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Psychology 451	Cognitive Development	Fall 2021

Instructor:	Dr. Alexandra Twyman	**Lecture Location:**	Online; D2L; Asynchronous
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Course Description

Current and classic research in the area of cognitive development is explored. Topics may include sensory and perceptual development, language acquisition, symbolic representation, concept formation, memory, and spatial development. The course will also discuss methodologies used in research with children.

Course Learning Outcomes

The Department of Psychology is committed to student knowledge and skill development. The table below lists the key learning outcomes for this course, the program-learning outcomes they facilitate (see https://live-arts.ucalgary.ca/psychology/about#program-learning-outcomes), and the expected level of achievement. achievement.

Course Learning Outcomes	Assessment Methods	PLO(s)	Level(s)
Describe and critically evaluate theories of cognitive development	Multiple choice exams, written assignments, oral presentations	1, 2, 4, 5, 6	A
Critically evaluate primary research articles on cognitive development	Written assignments and oral presentations	1, 2, 3, 4, 5, 6	A
Critically evaluate and summarize previous empirical studies in cognitive development	Written assignments and oral presentations	1, 2, 3, 4, 5, 6	A
Synthesize material from several sources (empirical articles, review articles, lectures) to formulate appropriate debates and conclusions regarding cognitive development, especially as it pertains to applied problems within cultural contexts	Written assignments and oral presentations	1, 2, 3, 4, 5, 7, 8	C, A
Deliver an effective oral presentation of the main components of your group research proposal	Oral Presentation	1, 2, 4, 5, 6	C, A

Learn how to translate a research question from theory into practice on demo day, conduct research with participants in culturally sensitive ways, and understand the importance of accurate replication	Written assignments and oral presentations	1, 2, 3, 4, 6, 8	C, A

Notes. PLOs = Program-Learning Outcomes: 1 = demonstrate knowledge of psychological sciences, 2 = think critically and solve problems, 3 = conduct research and analyze data, 4 = communicate effectively, 5 = demonstrate information literacy, 6 = understand and implement ethical principles in a diverse world, 7 = apply psychological knowledge and skills, 8 = Demonstrate multicultural competence and awareness of issues related to equity, diversity,* and inclusion. Level of PLO achievement facilitated by this course: I = introductory, C = competency, A = advanced.

Acknowledgments and Respect for Diversity

Our classrooms view diversity of identity as a strength and resource. Your experiences and different perspectives are encouraged and add to a rich learning environment that fosters critical thought through respectful discussion and inclusion. The Department of Psychology would also like to acknowledge the traditional territories of the people of the Treaty 7 region in southern Alberta. The City of Calgary is also home to Métis Nation of Alberta, Region III.

Student Support and Resources

UCalgary Student Wellness Services | University of Calgary   403.210.9355.
https://www.ucalgary.ca/registrar/registration/course-outlines

Our mental health is just as important as our physical health, and yet we often will neglect our mental wellbeing, which in turn often influences our physical well being. There are really wonderful and qualified people who can help you out! If you are going through a tough time, there is no need to go it alone. The hardest step to take is often that first phone call, but once you have taken that step, you will be amazed at how well taken care of you will be, and much mental health can improve with help and support. These resources are free to use for University of Calgary students. So if you are in need, please give them a call!

Course Format
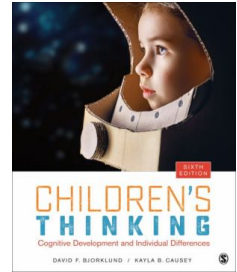Class materials will be posted to the course D2L page by the day/time (T/R at 11 a.m.) of each scheduled class as per the course schedule below.

Prerequisites
Psychology 300 and 301 (Research Methods and Data Analysis in Psychology I and II), 351 (Developmental Psychology) and admission to the Psychology major or Honours program or to the minor in Speech-Language Sciences for Linguistics Majors.

OPTIONAL Textbook
I DO NOT require a textbook in this course, as there are very few good undergraduate level books on cognitive development. If you are excited about the field of cognitive psychology, or prefer to have a textbook as an additional resource, then the book I have listed is an excellent resource, but it more of a graduate level textbook. The University Bookstore has copies of the text available. None of the questions on the exam will come directly from the book, everything that is testable is covered in the lecture content.

Bjorklund, D. F., & Causey, K. B. (2017). Children's Thinking: Cognitive Development and Individual Differences (6th Ed.). Sage.

Assessment Methods

Exams in this course are closed book. The use of resources, including class notes, the textbook, online resources, and calculators is prohibited during the exams in this course. Students may not communicate with others, either in person or electronically, about course material or the exam either in person or electronically during exams.

The exams are posted on D2L at midnight on the exam writing date and you will have the 24 hour period to pick your ideal start time on the exam writing day (available until midnight of that day).

Exams
Exam 1 (30%) – Unit 1 Material- multiple choice – Oct 21st
Exam 2 (15%) – Unit 2 Material – short answer – Dec 7th

Individual Assignment (one per student)
Please find a brief overview of each of the assignments in this course. Further details are posted on D2L.
Paper #1 (15%) – Media portrayal of cognitive development – In this assignment, you will be finding an advertisement or a media clip that is aimed to improve cognitive development. Using your growing knowledge, you will critically evaluate the advertisement claims. Max 1 page. (Nov 4th)

Group Term Project
In the lecture portion of the course, I will be giving you a broad overview of the area of cognitive development. For the group project, you will have a chance to go in depth into one area of cognitive development that interests you/your group(such as language, or memory). You will be working in groups (determined in class) to either replicate an existing experiment or suggest your own new experiment. You will be provided time during class to develop a topic of interest (topic approval assignment). You will then delve into the literature to learn more about your topic. Once your research question is finalized, you and your group will prepare a research project proposal in enough detail to be submitted for ethics review (ethics submission assignment). Once you have received ethics approval, your group will have a chance to work with a child to replicate (or use your new experiment) one of the classic findings of

cognitive development (data collection assignment). This component will be done from a distance, either by phone, zoom, or some other use of technology to enable virtual data collection. You will be recording your data collection and then posting it on D2L to share with the class. Your group will share your research project with the class in the oral presentation. This presentation will be created online and shared with the class on D2L. In the final paper submission, your group will be summarizing the main findings of the project and relating it back to class content and the scientific literature. It will also give you a chance to reflect on your term project: did go according to plan? And would you have one anything differently in the future? Further details of all assignment components will be discussed in class and posted on D2L.

Term Project Assignment Components (one per _Group_)
Each submission is due as one per group in the D2L dropbox folder by the due date. Further details are posted on D2L.
Topic Approval (5%)- A brief overview of your proposed research project. (Sept 23rd)
Ethics Submission (10%)- An account of your proposed research project for ethical review. (Oct 7th)
Data Collection (5%)- You will collect cognitive developmental data, and you will be evaluated on the data collection process. This is intended to foster the practical side of research in cognitive development. (Nov 18th)
Oral Presentation (10%)- An oral summary of the theory, data, and conclusions of your research project to disseminate your findings to our class. Presentations are 15 minutes in length. They are prerecorded and uploaded to D2L. (Dec 2nd)
Final Paper Submission (10%)- A written summary of the theory, data, and conclusions of your research project. (Dec 2nd)
All assignments will be submitted electronically through D2L dropbox as one assignment per group.
Without instructor approval, late assignments will be penalized 10% per day, including weekends. Without instructor approval, late presentations will be given a grade of 0%.

University of Calgary Academic Integrity Policy
Academic integrity is the foundation of the development and acquisition of knowledge and is based on values of honesty, trust, responsibility, and respect. We expect members of our community to act with integrity.
Research integrity, ethics, and principles of conduct are key to academic integrity. Members of our campus community are required to abide by our institutional code of conduct and promote academic integrity in upholding the University of Calgary's reputation of excellence. It is your responsibility to ensure that you have read and are familiar with the student academic misconduct policy:
https://www.ucalgary.ca/policies/files/policies/student-academic-misconduct-policy.pdf.

Department of Psychology Criteria for Letter Grades
Psychology course instructors use the following criteria when assigning letter grades:
A+ grade: _Exceptional Performance._ An A+ grade indicates near perfect performance on multiple choice and short answer exams. For research papers/essays/course projects/presentations, an A+ grade is awarded for exceptional work deserving of special recognition and is therefore not a common grade.

A, A- Range: *Excellent Performance.* Superior understanding of course material. Written work is very strong in terms of critical and original thinking, content, organization, and the expression of ideas, and demonstrates student's thorough knowledge of subject matter.

B Range: *Good Performance.* Above average understanding of course material. Written work shows evidence of critical thinking and attention to organization and editing but could be improved in form and/or content.

C Range: *Satisfactory Performance.* Adequate understanding of course material. Knowledge of basic concepts and terminology is demonstrated. Written work is satisfactory and meets essential requirements but could be improved significantly in form and content. Note: All prerequisites for courses offered by the Faculty of Arts must be met with a minimum grade of C-.

D range: *Marginally meets standards.* Minimal understanding of subject matter. Written work is marginally acceptable and meets basic requirements but requires substantial improvements in form and content. Student has not mastered course material at a level sufficient for advancement into more senior courses in the same or related subjects.

F grade: *Course standards not met.* Inadequate understanding of subject matter. Written work does not meet basic requirements. Student has not demonstrated knowledge of course material at a level sufficient for course credit.

Grading Scale

A+	96-100%	B+	80-84%	C+	67-71%	D+	54-58%
A	90-95%	B	76-79%	C	63-66%	D	50-53%
A-	85-89%	B-	72-75%	C-	59-62%	F	0-49%

It is at the instructor's discretion to round off either upward or downward to determine a final grade when the average of term work and final examinations is between two letter grades.

To determine final letter grades, final percentage grades will be rounded up or down to the nearest whole percentage (e.g., 89.5% will be rounded up to 90% = A but 89.4% will be rounded down to 89% = A-).

Course Credits for Research Participation
Research course credit is not allowed in 400- and 500-level courses.
Extra Research Participation Course Credit is Not Offered for this Course.

Tentative Lecture Schedule
This lecture schedule is tentative and may be adapted at the lecturer's discretion.

Week	Date	Topic/Activity/Readings/Due Date
		Unit 1 Material
1	T Sep 7	Introduction to Cognitive Development
1	R Sep 9	Foundational Concepts in Cognitive Development
2	T Sep 14	Evolution
2	R Sep 16	*Last day to drop a class without financial penalty* Genetics
2	F Sep 17	*Last day to add or swap a course*
3	T Sep 21	Group Work
3	R Sep 23	Group Work Group Topic Approval Due at 11:59 p.m.
3	F Sep 24	*Fee payment deadline for Fall Term full and half courses.*
4	T Sep 28	Brain Development
4	R Sep 30	*No Classes National Truth and Reconciliation Day*
5	T Oct 5	Group Work
5	R Oct 7	Brain Development Group Ethics Submission Due at 11:59 p.m.
6	M Oct 11	Thanksgiving Day, University closed (except Taylor Family Digital Library, Law, Medical, Gallagher and Business Libraries). No lectures.
6	T Oct 12	Social/Cultural Context
6	R Oct 14	Social/Cultural Context
7	T Oct 19	Group Work
7	R Oct 21	Individual Exam #1 on Unit 1 Material
		Unit 2 Material
8	T Oct 26	Infancy: Methods and Sense of Touch
8	R Oct 28	Visual Development, Face Perception, and Audition
9	T Nov 2	Intermodal Perception & Part I Piaget
9	R Nov 4	Part II Piaget & Implicit and Explicit Measures of Cognitive Development Individual Paper #1 Due at 11:59 p.m.

10	Nov 7-13	Term Break No Classes
10	W Nov 11	Remembrance Day (Observed). University Closed (except Taylor Family Digital Library, Law, Medical, Gallagher and Business Libraries). No lectures.
11	T Nov 16	Group Work – Piloting Data Collection
11	R Nov 18	Group Data Collection Due at 11:59 p.m.
12	T Nov 23	Spatial Development
12	R Nov 25	Information Processing
13	T Nov 30	Information Processing II
13	R Dec 2	Language Development & Mathematical Reasoning Group Final Oral Presentation Due to D2L at 11:59 p.m. Group Final Written Paper Due to D2L at 11:59 p.m.
14	T Dec 7	Individual Exam #2 on Unit 2 Material
14	R Dec 9	Class Presentations *Fall Term Lectures End. Last day to withdraw with permission from Fall Term half courses.*

Supporting Documentation

Students may be asked to provide supporting documentation for an exemption/special request. This may include, but is not limited to, a prolonged absence from a course where participation is required, a missed course assessment, a deferred examination, or an appeal. Students are encouraged to submit documentation that will support their situation. Supporting documentation may be dependent on the reason noted in their personal statement/explanation provided to explain their situation. This could be medical certificate/documentation, references, police reports, invitation letter, or a statutory declaration, etc. The decision to provide supporting documentation that best suits the situation is at the discretion of the student. Students cannot be required to provide specific supporting documentation, such as a medical note.

Students can make a Statutory Declaration as their supporting documentation (available at ucalgary.ca/registrar). This requires students to make a declaration in the presence of a Commissioner for Oaths. It demonstrates the importance of honest and accurate information provided and is a legally binding declaration. Several registered Commissioners for Oaths are available to students at no charge, on campus, please see ucalgary.ca/registrar.

Falsification of any supporting documentation will be taken very seriously and may result in disciplinary action through the Academic Discipline regulations or the Student Non-Academic Misconduct policy.

Absence From A Test/Exam

Makeup tests/exams are **NOT** an option without the approval of the instructor. Students who miss a test/exam have up to 48 hours to contact the instructor to ask for a makeup test/exam. It's the instructor's discretion if they will allow a make-up exam. Students who do not schedule a makeup test/exam with the instructor within this 48-hour period forfeit the right to a makeup test/exam. At the instructor's discretion, a makeup test/exam may differ significantly (in form and/or content) from a regularly scheduled test/exam. Once approved by the instructor a makeup test/exam must be written within 2 weeks of the missed test/exam on a day/time scheduled by the instructor. If a student cannot write their final exam on the date assigned by the Registrar's Office, they need to apply for a deferred exam https://www.ucalgary.ca/registrar/exams/deferred-exams.

Travel During Exams

Consistent with University regulations, students are expected to be available to write scheduled exams at any time during the official December and April examination periods. Requests to write a make-up exam because of conflicting travel plans (e.g., flight bookings) will NOT be considered by the department. Students are advised to wait until the final examination schedule is posted before making any travel arrangements. If a student cannot write their final exam on the date assigned by the Registrar's Office, they need to apply for a deferred exam https://www.ucalgary.ca/registrar/exams/deferred-exams. Students with an exceptional extenuating circumstance (e.g., a family emergency) should contact the Department of Psychology (psyugrd@ucalgary.ca).

Reappraisal of Graded Term Work http://www.ucalgary.ca/pubs/calendar/current/i-2.html

Reappraisal of Final Grade http://www.ucalgary.ca/pubs/calendar/current/i-3.html

Academic Accommodations

Students seeking an accommodation based on disability or medical concerns should contact Student Accessibility Services; SAS will process the request and issue letters of accommodation to instructors. For additional information on support services and accommodations for students with disabilities, visit www.ucalgary.ca/access/. Students who require an accommodation in relation to their coursework based on a protected ground other than disability should communicate this need in writing to their Instructor. The full policy on Student Accommodations is available at https://www.ucalgary.ca/legal-services/university-policies-procedures/accommodation-students-disabilities-procedure.

Academic Misconduct

For information on academic misconduct and its consequences, please see the University of Calgary Calendar at http://www.ucalgary.ca/pubs/calendar/current/k.html

Instructor Intellectual Property

Course materials created by professor(s) (including course outlines, presentations and posted notes, labs, case studies, assignments and exams) remain the intellectual property of the professor(s). These

materials may NOT be reproduced, redistributed or copied without the explicit consent of the professor. The posting of course materials to third party websites such as note-sharing sites without permission is prohibited. Sharing of extracts of these course materials with other students enrolled in the course at the same time may be allowed under fair dealing.

Copyright Legislation
All students are required to read the University of Calgary policy on Acceptable Use of Material Protected by Copyright (www.ucalgary.ca/policies/files/policies/acceptable-use-of-material-protected-by-copyright.pdf) and requirements of the copyright act (https://laws-lois.justice.gc.ca/eng/acts/C-42/index.html) to ensure they are aware of the consequences of unauthorized sharing of course materials (including instructor notes, electronic versions of textbooks etc.). Students who use material protected by copyright in violation of this policy may be disciplined under the Non-Academic Misconduct Policy.

Freedom OF Information and Protection of Privacy
Student information will be collected in accordance with typical (or usual) classroom practice. Students ' assignments will be accessible only by the authorized course faculty. Private information related to the individual student is treated with the utmost regard by the faculty at the University of Calgary

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Important Dates
The last day to drop this course with no "W" notation and **still receive a tuition fee refund** is **Thursday, September 16, 2021.** Last day add/swap a course is **Friday, September 17, 2021**. The last day to withdraw from this course is **Thursday, December 9, 2021**.
https://www.ucalgary.ca/pubs/calendar/current/academic-schedule.html