicating in writing, as a part of such use, that the current work submitted for credit is cumulative in nature.