Course Description
This course is designed to equip students with many of the skills used by researchers in developmental psychology, and in psychology more broadly. Students will learn about common developmental research designs and methods and will explore how researchers develop questions and design studies to address these questions. The course is designed to be driven by students’ own interests and students will have the opportunity to generate research questions, design a study and collect data from their peers, and present their research in both oral and written formats. Students will also practice critiquing others’ work in a professional and constructive manner. To succeed in this course, students must attend class, be actively engaged in all class activities, and complete a series of assignments alone and with their peers.

Please note that students will not be directly working with children in this course. Students will have the opportunity to observe preschoolers in the Department of Psychology’s Early Childhood Education Centre (ECEC), but will only collect data from their classmates in Psych 393.

Readings
There is no textbook for the course. Required readings and additional resources will be posted on LEARN.
Final Grade Breakdown
1. Attendance and Participation 5%
2. Assignment 1: Bibliography Test 5%
3. Assignment 2: Individual article critique 5%
4. Assignment 3: Observation in ECEC and reflection paper 10%
5. Assignment 4: Journal article presentation 15%
6. Assignment 5: Final project 60%
   a. Group research proposal (5%)
   b. Draft of individual paper (unmarked but needed for parts c. and g.)
   c. Peer review of two others’ drafts (6%)
   d. Group oral presentation (5%)
   e. Group poster presentation (5%)
   f. Final draft of individual paper (35% of final grade)
   g. Response to reviewers letter (4% of final grade)

ASSIGNMENT DESCRIPTIONS

Attendance and Participation (5% of final grade). This includes attendance and the quality of contributions to class discussions. One major goal of this class is to learn how to provide high quality professional feedback to your peers. Therefore, you are expected to attend and participate in all classes, even if you are not presenting that day.

Assignment 1. Bibliography Test (5% of final grade). This assignment will be conducted in the computer lab and will test your ability to use online library resources to find citations and conduct literature searches.

Assignment 2. Individual article critique based on group work (5% of final grade). I will make available 5 articles about a range of topics in child development. Based on students’ interests, students will be assigned in groups to read and critique one of the articles. Students are expected to read their assigned article in detail before the group discussion. During the group discussion, students should discuss the following questions, which should be the focus of the written critique to be submitted before the next class. The written critique should be completed independently, based on the group discussion.
- What was the point of the article? What question(s) was/were the authors trying to answer?
- What methods did the authors use to test their questions?
- What was the most important part of the results that addressed this question?
- What did you like, what didn’t you like, what are your remaining questions?

Assignment 3. Observation in ECEC and Reflection Paper (10% of final grade).
Observe children’s free play in the ECEC for a minimum of 45 minutes and then write a reflection paper (maximum 3 double-spaced pages) describing something you observed and reflecting on its significance. You could write about an individual child’s activities or about the interactions that take place between two or more children. The topic will depend on what catches your attention and interest. Please note, that it is not sufficient to just describe the events you see. Rather, you should use your observations to propose a general developmental question or theory and describe how you might test this question. Please do
not pose a question about a particular child, rather pose a question about child development more generally. Your discussion should address the following:

- What type of participants would be required to test this question? (e.g., age, gender, developmental status)
- What type of situation or task would be appropriate to test this question?

**Scheduling times for observations:** Free play at the ECEC takes place from 10:30 - 11:30am (morning) and 2:30 - 3:30pm (afternoon); there are no afternoon sessions on Fridays. You may visit the ECEC on any of the following days: (afternoon). You may visit the ECEC on any of the following days:

- Friday October 14th (morning only)
- Monday October 17th (morning and afternoon)
- Tuesday October 18th (morning and afternoon)
- Wednesday October 19th (morning and afternoon)
- Thursday October 20th (morning and afternoon)
- Friday October 21st (morning only)

There are limits on the number of students who can observe in each time slot. Therefore, you must schedule your observation time(s) with the ECEC. To do so, please contact Karen in the front office of the ECEC at (519) 888-4567 ext. 33167.

**Assignment 4. Journal article presentation (15% of final grade).** You will choose an empirical research paper based on your own interests, and present it to the class. Presentations should provide both a review and an assessment of the paper and should be made using PowerPoint (or similar software). Give us the following information in your presentations:

- Why is the topic interesting? Why is it important?
- How does this paper add new information to the existing literature?
- What did you like most about this paper?
- What didn’t you like about this paper?
- What questions remain to be answered about this topic?
- What are some follow-up studies you could conduct to extend this study?

You must confirm your chosen paper with the instructor or TA in advance, and post a .pdf of your chosen paper to LEARN. Each student must present a different paper; so if another student has already had an article you are interested in approved, you will be required to choose a different one. It is essential that all other students read the papers prior to class in order to engage fully in their peers’ presentations.

**Assignment 5. Final Project (60% of final grade).** You will work in groups to design, conduct, and present a study on adults and children (anywhere from approx. 3 – 12 years of age). There are a total of seven steps to completing this assignment:

a. Group research proposal (5% of final grade). Prior to collecting your data, you will submit a project proposal in which you outline and justify the importance of your research question, your hypotheses, and the methods you will use to test your hypotheses. When designing your study, please use methods that would be appropriate for testing children. A few exceptions to this are permitted: 1) where children are shown scenarios with adult narration, adults can look over a cartoon with the narrative written down; 2) where children are asked questions
verbally, adults can answer questions using pen-and-paper; 3) where tests meant to tax children's abilities would be too easy for adults, more difficult items can be used (e.g., different age-appropriate word-reading or numerical problems). The instructor and/or TA will provide feedback on your proposal and the approved proposal will form the basis of the Introduction and Method sections of your final individual paper. Once your proposal is approved, you will be given time in class to collect data from your peers in the class (i.e., your adult participants). You will generate 'hypothetical data' to reflect how you anticipate children would perform.

b. Draft of individual paper (unmarked but needed for part c and g). Once you have completed data collection and analysis, you will submit a draft of your individual paper in APA format. Your paper should be a maximum of 10 double-spaced pages (not including references, figures and/or tables).

c. Peer review of two others’ drafts (6% of final grade). Each individual paper will be assigned two anonymous reviewers, and you will each review two papers. If you do not submit your first draft, you will not be allowed to review anyone else’s paper, nor will you be able to respond to reviews (see g. below), leading to an automatic 10% deduction in your final grade.

d. Group oral presentation (5% of final grade). In the final two classes of the semester, each group will give a 15-minute oral presentation to the class (with an additional 5 minutes for questions). You should use PowerPoint or another presentation software and all members of the group must cover part of the presentation. Your presentation should review the theoretical background, identify the research question and hypotheses, explain the methods used, report the results of your study, and discuss the implications and future directions for your work. Presentations will be assessed by your peers, who will rate the effort put forth and the overall quality of the presentation out of 10 using a rubric provided by the instructor.

e. Group poster presentation (5% of final grade). Each group will create a poster presentation of their research study. Posters will be presented during a “research fair” to be held on December 1st (time TBA) in conjunction with other sections of Psych 39x. Your group will prepare a poster that summarizes your project’s rationale, hypotheses, methods, results, and conclusions. This is the type of presentation you will likely make at professional conferences. During the poster session, you will be asked to evaluate four of your peers’ presentations from another section, and four students from the other section will evaluate your poster. The average of these ratings will count towards 2.5% of your final grade. A TA from another section will also evaluate your poster out of 5. The TAs rating will count towards 2.5% of your final grade. Together, the peer and TA ratings will count toward 5% of your final grade. Although scheduled outside class time, this is a mandatory course event. Students who do not attend and participate will earn a grade of 0 on the poster presentation.

I will provide a template for creating posters in PowerPoint on LEARN. To get ideas for how to design your poster, walk around the research area on the 4th floor of PAS. There are many wonderful examples on the walls. The only constraints are you’re your posters should be no larger than 86cm X 111cm. You can save money by making your poster black and white; colour is not necessary. You have two options for printing your poster:
1. **Use a regular printer.** You can print your poster on individual separate sheets of paper and arrange them in a rectangle (e.g., 16 sheets organized in a 4 x 4 array). You could do the same, but then tape/glue the sheets, so that there are no gaps between them. For this option, “poster printing” should be one of your printer settings in PowerPoint; it is found in the same place as your setting for “multiple pages per side.” Also for this “taping” option, you may want to adjust your print margins so that they are as small as possible.

2. **Use a commercial printer that prints large posters.** You can have a company print your poster. Fedex in University Plaze is probably cheapest. To order a black and white poster on normal paper ask for an “over-sized black and white print 34 inches by 44 inches.” This option should cost you less than $20. Ordering a colour poster will cost much more and will be printed on thicker poster paper. Again, though, this is NOT necessary or required. To have a poster printed commercially, you will probably need to provide them with a .pdf of your poster. Remember that the printer cannot print right to the edges, so leave at least a ¼ inch of margin room in your design. Finally, if you decide to go with a commercial printer, call them in advance to check on their current wait times.

f. **Final draft of individual paper (35% of final grade).** Your final paper (maximum of 10 double-spaced pages) will incorporate the peer reviews and any other feedback you received on your project (i.e., during oral or poster presentations).

g. **Letter responding to reviewers (4% of final grade).** Write a letter that directly addresses each of the reviewers’ comments/suggestions. The best method is to keep the original review in its entirety, and respond below each of the review recommendations in bold, either describing how and where you revised the paper in response to the recommendation, or explaining why you chose not to revise in accordance with the recommendation.

### SCHEDULE OF CLASSES

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<tr>
<th>Date</th>
<th>Topic</th>
<th>Details</th>
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<tbody>
<tr>
<td>Sept 8</td>
<td>Introduction</td>
<td>Course Introduction; review and discussion of interests</td>
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<td>Sept 13</td>
<td>Lesson: Getting started in research</td>
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<td>Sept 15</td>
<td>Lesson: Conducting literature reviews</td>
<td>Meet in PAS 1237</td>
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<td>Sept 20</td>
<td>Lesson: Developmental research designs and methods</td>
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<td>Sept 22</td>
<td>Assignment 1: Bibliography Test</td>
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<td>Sept 27</td>
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<td>Sept 29</td>
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<td>Oct 4</td>
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<td>Oct 11</td>
<td>Thanksgiving Break</td>
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<td>Oct 13</td>
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<td>Oct 18</td>
<td>ECEC Observations</td>
<td>NO CLASS; ECEC observations</td>
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<td>Oct 20</td>
<td>ECEC Observations</td>
<td>NO CLASS; ECEC observations (cont)</td>
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<td>Oct 25</td>
<td>Class discussion: reflection papers</td>
<td>Assignment 3 DUE (ECEC reflection paper)</td>
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<td>Journal Article Presentations:</td>
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<td>Nov 8</td>
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<td>Nov 10</td>
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<td>Nov 15</td>
<td>Final Project: Data Collection in Class</td>
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<td>Nov 17</td>
<td>Final Project: Data Collection in Class</td>
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<td>Nov 22</td>
<td>Final study: Data Collection in Class</td>
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<td>Nov 24</td>
<td>Final study: Data Analysis and Interpretation</td>
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<td>Nov 29</td>
<td>Group Project Oral Presentations</td>
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<td>Dec 1</td>
<td>Group Project Oral Presentation</td>
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<td>Assignment 5d DUE by midnight Wednesday Dec 1st (Peer reviews of 1 classmate paper drafts)</td>
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**FINAL PAPER (Assignment 5f) and RESPONSE TO REVIEWERS (Assignment 5g) due by midnight Monday Dec 12th**

**Course Policies:**

**Office Hours:** If you would like additional assistance in order to achieve the goals of this course, you can schedule a meeting with me or the course TA during our office hours (see top of syllabus). Given the large number of students in this class, neither the TA nor I can accept “drop in” appointments. If you need to meet with one of us outside of our scheduled office hours, please send an email to arrange an appointment. *If you are struggling in this course for any reason, please meet with one of us as early in the semester as possible.*
Academic Integrity
In order to maintain a culture of academic integrity, members of the University of Waterloo are expected to promote honesty, trust, fairness, respect and responsibility. See the UWaterloo Academic Integrity webpage and the Arts Academic Integrity webpage for more information.

Discipline: A student is expected to know what constitutes academic integrity, to avoid committing academic offences, and to take responsibility for his/her actions. A student who is unsure whether an action constitutes an offence, or who needs help in learning how to avoid offences (e.g., plagiarism, cheating) or about “rules” for group work/collaboration should seek guidance from the course professor, academic advisor, or the Undergraduate Associate Dean. When misconduct has been found to have occurred, disciplinary penalties will be imposed under Policy 71 – Student Discipline. For information on categories of offenses and types of penalties, students should refer to Policy 71 - Student Discipline. For typical penalties check Guidelines for the Assessment of Penalties.

Concerns About a Course Policy or Decision
Informal Stage. We in the Psychology Department take great pride in the high quality of our program and our instructors. Though infrequent, we know that students occasionally find themselves in situations of conflict with their instructors over course policies or grade assessments. If such a conflict arises, the Associate Chair for Undergraduate Affairs (Richard Eibach) is available for consultation and to mediate a resolution between the student and instructor: Email: reibach@uwaterloo.ca; Ph 519-888-4567 ext. 38790

A student who believes that a decision affecting some aspect of his/her university life has been unfair or unreasonable may have grounds for initiating a grievance. See Policy 70 and 72 below for further details.

Grievance: A student who believes that a decision affecting some aspect of his/her university life has been unfair or unreasonable may have grounds for initiating a grievance. Read Policy 70 - Student Petitions and Grievances, Section 4. When in doubt, please be certain to contact Richard Eibach, the Associate Chair for Undergraduate Affairs who will provide further assistance; reibach@uwaterloo.ca.

Appeals: A decision made or penalty imposed under Policy 70 - Student Petitions and Grievances (other than a petition) or Policy 71 - Student Discipline may be appealed if there is a ground. A student who believes he/she has a ground for an appeal should refer to Policy 72 - Student Appeals

Accommodation for Students with Disabilities
Note for students with disabilities: The AccessAbility Services office, located on the first floor of the Needles Hall extension (1401), collaborates with all academic departments to arrange appropriate accommodations for students with disabilities without compromising the academic integrity of the curriculum. If you require academic accommodations to lessen the impact of your disability, please register with the AS office at the beginning of each academic term.
Accommodation for Course Requirements

- Students requesting accommodation for course requirements (assignments, midterm tests, final exams, etc.) due to illness should do the following:
  - seek medical treatment as soon as possible and obtain a completed uWaterloo Verification of Illness Form
  - submit that form to the instructor within 48 hours.
  - (if possible) inform the instructor by the due date for the course requirement that you will be unable to meet the deadline and that documentation will be forthcoming.

- In the case of a missed final exam, the instructor and student will negotiate an extension for the final exam, which will typically be written as soon as possible, but no later than the next offering of the course.

- In the case of a missed assignment deadline, midterm test, or quiz, the instructor will either:
  - waive the course component and re-weight remaining term work as he/she deems fit according to circumstances and the goals of the course, or
  - provide an extension.

- In the case of bereavement, the instructor will provide similar accommodations to those for illness. Appropriate documentation to support the request will be required.

- Students who are experiencing extenuating circumstances should also inform their academic advisors regarding their personal difficulties.

Official Version of the Course Outline

If there is a discrepancy between the hard copy outline (i.e., if students were provided with a hard copy at the first class) and the outline posted on LEARN, the outline on LEARN will be deemed the official version. Outlines on LEARN may change as instructors develop a course, but they become final as of the first class meeting for the term.