PSYCH 601: Current Topics in Psychology (003)
Studying Infant Development
Spring 2024

General Information

Instructor:
Haley Weaver (she/hers)
Email address: hjweaver@wisc.edu
Office Hours:

- Mondays 2:30 PM – 3:30 PM on Zoom
- Thursdays 2:45 PM – 3:45 PM in Brogden 462

Class Instructional Mode, Time, and Location
This class meets in-person for a total of 27 times. There will be *no classes* on 03/21, 03/26, & 03/28

Class	Date & Time	Location
601-003	TR 1:00 PM – 2:15 PM	Brogden 101

Course Description:
Infants learn and develop at an incredible rate in the first two years of life. How do researchers study this learning in infants, who, unlike adult participants, cannot use language to communicate their thoughts? The field of developmental psychology has designed some of the most creative and innovative methods to understand infants' earliest perceptual and cognitive abilities. This course will take a deep dive into infant research methods cross cutting areas of psychology including perception, social understanding, emotion, and language. Focusing on the first 2 years of life, we will explore methods such as habituation, eye-tracking, naturalistic observation, and many more. We will also discuss how broader issues in psychology, such as failing to replicate studies and diversifying participant samples, intersect with the kinds of methods used in developmental psychology.
Prerequisites: PSYCH 225
Course website: https://canvas.wisc.edu/courses/391766

Course Designations and Attributes:
Level - Advanced
L&S Credit - Counts as Liberal Arts and Science credit in L&S

Credit Hours
This *3-credit class* meets for *two, 75-minute class periods* each week over the spring semester and carries the expectation that students will work on course learning activities (e.g., reading, writing, discussion questions, etc.) for about 3 hours out of the classroom for every class period (*approximately 9 hours per week in total*). The syllabus includes more information about meeting times and expectations for student work.

Course Specific Information

Course Learning Objectives

1. Be able to summarize, integrate, and critique empirical articles in developmental psychology.
2. Understand at least 3 methods used to assess growth and/or cognition in infants.
3. Enhance communication skills in informal (discussions) and formal (final presentation) settings.
4. Write clear and concisely about developmental research and make research-informed arguments.
5. Identify 2 issues in developmental psychology that could be solved with methodological advancements.

Required Readings

There is *no* textbook assigned for this course. Instead, empirical articles and review papers will be posted to Perusall. All assigned readings should be completed before class.

Digital Tools and Other Course Materials

- All course material, homework, announcements, and grades will be uploaded to Canvas.
- **Perusall**: All required readings will be posted to this social annotation platform. We will be use Perusall in place of discussion boards to post general questions about materials, interact with empirical articles (details below), and create course themes with your peers. *You **must** click the Perusall link on Canvas to be added to the class Perusall* website.
- **Top Hat**: You will complete a comprehension quiz each time we encounter a new method. To access these quizzes, you must make a top hat account.

Grading

This course will be assessed through participation, discussions, weekly quizzes, reflection papers, a final paper, and a final presentation.

Weighting

Assignment type	% of final grade
Quizzes	5%
Participation	10%
Paper 1	10%
Paper 2	10%
Presentation	15%
Discussions	25%
Final Paper	25%

Grading Scales
Grading will *not* be on a curve. This means that your grade will not be determined based on your classmates' performance on each assignment. Grades will be based on the following, as specified by the Department of Psychology:

Letter Grade	Percentage
A	92.00 – 100.00
AB	88.00 – 91.99
B	82.00 – 87.99
BC	78.00 – 81.99
C	70.00 – 77.99
D	60.00 – 69.99
F	0.00 – 59.99

Assignments
Quizzes (5%):

- For each topic, we will have a quiz to check your general understanding of the main points of the assigned articles.
- There will be 10 quizzes in total, which have been outlined in the schedule below.
- Quizzes will be *graded for completion*, which means that you will receive full credit if you respond to every question. We will use the responses to help you monitor your own reading abilities and to inform the lectures.

Participation (10%)

- I will be presenting material during every class, but the majority of the class will be discussion-based. Therefore, it is very important that everyone comes ready to engage in discussion.
- You will receive a participation grade each week of the semester (14 weeks total)
- Your participation will be graded based on your attendance and your engagement with the readings via Perusall
- **Attendance (2%):** You can miss **2 out of 27 classes with no penalty**.
- **Perusall posts (8%):** Part of your participation grade is posting high quality questions and comments on the assigned readings through Perusall. This social annotation app is meant to help everyone prepare for our class discussions. Furthermore, engaging with the readings in Perusall will help you think critically about scientific articles. For each week, you are expected to make **2 posts on at least 2 of the articles**. Your post can ask a question, add a comment, or respond to another students' question/comment. There are 12 weeks with Perusall posts, and your final grade will be based on the top 10 weeks (i.e., your 2 lowest scoring posts will be dropped). **Posts are due on Mondays at 5 PM.** The Perusall post grading rubric can be found on Canvas.

Discussions (25%)

- One key learning objective in this course is to improve our communication skills. We will grow these skills by engaging in discussions during each class. On Tuesdays, I will provide an overview of the topic for the week and facilitate our discussion for that day. On Thursdays, students will facilitate our discussion.
- **Discussion Leadership (10%):** You are expected to facilitate a discussion with 2-3 other students **once** during the semester. Your discussion leadership will make up 10% of your discussion grade.
- **Self-evaluation (5%):** Twice during the semester you will evaluate your own discussion skills using an in-class hand-out. This is to help you identify areas of strengths and growth.
- **Instructor Evaluation (10%):** Your discussion skills will be graded by me three times throughout the semester (once in February, March, and April) using the rubric on canvas.

Papers 1 & 2 (20%)

- For each paper, you will individually write and submit a 3-page double-spaced paper. Details of each assignment and the accompanying rubrics will be provided on Canvas.
- **Paper 1 (10%):** You will select one of the topics we discussed (visual perception, auditory perception, motor, or object concepts) and write a paper in which you argue for using one method over another to investigate that particular topic. In your argument, you should reference each methods' limitations and claims about their reliability/validity. You should compare the two methods and support your argument with evidence cited from the articles.
- **Paper 2 (10%):** You will select one of the methods we've discussed, and find one other infant development research article (that was not assigned for class) that uses that method. You will be asked to provide a citation for the research article you select 2 weeks before the deadline for Paper 2. Your paper should briefly summarize the article and provide a critique of the claims.

Final Paper (25%)

- You will have a final paper due May 8th, 2024 at 11:59 PM.
- You will individually write and submit an 8–10-page double-spaced paper. Choose one of the topics we discussed over the course of the semester and propose an experiment using a method that we discussed during the semester, but was not used in any of the articles that were assigned for that topic.
- You should explain the shortcomings of prior methods (i.e., methods other than your selected method) used to study your selected topic by citing 4 research articles that we did not read in class.
- You should include a detailed description of your selected method, your predicted results (i.e., hypotheses), and a discussion of the implications of obtaining (or not obtaining) those results.
- A detailed rubric for each section of the paper will be provided on Canvas.

Final presentation (15%)

- The last 3 classes will be dedicated to in-class presentations. Each student will give a 5-6 minute presentation on their final paper with a 4-minute question period.
- The presentations will occur prior to the final paper submission to allow for time to incorporate your classmates' feedback into your final paper.
- Your presentation will be graded on the proposed content of your final paper and your questions for your peers regarding their experiment proposals. A rubric for the presentation will be provided on Canvas.

Late policy

- A Perusall post is considered late if it is submitted after the 5:00 PM deadline. Posts submitted between 12:00 PM and 9:00 AM will receive half credit.
- A paper is considered late if it is submitted after the 11:59 PM deadline. Each day (24-hour period) late will incur a 20% deduction. For example, if your Reflection Paper 1 received an 80% but you submitted it at 9:00 AM the following day, it would receive a 64%.
- A final paper submitted up to 24 hours late will receive half credit. Final papers will not be accepted after May 10th, 2024 at 11:59 PM.
- **You can request a 2-day extension for Papers 1 and 2 without penalty**. You must email the instructor 24 hours prior to the deadline (i.e., email by Sunday at 11:59 PM for a Monday 11:59 PM deadline) and state that you need an extension (no justification/explanation necessary).
- There will be no extensions granted for the final paper.

Artificial Intelligence (AI) policy

- You may use artificial intelligence (AI) tools and applications (e.g., ChatGPT) in this course to assist with idea generation, editing, and finding literature.
- The writing assignments in this course are designed to develop your writing skills, and to expand your ability to understand, synthesize, and evaluate research in infant development. AI tools *cannot* replace your own unique ideas and ultimately your own writing. However, AI tools can be incredibly helpful when used in combination with critical thinking and transparency.
- If you choose to use AI in your assignments, I expect you to be **ethical** and **transparent** about how you used AI. Specifically, when using AI tools, you are required **to cite the tools** in your assignments. The library has resources on citations for AI tools (https://researchguides.library.wisc.edu/c.php?g=1334141&p=9825297). You are also required to include a **footnote statement about where and how you used AI** in the assignment.
- The use of AI tools *without* transparency will result in an automatic 50% deduction and may be subject to academic misconduct policies.
- You are solely responsible for the quality, accuracy, and validity of any content you chose to include in your assignments.

Course Schedule/Calendar

*indicates a non-class due date

Week	Date	Topic	Assignments
1	**January 23**	Introduction	
	January 25		Persuall syllabus assignment How to read a journal article in social psychology. In R. F. Baumeister (Ed.), The Self in Social Psychology (pp. 461–470). Philadelphia: Psychology Press.
2	**January 30**	Visual Perception	Kellman, P. J., & Spelke, E. S. (1983). Perception of partly occluded objects in infancy. *Cognitive Psychology, 15*(4), 483–524. Mareschal, D., & Johnson, S. P. (2002). Learning to perceive object unity: A connectionist account. *Developmental Science*, *5*(2), 151-172.
	February 1	1	**Student led discussion.** **Top Hat Quiz 1** Mondloch, C. J., Lewis, T. L., Budreau, D. R., Maurer, D., Dannemiller, J. L., Stephens, B. R., & Kleiner-Gathercoal, K. A. (1999). Face Perception During Early Infancy. *Psychological Science, 10(5),* 419-422. Otsuka, Y., Nakato, E., Kanazawa, S., Yamaguchi, M. K., Watanabe, S., & Kakigi, R. (2007). Neural activation to upright and inverted faces in infants measured by near infrared spectroscopy. *Neuroimage*, *34*(1), 399-406.
3	**February 6**	Auditory Perception	Moon, C., Cooper, R. P., & Fifer, W. P. (1993). Two-day-olds prefer their native language. *Infant behavior and development*, *16*(4), 495-500. May, L., Byers-Heinlein, K., Gervain, J., & Werker, J. F. (2011). Language and the newborn brain: does prenatal language experience shape the neonate neural response to speech?. *Frontiers in psychology*, *2*, 222.
	February 8	2	**Student led discussion.** **Top Hat Quiz 2** Eimas, P. D., Siqueland, E. R., Jusczyk, P., & Vigorito, J. (1971). Speech perception in infants. *Science*, *171*(3968), 303-306. Mattock, K., & Burnham, D. (2006). Chinese and English infants' tone perception: Evidence for perceptual reorganization. *Infancy*, *10*(3), 241-265.
4	**February 13**	Motor	**Top Hat Quiz 3**

			Karasik, L. B., Tamis-LeMonda, C. S., Adolph, K. E., & Bornstein, M. H. (2015). Places and postures: A cross-cultural comparison of sitting in 5-month-olds. *Journal of Cross-Cultural Psychology*, *46*(8), 1023-1038 Harbourne, R. T., & Stergiou, N. (2003). Nonlinear analysis of the development of sitting postural control. *Developmental Psychobiology: The Journal of the International Society for Developmental Psychobiology*, *42*(4), 368-377.
	February 15	3	**Student led discussion.** Kretch, K. S., & Adolph, K. E. (2013). Cliff or step? Posture-specific learning at the edge of a drop-off. *Child development*, *84*(1), 226-240. Adolph, K. E., Cole, W. G., Komati, M., Garciaguirre, J. S., Badaly, D., Lingeman, J. M., Chan, G. L. Y., & Sotsky, R. B. (2012). How Do You Learn to Walk? Thousands of Steps and Dozens of Falls per Day. *Psychological Science, 23(11),* 1387-1394.
5	**February 20**	Object Concepts	**Top Hat Quiz 4** Oakes, L. M., Madole, K. L., & Cohen, L. B. (1991). Infants' object examining: Habituation and categorization. *Cognitive Development*, *6*(4), 377-392. Johnson, S. P., Amso, D., & Slemmer, J. A. (2003). Development of object concepts in infancy: Evidence for early learning in an eye-tracking paradigm. *Proceedings of the National Academy of Sciences*, *100*(18), 10568-10573.
	February 22	4	**Student led discussion.** Stahl, A. E., & Feigenson, L. (2015). Observing the unexpected enhances infants' learning and exploration. *Science*, *348*(6230), 91-94.
	February 26*		**Paper 1 due at 11:59 PM**
6	**February 27**	Number	**Top Hat Quiz 5** Lipton, J. S., & Spelke, E. S. (2003). Origins of number sense: Large-number discrimination in human infants. *Psychological science*, *14*(5), 396-401. Libertus, M. E., & Brannon, E. M. (2010). Stable individual differences in number discrimination in infancy. *Developmental science*, *13*(6), 900-906.
	February 29	5	**Student led discussion.**

			Wynn, K. (1992). Addition and subtraction by human infants. *Nature*, *358*(6389), 749-750. Berger, A., Tzur, G., & Posner, M. I. (2006). Infant brains detect arithmetic errors. *Proceedings of the National Academy of Sciences*, *103*(33), 12649-12653.
7	**March 5**	Categorization	**Top Hat Quiz 6** Quinn, P. C., & Tanaka, J. W. (2007). Early development of perceptual expertise: Within-basic-level categorization experience facilitates the formation of subordinate-level category representations in 6-to 7-month-old infants. *Memory & Cognition*, *35*(6), 1422-1431. Kovack-Lesh, K. A., Horst, J. S., & Oakes, L. M. (2008). The cat is out of the bag: The joint influence of previous experience and looking behavior on infant categorization. *Infancy*, *13*(4), 285-307.
	March 7	6	**Student led discussion.** Oakes, L. M., Coppage, D. J., & Dingel, A. (1997). By land or by sea: the role of perceptual similarity in infants' categorization of animals. *Developmental psychology*, *33*(3), 396. Quinn, P. C., Westerlund, A., & Nelson, C. A. (2006). Neural markers of categorization in 6-month-old infants. *Psychological Science*, *17*(1), 59-66.
8	**March 12**	Social Categories	**Top Hat Quiz 7** Gaither, S. E., Pauker, K., & Johnson, S. P. (2012). Biracial and monoracial infant own-race face perception: An eye tracking study. *Developmental science*, *15*(6), 775-782. Kelly, D. J., Quinn, P. C., Slater, A. M., Lee, K., Ge, L., & Pascalis, O. (2007). The other-race effect develops during infancy: Evidence of perceptual narrowing. *Psychological Science*, *18*, 1084–1089.
	March 14	7	Hamlin, J. K., Wynn, K., & Bloom, P. (2007). Social evaluation by preverbal infants. *Nature*, *450*(7169), 557-559 Schlingloff, L., Csibra, G., & Tatone, D. (2020). Do 15-month-old infants prefer helpers? A replication of Hamlin et al. (2007). *Royal Society Open Science*, *7*(4), 191795.
9	**March 19**	8	**Student led discussion.** Serbin, L. A., Poulin-Dubois, D., & Eichstedt, J. A. (2002). Infants' responses to gender-inconsistent events. *Infancy*, *3*(4), 531-542.

			Zosuls, K. M., Ruble, D. N., Tamis-LeMonda, C. S., Shrout, P. E., Bornstein, M. H., & Greulich, F. K. (2009). The acquisition of gender labels in infancy: Implications for gender-typed play. *Developmental Psychology, 45*(3), 688–701.
	March 21		**No Class**
	March 26 **March 28**	**Spring Break**	**No Class**
	April 1*		**Submit research article for review by 11:59 PM**
10	**April 2**	Language	**Top Hat Quiz 8** ManyBabies Consortium. (2020). Quantifying sources of variability in infancy research using the infant-directed-speech preference. *Advances in Methods and Practices in Psychological Science*, *3*(1), 24-52. Nencheva, M. L., Piazza, E. A., & Lew-Williams, C. (2021). The moment-to-moment pitch dynamics of child-directed speech shape toddlers' attention and learning. *Developmental Science*, *24*(1), e12997.
	April 4		**Field trip to Infant Learning Lab:** 1500 Highland Ave, Madison, WI 53705 (Waisman Center) Saffran, J. R., Aslin, R. N., & Newport, E. L. (1996). Statistical learning by 8-month-old infants. *Science*, *274*(5294), 1926-1928. Benitez, V. L., & Saffran, J. R. (2018). Predictable events enhance word learning in toddlers. *Current Biology*, *28*(17), 2787-2793.
11	**April 9**	9	**Student led discussion.** Roy, B. C., Frank, M. C., DeCamp, P., Miller, M., & Roy, D. (2015). Predicting the birth of a spoken word. *Proceedings of the National Academy of Sciences*, *112*(41), 12663-12668. Casillas, M., Brown, P., & Levinson, S. C. (2020). Early language experience in a Tseltal Mayan village. *Child Development*, *91*(5), 1819-1835.
	April 11	10	**Student led discussion.** Bergelson, E., & Swingley, D. (2012). At 6–9 months, human infants know the meanings of many common nouns. *Proceedings of the National Academy of Sciences*, *109*(9), 3253-3258. Yu, C., & Smith, L. B. (2012). Embodied attention and word learning by toddlers. *Cognition*, *125*(2), 244-262.
	April 15*		**Paper 2 due at 11:59 PM**

12	**April 16**	Emotion	**Top Hat Quiz 9** Ruba, A. L., Johnson, K. M., Harris, L. T., & Wilbourn, M. P. (2017). Developmental changes in infants' categorization of anger and disgust facial expressions. *Developmental Psychology*, *53*(10), 1826. Bornstein, M. H., & Arterberry, M. E. (2003). Recognition, discrimination and categorization of smiling by 5-month-old infants. *Developmental Science*, *6*(5), 585-599.
	April 18	11	**Student led discussion.** Taylor-Colls, S., & Pasco Fearon, R. M. (2015). The effects of parental behavior on infants' neural processing of emotion expressions. *Child Development*, *86*(3), 877-888. Chiarella, S. S., & Poulin-Dubois, D. (2013). Cry babies and pollyannas: Infants can detect unjustified emotional reactions. *Infancy*, *18*, E81-E96.
13	**April 23**	Overarching Themes	**Top Hat Quiz 10** Byers-Heinlein, K., Bergmann, C., & Savalei, V. (2022). Six solutions for more reliable infant research. *Infant and Child Development*, *31*(5), e2296.
	April 25	Presentations	
14	**April 30**	Presentations	
	May 2	Presentations	
	May 8*		**Final paper due at 11:59 PM**

Academic Policies and Statements

Academic Calendar & Religious Observances

The academic calendar and religious observances can be found at https://secfac.wisc.edu/academic-calendar/. Establishment of the academic calendar for the University of Wisconsin–Madison falls within the authority of the faculty as set forth in Faculty Policies and Procedures. Construction of the academic calendar is subject to various rules and laws prescribed by the Board of Regents, the Faculty Senate, State of Wisconsin, and the federal government. For additional dates and deadlines for students, see the Office of the Registrar's pages. Students are responsible for notifying instructors within the first two weeks of classes about any need for flexibility due to religious observances.

Academic Integrity Statement

By virtue of enrollment, each student agrees to uphold the high academic standards of the University of Wisconsin-Madison; academic misconduct is behavior that negatively impacts the integrity of the institution. Cheating, fabrication, plagiarism, unauthorized collaboration, and helping others commit these previously listed acts are examples of misconduct which may result in disciplinary action. Examples

of disciplinary sanctions include, but are not limited to, failure on the assignment/course, written reprimand, disciplinary probation, suspension, or expulsion.

Accommodations for Students with Disabilities Statement

The University of Wisconsin-Madison supports the right of all enrolled students to a full and equal educational opportunity. The Americans with Disabilities Act (ADA), Wisconsin State Statute (36.12), and UW-Madison policy (UW-855) require the university to provide reasonable accommodations to students with disabilities to access and participate in its academic programs and educational services. Faculty and students share responsibility in the accommodation process. Students are expected to inform faculty of their need for instructional accommodations during the beginning of the semester, or as soon as possible after being approved for accommodations. Faculty will work either directly with the student or in coordination with the McBurney Center to provide reasonable instructional and course-related accommodations. Disability information, including instructional accommodations as part of a student's educational record, is confidential and protected under FERPA. (See: McBurney Disability Resource Center).

Course Evaluation

Students will be provided with an opportunity to evaluate their enrolled courses and their learning experience. Most instructors use AEFIS a digital course evaluation survey tool. In most instances, students receive an official email two weeks prior to the end of the semester, notifying them that anonymous course evaluations are available. Student participation is an integral component of course development, and confidential feedback is important. UW-Madison strongly encourages student participation in course evaluations.

Diversity & Inclusion Statement

Diversity is a source of strength, creativity, and innovation for UW-Madison. We value the contributions of each person and respect the profound ways their identity, culture, background, experience, status, abilities, and opinion enrich the university community. We commit ourselves to the pursuit of excellence in teaching, research, outreach, and diversity as inextricably linked goals. The University of Wisconsin-Madison fulfills its public mission by creating a welcoming and inclusive community for people from every background – people who as students, faculty, and staff serve Wisconsin and the world.

Mental Health & Well-Being Statement

Students often experience stressors that can impact both their academic experience and personal well-being. These may include mental health concerns, substance misuse, sexual or relationship violence, family circumstances, campus climate, financial matters, among others. Students are encouraged to learn about and utilize UW-Madison's mental health services and/or other resources as needed. Visit uhs.wisc.edu or call University Health Services at (608) 265-5600 to learn more.

Privacy of Student Records & the Use of Audio Recorded Lectures Statement

View more information about FERPA. Lecture materials and recordings for this course are protected intellectual property at UW-Madison. Students in courses may use the materials and recordings for their

personal use related to participation in class. Students may also take notes solely for their personal use. If a lecture is not already recorded, students are not authorized to record lectures without permission unless they are considered by the university to be a qualified student with a disability who has an approved accommodation that includes recording. [Regent Policy Document 4-1] Students may not copy or have lecture materials and recordings outside of class, including posting on internet sites or selling to commercial entities, with the exception of sharing copies of personal notes as a notetaker through the McBurney Disability Resource Center. Students are otherwise prohibited from providing or selling their personal notes to anyone else or being paid for taking notes by any person or commercial firm without the instructor's express written permission. Unauthorized use of these copyrighted lecture materials and recordings constitutes copyright infringement and may be addressed under the university's policies, UWS Chapters 14 and 17, governing student academic and non-academic misconduct.

Students' Rules, Rights & Responsibilities

To see the Undergraduate Guide's Rules, Rights, and Responsibilities information, please refer to Rights & Responsibilities.

Teaching & Learning Data Transparency Statement

The privacy and security of faculty, staff and students' personal information is a top priority for UW-Madison. The university carefully reviews and vets all campus-supported digital tools used to support teaching and learning, to help support success through learning analytics, and to enable proctoring capabilities. View the university's full teaching and learning data transparency statement.