Description

PSYC G4280. Core Knowledge (seminar).
4 pts. Wednesday, 12:10 – 2:00, 200C Schermerhorn
Office Hours: 2:00 – 4:00 Milbank 415J (Barnard Campus)
Prerequisites: Courses in introductory psychology, cognitive or developmental psychology, and instructor permission.

Core Knowledge explores the origins and development of knowledge in infants and young children. In this course, we will examine the child's conception of objects, number, language, and the social world. We will look at which aspects of knowledge are uniquely human, and which are shared with other animals.

This course provides an overview of the methods and theories regarding cognitive development, specific to the domain of fundamental properties of the mind. It serves to introduce several well-defined topics in cognitive development that many scientists believe to be foundational to our ability to navigate the world.

PSYC G4280 is an advanced seminar, designed particularly for graduate students, for advanced undergraduates who are majoring in Psychology or in Neuroscience and Behavior, and for students participating in the Postbac Psychology Program. These students will have priority in registration, followed by junior majors followed by non-majors.

It fulfills the following degree requirements:

• For Psychology Graduate Students, PSYC G4280 will apply toward the “two seriously graded seminars” requirement of the Master’s degree.

• For the Psychology major or concentration in the College and in G. S., for the Psychology minor in Engineering, and for the Psychology Postbac, G4280 meets the Group I (Perception and Cognition) distribution requirement.

• For the Neuroscience and Behavior joint major, G4280 will fulfill the 5th Psychology requirement: “one advanced psychology seminar from a list approved by the Psychology Department advisor to the program.”

• For non-majors in the College and GS, G4280 will count as one term of the natural science requirement, provided that students obtain the necessary permission and have taken the prerequisite psychology courses. Graduate students, and students who are majoring in Psychology or in Neuroscience and Behavior, will have priority
over students who are taking the course for the science requirement, and we anticipate the course will rarely be used for the latter.

• For the Psychology Postbac certificate, PSYC G4280 will fulfill the advanced seminar requirement.

• For the Barnard Psychology major, PSYC G4280 will fulfill the senior seminar requirement.

The reading list and weekly syllabus

Below is a list of required readings for each class. All readings can be found on the class’s Courseworks site.

**Weekly Topics and Readings (in order of recommended reading order for each class):**

1. *(9/6/16)* *Introduction to the course*

2. *(9/13/16)* *In utero learning*

   DeCasper & Fifer (1980) Of human bonding: Newborns prefer their mothers’ voices.


3. *(9/20/16)* *Memory*


   Simcock & Hayne (2002) Breaking the barrier: Children fail to translate their preverbal memories into language.


4. (9/27/16) Face Processing


Pascalis, deHaan, & Nelson (2002) Is face processing species-specific during the first year of life?

Macchi Cassia, Turati, & Simion (2004) Can a non-specific bias towards top-heavy patterns explain newborns’ face preferences?


5. (10/4/16) Objects and Number


Bulf, de Hevia, & Macchi Cassia (2015) Small on the left, large on the right: Numbers orient visual attention onto space in preverbal infants.

6. (10/18/16) Symbolism


8. (10/25/16) Theory of Mind

Baron-Cohen, S., Leslie, A., & Frith, U. (1985) Does the autistic child have a "theory of mind"?


9. (11/1/16) Language 1

Terrace, H., Petitto, L., Sanders, R., & Bever, T. (1979) Can an ape create a sentence?


10. (11/8/16) Language 2


Markman & Wachtel (1988) Children's use of mutual exclusivity to constrain the meanings of words.


11. (11/15/16) Animacy


12. (11/23/16) NO CLASS: Thanksgiving holiday

13. (11/29/16) Student presentations on precocious social understanding
Cluster 1: Imitation


Cluster 2: Pedagogy

Topal, Gergely, Miklosi, & Erdohegyi, & Csibra (2009) Infants’ perseverative search errors are induced by pragmatic misinterpretation.


Begus, Gliga, & Southgate (2014) Infants learn what they want to learn: Responding to infant pointing leads to superior learning.

Cluster 3: Prosociality

Hamlin, Wynn, Bloom, & Mahajan (2011) How infants and toddlers react to antisocial others.


Cluster 4: Accent and Race

Kinzler, Dupoux, & Spelke (2007). The native language of social cognition.

Kinzler & Spelke (2011) Do infants show social preferences for people differing in race?

Cluster 5: Ritual and Culture


14. (12/6/16) Student presentations on unique grant proposals (final paper)

Course assignments, requirements, and grading

Attendance Policy: You may have one unexcused absence. More than one unexcused absence results in a loss of letter grade. To have an absence excused, you must ask your dean to send me an email explaining your absence, or bring a dated doctor’s note.

Class presentations: 15% of final grade
On the next to last class, students will present an article from the required readings, along with additional supporting information they have acquired through their own research. Students should prepare a 5- to 10-minute presentation which incorporates thought-provoking questions addressed to the class. The presentation should be comprehensive, but be open enough in format to allow for ongoing discussion.

Class participation: 15% of final grade
Students are required to read all assigned papers before class, and ask relevant questions during each class meeting.

Discussion questions: 25% of final grade
Students will compose questions about the readings and email one question per reading to me, no later than 24 hours before class. CC yourself in to ensure that it went through. The grading is binary; any week in which the questions are poor (e.g., suggest that you did not read, or understand the point of, the readings) will be given a 0, resulting in a 2.5% overall grade reduction. No questions are due for the week of student presentations.

Final paper presentation: 15% of final grade
The last class will be devoted to a presentation of the grant experiments proposed in your final paper. Presentations will be brief (~5 minutes), with an additional 5 minutes for questions from your classmates, and will be graded on how well you convey the importance of the topic, the clarity of the discussion of the design and stimuli which address your question of interest, and your responses to the questions asked.

Research proposal: 30% of final grade
The final paper should take the form of a grant proposal. The topic can be of the student’s choosing, but it must be on a subject that was discussed in class. The student must submit his/her paper idea by 11/15 and meet with the instructor at least one month prior to the due date, for discussion. The student’s proposal on 11/15 should include a 10-reference literature review on the topic, and should be based on the assigned readings as well as original research done in a psychology database such as PsychInfo or Web of Science on the topic. Important criteria for grading will be theoretical motivation and rigor, attention to design and methods,
and inventiveness and value of the proposed studies. The paper should be 12-15 pages (double-spaced). It is recommended that students begin research on a topic fairly early in the semester so that he/she can develop and reflect on the ideas via class, and talk them over with the instructor during the individual meetings.

*The research proposal will be due on Wednesday 12/14 @ 5 pm.*