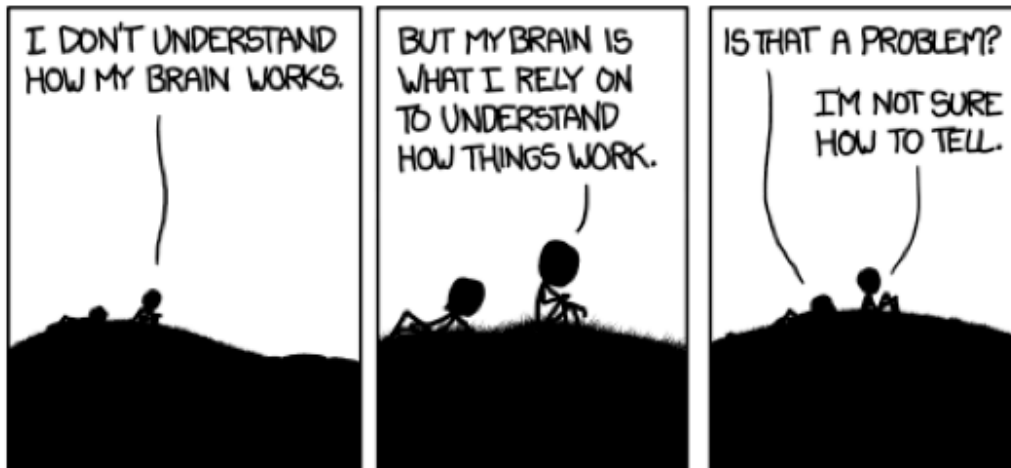


# COGNITIVE DEVELOPMENT

PSY 475 CRN: 35871

Spring 2013

Tues, Thurs 2:00 – 3:20 pm 142 STB



xkcd.com

**Instructor:** Robbie Ross **Office:** Straub 493 **Email:** [robbier@uoregon.edu](mailto:robbier@uoregon.edu)

**Office hours:** Tues 3:30-4:30 pm, Wed 2:00 – 3:00 pm

**Text:** Siegler, R., & Alibali, M. W. (2005). *Children's Thinking* (4th Ed.). Upper Saddle River, NJ: Prentice-Hall Inc. \*available at Duck Store

## Course Description:

Children's grasp of the world changes dramatically with development. In the brief two years from birth, they alter from helpless bundles into walking, talking dynamos. The course of cognitive development is also in some ways paradoxical. As toddlers, children acquire new knowledge at a remarkable pace, but at the same time they are prone to a degree of thoughtlessness that leads them into danger, such as swallowing strange substances or dashing in front of traffic, if adults aren't present to save them from the consequences of their own exuberance. Even the older, school-aged child holds unusual beliefs about people and the world, yet nevertheless can accomplish striking intellectual feats, such as reading and mathematical calculation. What accounts for the huge growth in knowledge and skill that we see in human development, and also for its seeming unevenness? Is knowledge accumulation what cognitive development is all about? Or do children's thinking skills also change in qualitative ways? If so, in what ways? In what ways is cognitive development in human children different from what we see in other species? How dependent is normal cognitive development on a certain kind of environment? These are among the questions we will consider in this course. We will look at different accounts of how mental abilities develop, as well as the scientific methods psychologists use to investigate cognitive development. A particular focus will be the latest breakthroughs in the study of cognition in infancy and early childhood, as this is a period of almost explosive cognitive change. As well, scientific understanding of cognitive change in this age range is itself rapidly changing.

**Blackboard:**

Blackboard will be a critical source of course-related information throughout the term. Any changes to the lecture or course schedule will be posted on this site. In addition, lecture slides, additional readings, handouts, grades, and other materials will be posted there. Check the Blackboard website regularly for course related materials and announcements. You can get to the course web site by logging into <http://blackboard.uoregon.edu>. If you need help using Blackboard, please refer to <http://libweb.uoregon.edu/scis/blackboard/help>. Important announcements will also be sent via email, so it is best to get into the habit of checking your email daily. If you send an email to the instructor, expect to receive a reply within approximately 24 hours.

**Course Requirements/Grading:**

In-Class Activities	150 points total
Exam 1	200 points
Exam 2	200 points
Project 1	200 points
Project 2	250 points
Total Available	1000 points

**Final Letter Grades:**

A+	975+ points
A	925-974 points
A-	900-924 points
B+	875-899 points
B	825-874 points
B-	800-824 points
C+	775-799 points
C	725-774 points
C-	700-724 points
D	600-699 points
F	Less than 600 points
P,I,W	Other grading options

## **Course Components:**

### **In-Class Activities (150 points total):**

You will have a total of 17 daily activities throughout the term, administered during lectures. Each daily set will be worth 10 points. Your top 15 scores will be used for computing your final score, out of 150 points. The activities will include in-class quizzes on materials from the assigned readings and lecture of the day. The goal of these in-class activities is to promote critical thinking of the material covered in class and the readings. There will be no make-up for any of the activities, so if you miss one for any reason, your score will be 0 for that activity.

### **Exams (400 points total):**

Exams will consist of multiple choice, true/false, fill-in-the-blank, short-answer, and/or short essay questions and will cover material from the assigned readings **AND** lectures. There will be two mandatory exams (Exams 1 & 2: 200 points each – dates listed on the class schedule). The final exam is optional. If you missed an exam or would like to drop one of your exam grades, you will have the opportunity to take the final exam. The final exam will be **comprehensive** and more challenging than the two midterm exams.

### **Projects (450 points total):**

All assignments uploaded to Blackboard should be in Word (.doc or .docx) or .pdf format. ALWAYS include your last name in the title of the uploaded assignment.

#### **Project #1 (200 points): Due Thursday, May 2, 2013, 5:00 pm**

- The first project will be to review and critique a peer-reviewed journal article of your choice. You will find your own original, peer-reviewed journal article related to cognitive development. There are numerous articles cited in the textbook or you may find an article using journal article search engines (PsycInfo, PubMed, Medline, etc.). You will write a detailed summary and critique of the purpose, research methods, results, and discussion presented in the article.
- More detailed descriptions of requirements for this project are available on Blackboard.
- You will submit your article for instructor approval prior to Project #1. The article proposal will be uploaded to Blackboard and is due no later than **Thursday, April 18, 2013, 5:00 pm**.

#### **Project #2 (250 points): Due Thursday, June 13, 2013, 5:00 pm**

- The second project will involve choosing a specific research question and writing a research proposal based on your research question.
- Research proposal topic to be approved by the course instructor. This will consist of a one-paragraph proposal submitted to the course instructor with all of your peer-reviewed articles included in a reference list.
- Upload your Research Topic Proposal to Blackboard no later than **Thursday, May 16, 2013, 5:00 pm**.
- Final Proposal Papers are expected to be 5-7 pages containing at least four peer-

reviewed articles and the textbook.

- An introduction – this will contain background information related to your question, including previous findings from at least four relevant peer-reviewed articles and your textbook, why this is a question of importance in cognitive development, and what hypotheses you are proposing to evaluate in your proposal
- A methods section – this will contain specific populations to be assessed, the specific method (behavioral and/or neuroimaging) to be used, the stimuli to be used, type of data to be collected, and the analyses of the data.
- More detailed descriptions of requirements for this project are available on Blackboard.

### **Extra Credit (Up to 30 points):**

There are two extra credit options, each of which potentially enables you to improve your overall grade by as much as 3%. You may choose one or the other, but cannot get credit for both, nor for any combination of the two. Extra credit work is due by **Friday, June. 14, 5:00pm.**

**Extra Credit Option 1 (Research Participation):** You can participate in Psychology Department research through the Psychology Department Human Subjects Pool. For each credit of participation assigned to Psych 475, you can earn a 1% improvement to your final grade, or 10 points, for up to 3%, or 30 points. Also necessary for gaining the extra credit is that you hand in a one-page description of the research you participated in for each of the participation credits. You can gain information by contacting the human subjects coordinator, Bill Schumacher, by email at [hscoord@uoregon.edu](mailto:hscoord@uoregon.edu). You can sign up for research opportunities here: <https://uopsych.sona-systems.com>.

*Note: The Prescreen activity does not count towards your extra credit hours, but you must complete it in order to participate in other studies.*

**Extra Credit Option 2 (Critique of an Empirical Article):** You can locate an empirical article relevant to the study of cognitive development in a major, peer-reviewed journal, summarize it, and evaluate its contribution to our understanding of cognitive development. A terrific critique (target length is 3 double-spaced pages) will earn you the full 3%, or 30 points, extra credit. It would be wise to seek approval of your article from me before beginning your evaluation/critique. To receive the extra credit you will need to hand in both a copy of the article and the evaluation/critique.

### **Late Work:**

All dates and assignments are available at the beginning of the term, providing adequate time for preparation of projects and for exams. Please plan ahead and do not wait until the last minute to work on assignments. Late work is NOT accepted and any assignments turned in late will receive a grade of 0.

### **Lecture Notes:**

Lecture notes for each class will be posted on Blackboard by 12:00 pm the day of class.

## **Schedule:**

Please note that the schedule is subject to change. Any changes in schedule will be announced in class and posted to Blackboard.

## **Additional Information:**

**1. Guidelines for Teaching and Learning:** The Psychology Department has developed guidelines for teaching and learning in Psychology. These guidelines can be accessed at the following web address: <http://psychweb.uoregon.edu/undergraduates/guidelines>. Please read these guidelines carefully as they clarify our general expectations and goals for each other in this course.

**2. Academic Honesty:** As a member of the university community you are expected to be honest and forthright in all your academic endeavors. To falsify the results of one's research, to present the words, ideas, data, or work of another as one's own, or to cheat on an examination corrupts the essential process by which knowledge is advanced.

- a. All work submitted in this course must be your own and produced exclusively for this course. The use of sources (ideas, quotations, paraphrases) must be properly acknowledged and documented. For the consequences of academic dishonesty, refer to the Schedule of Classes published quarterly.
- b. Violations will be taken seriously and are noted on student disciplinary records. If you are in doubt regarding any aspect of these issues as they pertain to this course, please consult with the instructor before you complete any relevant requirements of the course. For more information regarding academic honesty and the student conduct code at the University of Oregon, visit the University's Office of Student Life website at:  
<http://studentlife.uoregon.edu/StudentConductandCommunityStandards/StudentConductCode/tabid/69/Default.aspx>
- c. Any assignment or exam containing academic dishonesty (i.e., plagiarism, cheating, fabrication, etc.) will receive a grade of 0 and will not have the opportunity to be redone.

**3. Plagiarism:** Plagiarism is the inclusion of someone else's product, words, ideas, or data as one's own work. When a student submits work for credit that includes the product, words, ideas, or data of others, the source must be acknowledged by the use of complete, accurate, and specific references, such as footnotes. Expectations may vary slightly among disciplines. By placing one's name on work submitted for credit, the student certifies the originality of all work not otherwise identified by appropriate acknowledgements. On written assignments, if verbatim statements are included, the statements must be enclosed by quotation marks or set off from regular text as indented extracts.

- a. A student will avoid being charged with plagiarism if there is an acknowledgement of indebtedness. Indebtedness must be acknowledged whenever:
  - i. one quotes another person's actual words or replicates all or part of another's product;
  - ii. one uses another person's ideas, opinions, work, data, or theories, even if they are completely paraphrased in one's own words;

- iii. one borrows facts, statistics, or other illustrative materials—unless the information is common knowledge.
- b. Unauthorized collaboration with others on papers or projects can inadvertently lead to a charge of plagiarism. If in doubt, consult the instructor or seek assistance from the staff of the Teaching and Learning Center (68 PLC, 346---3226). In addition, it is plagiarism to submit as your own any academic exercise (for example, written work, printing, computer program, art or design work, musical composition, and choreography) prepared totally or in part by another.
- c. Plagiarism also includes submitting work in which portions were substantially produced by someone acting as a tutor or editor.

**4. Fabrication:** Fabrication is the intentional use of information that the author has invented when he or she states or implies otherwise, or the falsification of research or other findings with the intent to deceive.

- a. Examples include, but are not limited to:
  - i. citing information not taken from the source indicated;
  - ii. listing sources in a reference not used in the academic exercise;
  - iii. inventing data or source information for research or other academic exercises.

**5. Cheating:** Cheating is an act of deception by which a student misrepresents or misleadingly demonstrates that he or she has mastered information on an academic exercise that he or she has not mastered, including the giving or receiving of unauthorized help in an academic exercise.

- a. Examples include, but are not limited to:
  - i. copying from another student's test paper, computer program, project, product, or performance;
  - ii. collaborating without authority or allowing another student to copy one's work in a test situation;
  - iii. using the course textbook or other material not authorized for use during a test;
  - iv. using unauthorized materials during a test; for example, notes, formula lists, cues on a computer, photographs, symbolic representations, and notes written on clothing;
  - v. resubmitting substantially the same work that was produced for another assignment without the knowledge and permission of the instructor;
  - vi. taking a test for someone else or permitting someone else to take a test for you.

**6. Students with Disabilities:** If you have a documented disability and anticipate needing accommodations in this course, please make arrangements to meet with the instructor soon. It would be wise to contact Disability Services (164 Oregon Hall, 346---1155, [disabsrv@uoregon.edu](mailto:disabsrv@uoregon.edu), <http://ds.uoregon.edu/>). Also please request that the Counselor for Students with Disabilities send a letter verifying your disability. (Counselor for Students with Disabilities: Molly Sirois, 346---3211, 164 Oregon Hall, 346---1073, [sirois@uoregon.edu](mailto:sirois@uoregon.edu))

## Course Schedule

Week	Reading	Date	Topics and Important Deadlines
1	S.A. Ch. 1-2	4-2	Introduction
		4-4	Methodology
2	S.A. Ch. 5	4-9	Perception I
		4-11	Perception II
3	S.A. Ch. 3-4 & 8	4-16	Conceptual Development I
		4-18	<b>NO CLASS: ROBBIE AT CONFERENCE - PROJECT 1 PROPOSALS DUE - UPLOAD TO BLACKBOARD BY 5:00 PM</b>
4	S.A. Ch. 6	4-23	Conceptual Development II
		4-25	Language Development I
5		4-30	Language Development II
		5-2	Language Resilience <b>PROJECT #1 DUE - UPLOAD TO BLACKBOARD BY 5:00 PM</b>
6	S.A. Ch. 7	5-7	<b>EXAM #1</b>
		5-9	Memory
7	S.A. Ch. 9	5-14	Social Cognition I
		5-16	Social Cognition II <b>PROJECT #2 PROPOSAL DUE - UPLOAD TO BLACKBOARD BY 5:00 PM</b>
8	S.A. Ch. 10 & Bernier et al., 2010	5-21	Executive Function
		5-23	Problem Solving
9	TBA	5-28	Developmental Variations
		5-30	Effects of Experience I
10	TBA	6-4	Effects of Experience II
		6-6	<b>EXAM #2</b>
Finals		6-11	<b>FINAL EXAM - Straub 142 - 1:00 pm</b>
		6-13	<b>PROJECT #2 DUE - UPLOAD TO BLACKBOARD BY 5:00 pm</b>
		6-14	<b>EXTRA CREDIT DUE - VIA EMAIL - 5:00 pm</b>

\*S.A. = Siegler & Alibali text