#### **COGNITIVE AND LANGUAGE DEVELOPMENT**

Psychology 352, Winter 2018 Queen's University

W: 13:00-14:30, MCLAUGHLIN RM 315

F: 11:30-13:00, MACINTOSH-CORRY RM B201

Instructor: Dr. Stanka Fitneva Email: fitneva@queensu.ca

Office hours: Friday 1:30-2:30pm, H349

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Office hours: TBA

### **Introduction and Overview**

Children perceive, consider, and explain the world in ways that are sometimes similar, and sometimes dissimilar to the ways adults explain it. Where there are similarities, particularly similarities that can be seen in infants, we gain insight into how the human mind has evolved to understand the world. Dissimilarities, in contrast, flag the areas in which idiosyncratic experience, culture, and biological maturation play their roles in shaping how we come to think the way we do. The goal of this course is to provide an overview of the basic scientific enterprise of understanding the developmental origins of human cognition and language, and the mechanisms that cause change over the childhood period.

### **Learning Outcomes**

To complete this course students will demonstrate their ability to:

- 1. Compare the mechanisms of development proposed by the major developmental theories.
- 2. Apply these theories to developmental situations to generate explanations and interventions.
- 3. Describe and explain the development of language, memory, social cognition, problem solving, and major concepts, as well as key research methodologies in these areas, to academic and lay audiences.
- 4. Examine primary information sources to identify the importance, methods, implications, and limitations of reported research
- 5. Develop and execute teamwork strategies for integrating and disseminating primary research to relevant stakeholders.

#### Structure of the Course

Following the structure of the textbook, we will first survey the field from a theoretical perspective that uses examples from research to illustrate how particular theoretical mechanisms might work. Following this, we will survey a number of broad domains of research on cognitive and language development. Throughout these sections there will be more of a focus on the abilities and capacities that infants (or young children) might start with and how those change over time.

In general, each of the specific domains that we cover will be introduced with an "overview" lecture. This will be followed by a "focus" class in which we will examine more closely specific research studies, theoretical points of contemporary interest, and methods. Focus classes will be structured with an emphasis on interactivity and participation. The reading material for "focus" sessions will be primary literature that has been written by and for scientists in the field. I expect this material to be challenging, but I hope that students who engage the material will find it rewarding.

### Required course materials

Siegler, R. S. & Alibali, M. W. (2005). *Children's Thinking*. Prentice-Hall. Articles listed on the syllabus and in the Science News Report instructions can be accessed through the Queen's library.

## **Evaluation**

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	Weight	Learning Outcome Measured		
In-class exam 1 (covers material from beginning to exam)	25%	1, 2, 4		
In-class exam 2 (covers material since previous exam)	25%	3, 4		
Reaction papers (2 x 2%)	4%	2, 4		
Science News Report	10%	3, 4, 5		
Final exam (cumulative)	36%	1, 2, 3, 4		

All components of this course except the reaction papers will receive numerical percentage marks. The final grade you receive for the course will be derived by converting your numerical course average to a letter grade according to Queen's Official Grade Conversion Scale:

Grade	Numerical Course Average (Range)	
A+	90-100	
Α	85-89	
A-	80-84	
B+	77-79	
В	73-76	
B-	70-72	
C+	67-69	
С	63-66	
C-	60-62	
D+	57-59	
D	53-56	
D-	50-52	
F	49 and below	

The in-class exams and the final will consist of multiple-choice questions and essay questions. For the Science News Report (2.5 pages max, single spaced), you will work in a group to distill the findings of 2 or 3 primary research articles for the general public, highlight their theoretical importance, identify their implications for public policy, education, or the family, and identify any shortcoming in the research or directions for future research. Further details will be provided in the third week of class, after enrollment is set. You can find the dates of the exams and the due date for the Science News Report in the schedule of classes below. The final exam will be scheduled during the final exam period.

To prepare for in-class discussion, you are invited to post **reaction papers** to the readings in onQ. Two of those will be graded. The deadline for posting the reaction papers is <u>10am on the day the class discussion meeting</u> will take place. The reaction papers should be 250-300 words long. The reaction papers will be graded on a rubric. Late papers will not be accepted.

## Please see the departmental website:

http://www.queensu.ca/psychology/undergraduate/current-students/departmental-policies

This site includes department policies regarding exam absences (and arranging makeup exams), travel during exams (which is not a valid excuse for missing or deferring an exam), and accommodation after the fact. If you know now that you cannot attend one of the exams, please contact me immediately to discuss your situation.

## **Academic Integrity**

Queen's students, faculty, administrators and staff all have responsibilities for supporting and upholding the fundamental values of academic integrity. Academic integrity is constituted by the five core fundamental values of honesty, trust, fairness, respect and responsibility (see <a href="www.academicintegrity.org">www.academicintegrity.org</a>) and by the quality of courage. These values and qualities are central to the building, nurturing and sustaining of an academic community in which all members of the community will thrive. Adherence to the values expressed through academic integrity forms a foundation for the "freedom of inquiry and exchange of ideas" essential to the intellectual life of the University.

Students are responsible for familiarizing themselves with and adhering to the regulations concerning academic integrity. General information on academic integrity is available at Integrity@Queen's University, along with Faculty or School specific information. Departures from academic integrity include, but are not limited to, plagiarism, use of unauthorized materials, facilitation, forgery and falsification. Actions which contravene the regulation on academic integrity carry sanctions that can range from a warning, to loss of grades on an assignment, to failure of a course, to requirement to withdraw from the university.

#### Accommodation

Queen's University is committed to achieving full accessibility for persons with disabilities. Part of this commitment includes arranging academic accommodations for students with disabilities to ensure they have an equitable opportunity to participate in all of their academic activities. If you are a student with a

disability and think you may need accommodations, you are strongly encouraged to contact Student Wellness Services (SWS) and register as early as possible. For more information, including important deadlines, please visit the Student Wellness website at:

http://www.queensu.ca/studentwellness/accessibility-services/

## **Exceptional circumstances**

The Senate Policy on Academic Consideration for Students in Extenuating Circumstances (http://www.queensu.ca/secretariat/sites/webpublish.queensu.ca.uslcwww/files/files/policies/senateand trustees/Academic%20Considerations%20for%20Extenuating%20Circumstances%20Policy%20Final.pdf) was approved in April, 2017. Queen's University is committed to providing academic consideration to students experiencing extenuating circumstances that are beyond their control and which have a direct and substantial impact on their ability to meet essential academic requirements. The Faculty of Arts and Science has developed a protocol to provide a consistent and equitable approach in dealing with requests for academic consideration for students facing extenuating circumstances, which can be found at: http://www.queensu.ca/artsci/accommodations

### **Final Exam Location and Timing**

As noted in Academic Regulation 8.2.1, "the final examination in any class offered in a term or session (including Summer Term) must be written on the campus on which it was taken, at the end of the appropriate term or session at the time scheduled by the Examinations Office." The exam period is listed in the key dates prior to the start of the academic year in the

Faculty of Arts and Science Academic Calendar and on the Office of the University Registrar's webpage. A detailed exam schedule for the Fall Term is posted before the Thanksgiving holiday; for the Winter Term it is posted the Friday before Reading Week, and for the Summer Term the window of dates is noted on the Arts and Science Online syllabus prior to the start of the course. Students should delay finalizing any travel plans until after the examination schedule has been posted. Exams will not be moved or deferred to accommodate employment, travel /holiday plans or flight reservations.

#### FAQ

**Will this be on the exam?** There will not be complete overlap between the material that is covered in the textbook and the material that is covered in lecture. Some material will be textbook only, and some will be lecture only. I have not yet composed the exams and so I do not know what will be on the exam, but please know that all material that has been presented in the course is fair game for the exam.

How should I study for the exam? As you study, the main questions you should be asking yourself is "What?" and "Why? or How?" So, for instance, you might ask "What did Piaget think about kids between the ages of 0-2 and why did he think that?" Or, you might ask "What is the biological basis for language and how do we know that?" If you have good answers to these questions, you are probably in great shape.

Will your lectures be online? The media (presentations, videos, pictures, etc.) I use in lecture will be available to download from the class onQ site following the lecture. The media are selected and designed with the intention of enhancing the lecture and promoting active, thoughtful engagement of the material, but rarely will they be informative on their own. They are not my lecture notes, and they are not meant to be copied from as a substitute for engaging the material. This may be a little different from your experiences in other courses, but I hope that it will promote a meaningful, self-motivated learning experience.

### Communication

- 1. You **must** activate notifications for the **News** forum on the course's onQ page. I will use it to distribute important information and updates about the course. "Important information" means information that you are responsible for, e.g., deadlines, details about assignments, etc. To ensure that you do not miss any important communications, here is how you should set up email/SMS notifications:
  - 1. Log into onQ.
  - Click on the drop-down arrow, next to your name, in the top right corner of your screen.
  - 3. Select Notifications.
  - 4. Under **Contact Methods** enter your mobile number, if you would like to receive texts.
  - 5. Under Instant Notifications check the boxes to choose which notifications will be sent by email/SMS. You have to select the two News items; the rest are optional.
  - 6. Select the **Save** button to confirm changes.

- 2. *onQ*: 1) Participation in the electronic Discussion Board is strongly encouraged: post questions, read and respond to your fellow classmates. 2) The Board is intended to be used ONLY as a forum for discussion of topics relating to Psychology 352.
- 3. The best way to contact me is via email. **Please use "Psyc 352:" in the subject line.** I aim to respond to student email within *two business* days.
- 4. Do come to office hours if I can help you with anything (including grad school/career questions) or just want to chat about the course! You do not need to check if it's ok to come or give me a heads up unless you would like me to check or review something before the meeting.

# **Tentative Schedule of Classes**

Week	Day	Topic & Assessments	Reading
1	Wednesday, January 10	Introduction	Chapter 1
	Friday, January 12	Piaget: Infancy and preschool years	Chapter 2
2	Wednesday, January 17	Piaget: School-age to adolescence	Chapter 2
	Friday, January 19	Information processing approach	Chapter 3
3	Wednesday, January 24	Focus discussion: Metacognition Reading your sources critically Reaction paper 0 – due	Carson, S. H. et al. (2012). Writing for psychology: A guide for psychology concentrators. Harvard. pp. 5-12.  https://writingproject.fas.harvard.edu/files/hwp/files/writing_for_psych_final_from_printer.pdf
			Hembacher, E., & Ghetti, S. (2014). Don't look at my answer: Subjective uncertainty underlies preschoolers' exclusion of their least accurate memories. <i>Psychological Science</i> , 25, 1768 – 1776.
	Friday, January 26	Socio-cultural theories: Vygotsky	Chapter 4
4	Wednesday, January 31	Class movie discussion Growing up within a culture:	Childhood in three cultures
	Friday, February 2	In-class exam #1	
5	Wednesday, February 7	Language development 1: from sound to speech	Chapter 5 pp. 164-174
	Friday, February 9	Language development 2	Chapter 6
			Werker, J.F., Yeung, H. H., & Yoshida, K. (2012). How do infants become native speech perception experts? <i>Current Directions in Psychological Science</i> . 21(4), 221-226.
6	Wednesday, February 14	Language development 3	Chapter 6
	Friday, February 16	Focus discussion: Language and thought  Reaction paper 1 – due	1. Hespos, S. J., & Spelke, E. S. (2004). Conceptual precursors to language.  Nature, 430 (6998), 453-456.  2. Dessalegn, B. & Landau, B. (2008).  More than meets the eye: The role of language in binding visual properties.  Psychological Science, 19(2), 189-195.
7	Wednesday, February 21	Reading week – no class	
	Friday, February 23	Reading week - no class	

8	Wednesday, February 28	Memory Development	Chapter 7
	Friday, March 2	Focus: Truth and consequences	Principe, G., Kanaya, T., Ceci, S. J., & Singh, M. (2006). Believing is seeing: How rumors can engender false memories in preschoolers.  Psychological Science, 17, 243-248.
9	Wednesday, March 7	Conceptual Development	Chapter 8
	Friday, March 9	Focus discussion: biological thinking  Reaction paper 2 – due	1. Kelemen, D., Emmons, N., Seston, R. & Ganea, P. (2014). Young children can be taught basic natural selection using a picture storybook intervention. <i>Psychological Science, 25,</i> 893-902. doi:10.1177/0956797613516009.  2. Medin, D. L., Waxman, S. R., Woodring, J., & Washinawatok, K. (2010). Human-centeredness is not a universal feature of young children's reasoning: Culture and experience matter when reasoning about biological entities. <i>Cognitive Development, 25,</i> 197–207.
10	Wednesday, March 14	In-class exam #2	
	Friday, March 16	In-class group work on science news report	
11	Wednesday, March 21	Social Cognitive Development	Chapter 9
	Friday, March 23	Focus: The social world	Mascaro, O., & Csibra, G. (2012).  Representation of stable social  dominance relations by human infants.  Proceedings of the National Academy of Sciences, 109(18), 6862–6867.
12	Wednesday, March 28	Problem Solving	Chapter 10
		Science News Report due	
		Group Work Assessment due	
	Friday, March 30	Good Friday – no class	
13	Wednesday, April 4	Focus: Tools and reasoning  Report votes	Christie, S., & Gentner, D. (2014). Language helps children succeed on a classic analogy task. <i>Cognitive Science</i> , 38(2), 383–397.

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