# PSYC\*3440, Course Outline: Fall 2015

## **General Information**

Course Title: Cognitive Development

**Course Description:** This course will provide students with an overview of current theory and research in cognitive development and will consider both typical development and individual differences. Topics may include the development of perception, memory, mental representation, reasoning, and numeracy.

Credit Weight: 0.5

Academic Department (or campus): Psychology

Semester Offering: Fall

**Class Schedule and Location:** Tuesdays and Thursdays, 2:30 - 3:50 pm, J. D. MacLachlan Building 102 (MCLN 102)

## **Instructor Information**

Instructor Name: Roderick W. Barron Instructor Email: barron@psy.uoguelph.ca Office location and office hours: Tuesdays 11:00 am to 1:00 pm and by appointment

## **GTA Information**

GTA Name: Eli Cwinn GTA Email: ecwinn@uoguelph.ca GTA office location and office hours: TBA

GTA Name: Lisa Do Couto GTA Email: Idocouto@uoguelph.ca GTA office location and office hours: TBA

GTA Name: Ari Shortt GTA Email: ashortt@uoguelph.ca GTA office location and office hours: TBA

GTA Name: Angela Vascotto GTA Email: avascott@uoguelph.ca GTA office location and office hours: TBA

# **Course Content**

## **Specific Learning Outcomes:**

## Learning Outcome 1: Critical and Creative Thinking

**Facet 1**: Depth and Breath of Understanding: Demonstrates knowledge of key concepts in psychology, and integrates that knowledge across disciplinary and sub-disciplinary boundaries. **Reinforce 2**: Understands and applies advanced concepts in core areas. Upon successful completion of this course, students will have

developed a working knowledge of the theory and central research findings in Cognitive Development (**1.1.2**).

learned about the major research methods used to study Cognitive Development (1.1.2)

**Facet 2**: Inquiry and Analysis: A systematic process of exploring issues, objects and works in psychology through the collection and analysis of evidence that result in informed conclusions or judgments. **Master 3**: Develops novel hypotheses to explore further possibilities. Upon successful completion of this course, students will have

thought critically about research in Cognitive Development, especially the relationships among variables involved in both experimental and correlation-based research and the inferences that are drawn about the development of underlying cognitive processes, and will use this knowledge to develop a hypothetical research study consisting of Introduction, Method, Results, and Discussion sections (**1.2.3**)

#### Learning outcome 4: Communication

**Facet 1:** Oral Communication: Includes interpersonal skills, oral speaking and active listening as they apply to psychology. **Reinforce 2**: Speaks clearly and accurately in presentations and demonstrates oral communication skills that are organized and presented in a creative and interesting manner (e.g., with visual aids). Upon successful completion of this course, students will have

learned to prepare a presentation in a group setting that involves visual aids (i.e., PowerPoint) and to participate actively in the oral presentation and the questions that follow in front of a classroom audience **(4.1.2)** 

**Facet 2**: Written Communication: The ability to express one's ideas and summarize theory and research through a variety of writing styles (e.g., American Psychological Association [APA] style, term papers, posters). **Reinforce 2**: Writes clearly and demonstrates general psychological knowledge when describing an idea. Upon successful completion of this course, students will have

learned to provide clearly written descriptions of theoretical concepts in Cognitive Development and of the evidence pertaining to those concepts (**4.2.2**)

learned to provide a clearly written review of a literature in Cognitive Development, propose hypotheses, describe appropriate research methods, report hypothetical results, and interpret those results **(4.2.2)** 

**Facet 3**: Reading Comprehension: The understanding of the theoretical and empirical literature in psychology. **Reinforce 2**: Understands sophisticated theoretical and empirical writing in psychology. Upon successful completion of this course, students will have

read and understood the primary theoretical concepts in Cognitive Development and the evidence pertaining to those concepts that are presented in texts, review journal articles, and in primary source empirical journal articles (**4.3.2**).

**Facet 4**: Integrative Communication: A mental process that integrates existing psychological knowledge to develop and communicate new knowledge across the curriculum. **Reinforce 2**: Generates connections between psychological research and/or theory from more than one discipline or perspective. Upon successful completion of this course, students will have

learned how research findings in Cognitive Development can be integrated in order to produce hypotheses and then how to investigate those hypotheses though the process of proposing, generating, and interpreting hypothetical research findings (**4.4.2**).

## Learning Outcome 5: Professional and Ethical Behaviour

**Facet 1**: Teamwork: Working together in a respectful and collaborative manner to complete tasks. **Introduce 1**: Demonstrates respect and integrity when working with others. Upon successful completion of this course, students will have

learned to develop a group presentation on a topic in cognitive development and present it orally to a classroom audience where all members participate in all aspects of the presentation. (5.1.1)

## Lecture Content:

Course Schedule and Assigned Readings in Siegler, R. S. & Alibali, M.W. (2005). *Children's Thinking*. 4<sup>th</sup> Ed. Upper Saddle River, NJ: Prentice Hall. Examination dates, group presentation dates, and research proposal due dates are also listed.

#### Sep. 10 Course Introduction

- Sep. 15, 17 Theories of Cognitive Development: Piaget and Beyond Chapters 1 and 2
- Sep. 22, 24 Development of Perception Chapter 5
- Sep. 29, Oct. 1 Development of Information Processing Skills Chapter 3 (pp. 65-82 and 97-106), Chapter 7 (pp. 226 – 246)
- Oct. 6 Memory Development Chapter 7 (pp. 246 267)
- Oct. 8 Review for Midterm Exam
- Oct. 13 Fall Study Break (no class)
- Oct 15 Midterm Examination: Thursday, October 15
- Oct. 20 Social Cognition: Mental Representation and Theory of Mind I Chapter 9
- Oct. 22 Group Presentations 1, 2, 3, 4 Thursday, October 22

Groups 1, 2, 3, 4 research proposals due in class on Thursday, November 3

- Oct. 27 Social Cognition: Mental Representation and Theory of Mind II Chapter 9
- Oct. 29 Group Presentations 5, 6, 7, 8 Thursday, October 29

Groups 5, 6, 7, 8 research proposals due in class on Thursday, November 10

- Nov. 3 Development of Conceptual Abilities I Chapter 8 (pp. 268-292)
- Nov. 5Group Presentations 9, 10, 11, 12 Thursday, November 5Groups 9, 10, 11, 12 research proposals due in class on Thursday, November 19
- Nov. 10 Development of Conceptual Abilities II Chapter 8 (pp. 297-304)
- Nov. 12 Group Presentations 13, 14, 15, 16 Thursday, November 12

Groups 13, 14, 15, 16 research proposals due in class on Thursday, November 26

- Nov. 17 Math Skill Development I Chapter 8 (292-297), Chapter 11 (pp. 384 400)
- Nov. 19 Group Presentations 17, 18, 19, 20 Thursday, November 19

Groups 17, 18, 19, 20 research proposals due in class on Thursday, December 3

Nov. 24 Math Skill Development II Chapter 11 (pp. 384 - 400)

#### Nov. 26 Group Presentations, 21, 22, 23 24 Thursday, November 26

Groups 21, 22, 23, 24 research proposals due in instructor's office (3011 MacKinnon Extension) by 5:00 pm, Thursday, December 10

- Dec. 1 Some Issues in Cognitive Development Chapter 12 (pp. 422-443)
- Dec. 3 Review for the Final Examination

#### Final Examination, Tuesday, December 15, 7:00 – 9:00 pm

#### Labs: No Labs

#### Seminars: No Seminars

#### **Course Assignments and Tests:**

Assignment or Test	Due Date	Contribution to Final Mark (%)	Learning Outcomes Assessed
Midterm Exam	Thursday, October 15	29	1.1.2, 4.2.2, 4.3.2
Group Presentation	To be assigned for presentation between October 22 and November 26, 2015	12	1.1.2, 4.1.2, 4.2.2, 4.3.2, 5.1.1
Research Proposal	Due two weeks after assigned group presentation	30	1.1.2, 1.2.3, 4.2.2, 4.3.2, 4.4.2
Final Exam	Tuesday, December 15, 7:00 – 9:00 pm	29	1.1.2, 4.2.2, 4.3.2

## Additional Notes (if required):

#### **Examinations:**

The Midterm Examination will be held on Thursday, October 15 and will be worth 29 marks in the course. It will cover the lectures and assigned textbook readings from September 10 through October 8. The Final Examination (Exam 2) will be held on Tuesday, December 15, 7:00 – 9:00 pm and will be worth 29 marks in the course. It will cover the lectures and assigned textbook readings from October 20 through December 1. The Final Examination will also cover the material presented in the 24 group presentations. Students will be responsible for all of the assigned textbook material for each examination even though some of it will not be covered in the lectures and students will be responsible for all of the material presented in lectures for each examination even though some of the material presented in the assigned

textbook readings. Students will also be responsible for the material presented in the Group Presentations with an emphasis upon the content of the PowerPoint slides. The Midterm and the Final examinations will consist of multiple choice and short essay questions.

## Group Presentations:

Twenty-four research topics in cognitive development will be presented in class and then listed on the Courselink website for PSYC 3440. Each research topic will have one target article and PDFs of these target articles (or links to them) will be posted on Courselink. You will sign up for a research topic that interests you and present it to the class along with five to seven other students who have also signed up for that topic. Working with your group, you will be required to put together a PowerPoint slide presentation based upon the target article that all of you orally present to the class. You will be expected to develop the content of the target article by 1) discussing the main issues and research in the target article itself, 2) elaborating on the research cited in the target article by providing additional information on at least 3 primary source articles cited in the target article, 3) providing a reference list that includes the target article and the articles you cited in your presentation, and 4) providing two discussion questions at the end of your presentation that will guide the question and answer session that follows your presentation. Your presentation is strictly limited to 15 slides (including one slide for the references and one slide for the discussion questions) and each slide is limited to 50 words of text (except for the reference slide). Figures, tables, diagrams, etc. are strongly encouraged but they must be readable. All members of the group are expected to participate in preparing the presentation and presenting it in class. The Discussion function on Courselink will be available to each group to assist in preparing the presentations. The presentation is strictly limited to 10 minutes with 3 additional minutes set aside for the discussion questions. The Group Presentation is worth 12 marks in the course and you will be evaluated as follows: 4 marks for a combination of a self-evaluation of your contribution to the group and an anonymous evaluation of your contribution to the group by the other members of the group; 8 marks for a combination of an evaluation of the quality of the group presentation and the content of the slides by members of the class (anonymous) and by the instructor. The PowerPoint slides for each group's presentation must be emailed to the course instructor by 5:00 p.m. on the day before their presentation. These PowerPoint slides will be posted on the Courselink website. The presentations will be scheduled between Thursday, October 22 and Thursday, November 26. Each group must consult with the instructor about their presentation at least one week before the presentation date. NOTE: You will receive a zero for this part of the course if you fail to attend your group's presentation or you do not participate in preparing the presentation.

## **Research Proposal:**

The research proposal can based on the topic of your group's presentation or on a topic presented by another group or on a topic presented in lecture or the textbook. **The research proposal can be no longer than 1000 words** (excluding references and figures and/or tables) and involves the following components: 1) a brief, focused review of the literature that leads to a set of research hypotheses (or, if warranted, a single hypothesis), 2) a description of the

hypotheses and specific predictions based on those hypotheses, 3) a description of the research methodology that will be employed, 4) a description and presentation of the hypothetical results that are expected (e.g. you are required to provide table(s) and/or figure(s) showing the expected hypothetical results in a numerical and/or graphical format in which the independent and dependent variables are clearly identified), 5) a discussion of the interpretation of the expected results with regard to empirical research and/or theory associated with the topic, and 6) a reference list of the articles cited in the proposal. **The research proposal must involve at least six primary source academic journal articles or book chapters (i.e., no Wikipedia, paper or internet news sources, magazine articles, personal testimonials, interviews, etc.).** The section headings, article citations, and reference list must follow American Psychological Association (APA) format. You are strongly encouraged to consult with the instructor about your research proposal. **The research proposal will be accepted** but you will lose 5 marks out of 30 for each day (24 hour period) that it is late.

Final examination date and time: Tuesday, December 15, 7:00 - 9:00 pm

Final exam weighting: 29 percent

**Examination Regulations** 

## **Course Resources**

#### **Required Texts:**

Siegler, R. S. & Alibali, M.W. (2005). *Children's Thinking*. 4<sup>th</sup> Ed. Upper Saddle River, NJ: PrenticeHall. ISBN-10: 0-13-111484-4 ISBN-13: 978-0-13-111384-8

Two copies of the text are on two hour reserve in the library.

Recommended Texts: No recommended texts Lab Manual: No lab manual Other Resources: No additional resources Field Trips: No field trips Additional Costs: No additional costs

# **Course Policies**

## **Grading Policies**

You must contact the instructor by email (please include your student ID number and full name) or in person if you are unable to attend an examination as scheduled, participate in your Presentation Group's oral presentation, and/or submit your research proposal by the required

due date. Documented medical or compassionate reasons will be accepted as legitimate grounds for missing these due dates but other reasons (e.g., other exams on the same day, final exam conflicts, travel plans) will not be accepted unless justified on medical or compassionate grounds based on **prior consultation** with the instructor. You may need to document your claim for medical or compassionate consideration with a written note from a medical doctor and/or your program counselor.

Undergraduate Grading Procedures Graduate Grade interpretation

## **Course Policy on Group Work:**

See Group Presentations above for further information.

## Course Policy regarding use of electronic devices and recording of lectures:

Electronic recording of classes is expressly forbidden without consent of the instructor. When recordings are permitted they are solely for the use of the authorized student and may not be reproduced, or transmitted to others, without the express written consent of the instructor.

## **University Policies**

## **Academic Consideration**

When you find yourself unable to meet an in-course requirement because of illness or compassionate reasons, please advise the course instructor in writing, with your name, id#, and e-mail contact. See the academic calendar for information on regulations and procedures for <u>Academic Consideration</u>: Academic Consideration, Appeals and Petitions

#### Academic Misconduct

The University of Guelph is committed to upholding the highest standards of academic integrity and it is the responsibility of all members of the University community, faculty, staff, and students to be aware of what constitutes academic misconduct and to do as much as possible to prevent academic offences from occurring.

University of Guelph students have the responsibility of abiding by the University's policy on academic misconduct regardless of their location of study; faculty, staff and students have the responsibility of supporting an environment that discourages misconduct. Students need to remain aware that instructors have access to and the right to use electronic and other means of detection. Please note: Whether or not a student intended to commit academic misconduct is not relevant for a finding of guilt. Hurried or careless submission of assignments does not

excuse students from responsibility for verifying the academic integrity of their work before submitting it. Students who are in any doubt as to whether an action on their part could be construed as an academic offence should consult with a faculty member or faculty advisor.

The <u>Academic Misconduct Policy</u> is detailed in the Undergraduate Calendar: <u>Academic Misconduct Policy</u>

## Accessibility

The University of Guelph is committed to creating a barrier-free environment. Providing services for students is a shared responsibility among students, faculty and administrators. This relationship is based on respect of individual rights, the dignity of the individual and the University community's shared commitment to an open and supportive learning environment. Students requiring service or accommodation, whether due to an identified, ongoing disability or a short-term disability should contact the Centre for Students with Disabilities as soon as possible.

For more information, contact CSD at 519-824-4120 ext. 56208 or email csd@uoguelph.ca or see the website: <u>Student Accessibility Services Website</u>

#### **Course Evaluation Information**

Please refer to the Course and Instructor Evaluation Website .

## Drop date

The last date to drop one-semester courses, without academic penalty, is Friday, November 6, 2015. For regulations and procedures for Dropping Courses, see the Academic Calendar: <u>Current Undergraduate Calendar</u>