

HDE 101 & PSC 141: Cognitive Development Winter 2019

Class Time: Tuesdays & Thursdays, 3:10 – 4:30 PM

Classroom: 1227 Haring

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Required Textbook: “Children’s Thinking” (fourth edition) by Robert Siegler and Martha Alibali. This text provides a solid, scholarly summary of information about children’s intellectual development. The book is readable, and anyone mastering its contents will come away with a great deal of knowledge about children’s cognitive development.

Additional readings: Some recent and classic journal articles will be assigned as supplemental materials.

Course Description: This course is an introduction to cognitive development. It will provide an overview of cognitive change from infancy to late childhood. The course will cover various theoretical perspectives and methodological approaches, as well as current research that describes how children think and learn in areas such as perception, memory, language, conceptual understanding, problem solving, and reasoning. Educational implications and cross-cultural issues will be touched on as well. By understanding both current findings and theoretical approaches in cognitive development, you should be in a position to evaluate new developments in the field and design experiments that can further enhance our understanding of children’s learning and thinking. The attached course schedule indicates when topics will be covered; however, please allow for some flexibility in the schedule.

Exams & Papers: Students will be tested on all materials presented in the text and lectures. Your grade for this course will be based on performance on three exams, one research proposal, and either a short paper or a class presentation.

1. Exams: There will be three exams (2 midterms and 1 final). The midterm and final exams will consist of multiple choice and short-answer (concept) questions. The exams will be **non-cumulative** (45 points for each midterm; and 50 points for the final exam). Make-up exams: The only acceptable reasons for missing

an exam are illness or family emergencies. You must provide written official documentation of your absence in order to be eligible for a make-up exam. All make-up exams will be essay exams.

2. Short Paper or class presentation.

You may choose EITHER to write a short paper OR to do a class presentation (see the Class Presentation section).

Short paper: The 2-page paper will be associated with a published magazine, newspaper (e.g., Time, Newsweek, New York Times, etc.), or internet article (note this means no professional journal articles. If this is not clear, please ask the TAs or instructor for clarification). To complete this requirement you are asked to copy a magazine or newspaper article bearing on children's intellectual development that has recently (within the past few years – after 2012) been published. Your paper should address some of the following issues: How is this article relevant to information presented in the text or provided in class? How do the reported findings agree or disagree with the course material? Add comments about any methodological or interpretive problems that should be considered by the critical reader - that's you! In other words, do not hesitate to comment on the limitations of the information provided or the questions that remain unanswered. Additionally, point out especially important contributions that are made by the work described in the article. Make a COPY of the article and at the beginning of your paper provide information about the title, author(s), and publication source and date. The short paper should be submitted no later than **Feb. 12 by 3:10 PM**. Late short papers will have 3 points deducted (out of 10 points). No paper will be accepted after **Feb. 14 by 3:10 PM**.

Class presentation: Instead of writing a short paper, you may choose, and are encouraged, to give a brief (a total of 7 to 8 minutes) class presentation. You may choose to present part of one article that we read for a class (typically two students are responsible for presenting an article), or to present your research proposal toward the end of the quarter (i.e., **March 14**). You will only have a brief time, so you will need to organize your presentation well. The key is clarity, organization, and coverage of the essences. Please see the instructor or TA for help if you have any questions regarding this presentation.

3. Research Proposal

Research proposal: The 10-page (including the cover and reference pages) research proposal addresses an issue in children's cognitive development. Once adequate information and knowledge regarding specific topics in children's thinking have been accumulated, students will start writing a proposal addressing a specific issue of cognitive development in a particular area. Topics may include, but are not limited to, memory, language, conceptual development, problem solving strategies or skills, mathematical or scientific reasoning. Your proposal must include the following sections: 1) introduction (background); 2) an explicit statement of the study's objectives (rationale); 3) specific hypotheses; 4) an experimental method (design, subjects, material and procedure); 5) expected results and possible conclusions; and 6) references. Please refer to the APA manual (6th edition) for appropriate formats. The research proposal will provide you with the opportunity to examine a specific question or issue about cognitive development in greater depth. Your proposal will be graded on importance of the issue, appropriateness of the method, soundness of the design, clarity of expression, and logical coherence. Guidelines and specific details will be provided right after the first midterm. The final research proposal is due on **March 5 (Tuesday) by 3:10 PM**. Late research proposals will have 10 points (out of 50 points) deducted. No proposal will be accepted after **March 7 (Thursday) by 3:10 PM**. You are strongly encouraged to submit a draft of your proposal between **Feb. 26 and March 4** to the instructor or TA. We will provide feedback and comments for your revisions before your final submission before the deadline.

To summarize, course requirements include:

- ◆ Midterms (2)
- ◆ Final
- ◆ A 10-page research proposal
- ◆ A 2-page short paper, OR
- ◆ Class presentation of a journal article OR your own research proposal (Optional)

UC Davis Code of Academic Conduct: Honesty, Fairness & Integrity: <http://sja.ucdavis.edu/cac.html>

Additional Information: The format of the class is lecture and discussion. You are expected to read the corresponding chapters and journal articles before the class. For the sake of your own learning, you are strongly encouraged to ask questions and participate in class discussions.

I am available for consultation and advice; just show up during office hours. If my office hours are inconvenient for you, call or e-mail to set up an appointment. It is easiest to get in touch with me via e-mail. I am happy to meet outside of office hours whenever my schedule allows. In addition, I will schedule extra office hours a few days before the final exam.

Your feedback is most welcome at any time. If something is frustrating, unclear, or intimidating, please come talk with me about it. Similarly, if you are particularly enjoying something about the class, let me know. It is important for me to do all that I can to help you maximize your learning experience.

Determining your course grade: Your course grade will be based on the following distribution of points:

Midterm I: 45 points

Midterm II: 45 points

Final: 50 points

Research Proposal: 50 points

Short Paper OR Class Presentation: 10 points

Total possible points: 200 points

<u>Grade</u>	<u>%</u>	<u>Points</u>
A+	>94%	188 or above
A	91-93%	181-187
A-	88-90%	176-180
B+	84-87%	168-175
B	80-83%	160-167
B-	77-79%	154-159
C+	74-76%	148-153
C	70-73%	140-147
C-	67-69%	134-139
D+	64-66%	128-133
D	62-63%	124-127
D-	60-61%	120-123
F	<60%	119 or below

Schedule of lectures, exams, reading assignments and due dates:

Date	Chapter	Content
1. Tuesday, Jan. 8		Course Introduction
2. Thursday, Jan. 10	Chapter 1	Introduction to Children's Thinking
3. Tuesday, Jan. 15	Chapters 2, 3, & 4	Theories of Cognitive Development Flavell (1992). Cognitive Development: Past, present and future. <i>Developmental Psychology</i> , 28, 998-1005.
4. Thursday, Jan. 17	Chapters 2, 3, & 4	Theories of Cognitive Development
5. Tuesday, Jan. 22	Chapters 2, 3, & 4	Theories of Cognitive Development
6. Thursday, Jan., 24	Chapters 2, 3, & 4	Theories of Cognitive Development Eimas & Quinn (1994). Studies on the formation of perceptually based basic-level categories in young infants. <i>Child Development</i> , 65, 903-917.
7. Tuesday, Jan. 29	Chapter 5	Perceptual Development
8. Thursday, Jan. 31	Midterm I (bring a scantron and a pencil)	
9. Tuesday, Feb. 5	Chapter 6	Language Development
10. Thursday, Feb. 7	Chapter 7	Memory Development Rovee-Collier, Evancio, & Earley (1995). Time window hypothesis: Spacing effects. <i>Infant Behavior and Development</i> , 18. 69-78.
11. Tuesday, Feb. 12	Chapter 7	Memory Development Coyle & Bjorklund (1997). Age differences in, and consequences of, multiple- and variable-strategy use on a multitrial sort-recall task. <i>Developmental Psychology</i> , 33. 372-380. Baker-Ward, Gordon, Ornstein, Larus, & Clubb (1993). Young children's long-term retention of a pediatric examination. <i>Child Development</i> , 64. 1519-1533.

Short Paper Due (by 12:10 PM)

12. Thursday, Feb. 14 Chapter 7 Memory Development

13. Tuesday, Feb. 19 **Midterm II** (bring a scantron and a pencil)

14. Thursday, Feb. 21 Chapter 8 Conceptual Development

Baillargeon (1987). Object permanence in 3 1/2- and 4 1/2-month-old infants. *Developmental Psychology*, 23, 655-664.

15. Tuesday, Feb. 26 Chapter 8 Conceptual Development

16. Thursday, Feb. 28 Chapter 9 The Development of Social Cognition

Johnson & Solomon (1997). Why dogs have puppies and cats have kittens: The role of birth in young children's understanding of biological origins. *Child Development*, 68, 404-419.

Vosniadou & Brewer (1992). Mental models of the earth: A study of conceptual change in childhood. *Cognitive Psychology*, 24, 535-585.

17. Tuesday, March 5 Chapter 10 Problem Solving & Reasoning

Research Proposal Due (by 12:10 PM)

18. Thursday, March 7 Chapter 10 Problem Solving & Reasoning

19. Tuesday, March 12 Chapter 10 Problem Solving & Reasoning

DeLoache (1991). Symbolic functioning in very young children: Understanding of pictures and models. *Child Development*, 62, 736-752.

Sodian, Zaitchik, & Carey (1991). Young children's differentiation of hypothetical beliefs from evidence. *Child Development*, 62, 753-766.

20. Thursday, March 14 Class Presentations

Review, Summary, Discussion, and Future Directions

Final Exam: March 18 (Monday) 10:30am – 12:30pm