Cognitive Development
Psychology 455, Fall 2014

**Time:** Tuesdays and Thursdays
2:00 to 3:15 pm
**Location:** SQH 2119
**Website:** http://elms.umd.edu

**Instructor:** Dr. Jonathan Beier
**Email:** jsbeier@umd.edu
**Office hours:** By appointment,
BPS 2147E (please email to set a time)

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**Course description**

This advanced undergraduate seminar explores the development of cognition, focusing primarily on developments from birth through the first few years of life. In this course, we will first review infants’ conceptual development in several domains of knowledge: objects, quantity, and agents. We will then pursue an extended study of language development, arriving not just at an understanding of how language works and is acquired, but how language influences conceptual thought. Continuing, we will consider how knowledge is organized, remembered, enriched, and changed. Although our emphasis is cognitive development, we will incorporate insights from comparative psychology, adult psychology, neuroscience, and cross-cultural psychology in order to fully characterize the foundations of these cognitive processes and the mechanisms for their ensuing development. Equally, we will return repeatedly to the notion that only a study of development can provide a full portrait of cognition in adults.

Success in this class is simple. Do the readings. Come to class. Participate in discussions. Participate in discussions (really). Submit your assignments on time; make them thoughtful. And ask for help if you need it.

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**Grading**

- Class participation (20%)
- Online discussion posts (20%)
- Discussion leading (10%)
- Written QALMRI analysis (10%)
- Final paper presentation (10%)
- Final paper (30%)

Extra Credit option, TBA: +1 point on final grade
Policy on late assignments

If they are late, written assignments will rapidly lose their value to you.

If your online discussion post does not appear before 7 pm the night before class, you will not receive credit for it.

QALMRI papers are due at the start of class one week following your in-class presentation. Final papers are due by midnight on the evening of Wednesday, December 17th. If an assignment arrives within 24 hours after these times, the grade will be reduced by 10%; deductions of 20% and 30% will occur if it arrives on the second or third day, respectively. After that, late assignments will not be accepted.

More on assignments

Class participation (20%):
• Be prepared and be engaged!
• I will take notes each day on each student’s attendance and participation in the discussion. You should contribute something each day, but keep in mind that quality is more important than quantity.

Online discussion posts (20%):
• Before each class session you will post a short response to that day’s readings on the ELMS discussion board for the class.
• Your posts are due by 7 pm the night before class. This is important because the discussion leader(s) for that day must have time to review your posts and think about how to include the issues you have raised.
• Read through other students’ posts! You’ll learn a lot from each other’s reactions. In your post, you are welcome to refer to posts made by your peers, but be advised that if the discussion has gone far afield you might not want to follow it there.
• Posts should be about a paragraph long at minimum (~150 words). Although only one is required, you should feel free to make multiple posts; but if you do, make sure that at least one of them meets this length.
• You don’t need to summarize the readings beyond providing enough detail for us to know what you’re referring to. We’ve all read the papers, so get to the point.
• In order to receive full credit, you will have to go beyond statements such as “I thought X was interesting” or “I didn’t understand Y.” Of course, these are reasonable starting points for your comments, but you shouldn’t stop here! For instance, “I thought X’s finding was interesting because it contradicted Y’s theory that...”; or, “I didn’t understand Y’s conclusion because the data really seemed to suggest that...”; or, “I think X experiment is related to an article I read in a previous class because Y...”; or, “In future work, it would be important to know X because otherwise Y...”
Discussion leading (10%):
• You will be responsible for leading the day's discussion at various points during the semester. There are several parts to this role:
  o You will present a SHORT summary of one of the empirical research articles assigned for that day.
  o Prior to class, you will compile a list of the thoughtful comments made by your peers online, to be used as starting points for discussion during class. Look for both themes across multiple students’ posts and particularly insightful comments by individual students.
  o During class, I will give the discussion leaders an opportunity to comment on the day’s readings as a whole. In addition to offering their own thoughts, they will guide the discussion by asking other students to restate their points made online.
• The final assignment of students to days for discussion leading depends upon final enrollment in the class. I anticipate 1 or 1.5 days of leading per person.

Written QALMRI analysis (10%):
• Each student will write one QALMRI analysis of an empirical paper they described while leading the discussion.
• Since you may lead discussion more than once, and because some days include multiple empirical papers, you may have your choice of which paper to write about.
• QALMRI papers are due at the start of class, in hardcopy, one week after the class in which you presented that empirical paper. You should also submit a copy via ELMS.

Final paper presentation (10%):
• I’ve set aside four class days towards the end of the semester for Final paper presentations. By this point in the semester, you should have begun making concrete plans for the topic of your paper. The presentation is your chance to get feedback for these plans, from your peers and from me.
• Because there will be many of them, paper presentations should be brief. Exact timings will be determined by the number of students who need to present, but expect about 10 minutes for presentation and class discussion.

Final paper (30%):
• At the end of the semester, you will turn in a proposal for a new study in the domain of social cognitive development. It must be 10 – 11 pages, double spaced, APA format, and without tortured margins.
• The study you propose should make contact with at least one of the topics that we discussed in class. I recommend that you keep a list of the open questions that you identify throughout the semester; when it comes time to begin work on the paper, this list will come in handy.
• The paper will be roughly in the format of a journal article, though of course without data: you'll have an introduction, methods section, planned analyses,
and a thorough discussion of possible results and their implications. More
details will be provided as the deadline approaches.
• You should email me a short description (just a few sentences) about your
  study proposal by November 25 (the Tuesday before Thanksgiving). Based on
  these descriptions, I’ll be able to let you know if you’re headed down a
  reasonable path. I’m also happy to discuss your topic during my office hours.
  Note that if your presentation is in the first round, you’ll want to email me well
  before the 25th.
• Final papers are due at midnight on the night of Wednesday, December 17th.

**Academic Integrity**

Academic integrity is a serious matter, and the Department of Psychology has a zero-
tolerance policy towards academic dishonesty. Please review our statement on the
ethics of scholarship, appended to this syllabus.

**Excused Absences**

University of Maryland policy dictates that a single absence during the semester due
to illness or injury will be excused with a signed letter attesting to the date of the
illness and acknowledging that the information is true and correct. You are required
to contact me by email prior to the class meeting if you expect to be absent for any
reason, especially due to illness or injury, and to provide this form by the next class
meeting that you are present for:

Multiple absences, and those occurring on a major scheduled grading event
(http://president.umd.edu/policies/docs/V-100G.pdf), require written
documentation of the illness or injury from the Health Center or an outside health
care provider. The letter must verify the dates of treatment and the time period
during which you were unable to meet academic responsibilities. Accommodations
will be arranged on a case-by-case basis.

A grade of zero will be assigned for any assessment missed with an unexcused or
undocumented absence.

**Electronic devices**

I will take a wait-and-see approach to the use of laptops and tablets during class. If
you are clearly using them for note-taking or to view digital copies of the assigned
reading, all will be fine. If I suspect that some of you are using your electronic devices
for other purposes, such as email, messaging, web browsing, or Facebook, I may
decide to ban these devices for everyone (except when required for DSS
accommodations).
<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
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<tbody>
<tr>
<td>Sept 2</td>
<td>Intro and organization</td>
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<td>Sept 4</td>
<td>A view on Cognitive Psychology; What infants see</td>
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<td>Sept 9</td>
<td>Depth perception</td>
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<td>Sept 11</td>
<td>Objects 1</td>
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<td>Sept 16</td>
<td>Objects 2</td>
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<td>Sept 18</td>
<td>Magnitude</td>
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<td>Sept 23</td>
<td>Faces</td>
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<td>Sept 25</td>
<td>Agents and Goals</td>
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<td>Sept 30</td>
<td>Agents and Beliefs</td>
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<td>Oct 2</td>
<td>How language works</td>
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<td>Oct 7</td>
<td>Learning the sounds</td>
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<td>Oct 9</td>
<td>Learning the structure</td>
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<td>Oct 14</td>
<td>Words, categories, concepts</td>
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<td>Oct 16</td>
<td>Essentialism 1 – Hidden insides</td>
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<td>Oct 21</td>
<td>Essentialism 2 – Social groups</td>
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<td>Oct 23</td>
<td>Memory</td>
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<td>Oct 28</td>
<td>Probability and Statistics</td>
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<td>Oct 30</td>
<td>Causal understanding</td>
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<td>Nov 4</td>
<td>Action!</td>
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<td>Nov 6</td>
<td>Symbols</td>
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<td>Natural number</td>
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<td>Nov 13</td>
<td>Natural geometry</td>
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<td>Nov 18</td>
<td>Intelligence 1 – Gender?</td>
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<td>Nov 20</td>
<td>Intelligence 2 – Schooling and SES</td>
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<td>Nov 25</td>
<td>Paper presentations</td>
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<td>Nov 27</td>
<td>NO CLASS – THANKSGIVING</td>
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<td>Dec 2</td>
<td>Paper presentations</td>
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<td>Dec 4</td>
<td>Paper presentations</td>
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<td>Dec 9</td>
<td>Paper presentations</td>
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<td>Dec 11</td>
<td>Wrap-up</td>
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Class Outline

Note: I recommend that you engage the readings in the order that they are listed here. Also, readings are subject to revision as the course proceeds!

September 2: Introduction and organization

September 4: Cognitive Psychology in perspective


September 9: Depth perception


September 11: Objects 1


September 16: Objects 2


September 18: Magnitude


**September 23: Faces**


**September 25: Agents and goals**


**September 30: Agents and beliefs**


**October 2: How language works**


**October 7: Learning the sounds**

October 9: Learning the structure


October 14: Words, categories, concepts


October 16: Essentialism 1 – Hidden insides


October 21: Essentialism 2 – Social groups


October 23: Memory


October 28: Probability and statistics


**October 30: Causal understanding**


**November 4: Action!**


**November 6: Symbols**


**November 11: Natural number**


**November 13: Natural geometry**


**November 18: Intelligence 1 – Gender?**

• **WATCH:** Spelke versus Pinker debate on “The Science of Gender and Science”
  o http://edge.org/3rd_culture/debate05/debate05_index.html

**November 20: Intelligence 2 – Schooling and SES**


**November 25: Paper presentations – Group 1**

**November 27: NO CLASS – Thanksgiving!**

**December 2: Paper presentations – Group 2**

**December 4: Paper presentations – Group 3**

**December 9: Paper presentations – Group 4**

**December 11: Wrap-up discussion**

• Readings TBA

[Final papers due by midnight on Wednesday, December 17th]