

PSY 306: Face Perception, Spring 2024
Wednesday 9:10 a.m. – 11:30 a.m.
Olin 107

Instructor

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Office hours: Mondays 10:00 a.m. – 11:00 a.m. and Thursdays 1:30 p.m. – 2:30 p.m.

COURSE DESCRIPTION

Faces carry important information about the identity, thoughts, emotions, and future behavior of an individual, and humans prioritize this information from the earliest stages of development. This seminar will explore the neural and cognitive mechanisms underlying face perception, the developmental time course of face perception, and individual differences in face perception. In addition, we will consider how social characteristics of the face and the observer interact to influence how a face is perceived.

REQUIRED READING MATERIALS

All assigned readings are available through the course Brightspace site:

<https://bardcollege.brightspace.com/d2l/home/13966>.

COMPONENTS OF THE COURSE GRADE**Weekly Responses (20% of final course grade)**

Each week you will submit one response for **each** of the assigned readings. Responses can take the form of questions or comments and are intended to help you think deeply about the articles and to help me organize our class discussion. Responses should be posted to the relevant Brightspace module by Wednesdays at 8:00 a.m. Responses submitted after 8:00 am will be considered late and will incur a 50% penalty. Your lowest score will be dropped.

Figure/Table Presentations (10% of final course grade)

On the second week of class, you will be assigned approximately 3-5 figures and/or tables from our readings. For those figures/tables, you will be the class expert during the class discussion and will be expected to explain all aspects of the figure/table as well as the importance of that figure/table to the paper.

Brief Report (10% of final course grade)

At the beginning of the semester, we will attempt to empirically replicate a previous finding in the face perception literature. As a group we will design the experiment and collect data and each student will be required to individually write up the results in an APA-style brief report. Brief reports are due by the start of class on **February 28th**.

Article Presentation (10% of final course grade)

Along with a partner, you will select an empirical paper that either cites or is cited by an article we discuss in class. Next, you will give a 10 to 15-minute PowerPoint presentation of the article followed by questions from the class. Article selections are due during class on **March 13th**. Presentations will take place during class on **March 27th**.

Class Participation and Attendance (20% of final course grade)

As a seminar, this class is founded on discussion among students and you will be graded on your class participation. Earning a high grade on class participation does not require you to answer every question in class. My hope is that you will come to class prepared to engage with the material and the other students in this class. Missing more than 3 classes will result in a loss of 50% of Class Participation and Attendance points.

Research Report (30% of final course grade)

In this assignment, you will propose and implement a novel experiment that is relevant to the topics covered in this course. This project will be broken down into the following parts (some parts will be done in conjunction with a partner, others will not):

- 1) Each student will submit an initial 1-paragraph proposal in which you describe an experiment you would like to conduct. This proposal should include a summary of at least one relevant article that has not been read as part of class. Proposals must be emailed to me (thutcheo@bard.edu) prior to the start of class on **April 3rd**.
- 2) As a group, you and 2-3 classmates will build an experiment and collect data to answer your research question. Data collection must be completed and your dataset must be emailed to me (thutcheo@bard.edu) prior to the start of class on **April 24th**.
- 3) On **May 15th**, your group will present the results of your experiment to the class in a 10-15-minute presentation. You will also submit your final paper written in APA style (8 to 12 pages). Final papers should be emailed to me (thutcheo@bard.edu) by the start of class. Students will write the final papers independently.

SUMMARY OF DUE DATES

Weekly Responses: Prior to the start of each class

Figure/Table Presentations: Will be assigned during first class meeting

Brief Report: February 28th

Article Selection: March 13th

Article Presentation: March 27th

Experiment Proposal: April 3rd

Dataset Submission: April 24th

Final Presentation and Research Report: May 15th

ADDITIONAL INFORMATION

Academic Accommodations

Your experience in this class is important to me. I am committed to meeting the needs of all students in this course and will work with you to ensure your accommodations are adequately met. If you have already established accommodations, I will receive a letter from the Learning Commons Disability Support Services with additional information. If you have not yet established services through the Learning Commons, but have a temporary health condition or permanent disability that requires accommodations (conditions include but are not limited to: mental health, attention-related, learning, vision, hearing, physical or health impacts), please review the Student Accessibility Resources website:

<https://www.bard.edu/accessibility/students/>

Academic Integrity

All students are assumed to have read the Bard College Handbook and are familiar with the school's policies regarding Plagiarism and Academic Dishonesty. Violations of these policies are taken extremely seriously and one violation will result in a failing grade for the course and a referral to the Dean of Students for further action.

Respect for Diversity

It is my intent that students from diverse backgrounds and perspectives be well-served by this course, that students' learning needs be addressed both in and out of class, and that the diversity that students bring to this class be viewed as a resource, strength and benefit. It is my intent to present materials and activities that are respectful of diversity: gender, sexuality, disability, age, socioeconomic status, ethnicity, race, and culture. Your suggestions on ways that I can improve the course and incorporate more diversity are encouraged and appreciated.

BARD LAND ACKNOWLEDGMENT

In the spirit of truth and equity, it is with gratitude and humility that we acknowledge that we are gathered on the sacred homelands of the Munsee and Muhheaconneok people, who are the original stewards of this land. Today, due to forced removal, the community resides in Northeast Wisconsin and is known as the Stockbridge-Munsee Community. We honor and pay respect to their ancestors past and present, as well as to Future generations and we recognize their continuing presence in their homelands. We understand that our acknowledgment requires those of us who are settlers to recognize our own place in and responsibilities toward addressing inequity, and that this ongoing and challenging work requires that we commit to real engagement with the Munsee and Mohican communities to build an inclusive and equitable space for all.

Face Perception Schedule – Spring 2024

Wednesday, January 31st – Welcome to Face Perception!

Wednesday, February 7th – A face-processing module in the brain

1. Kanwisher, N., McDermott, J., & Chun, M. M. (1997). The fusiform face area: a module in human extrastriate cortex specialized for face perception. *Journal of neuroscience*, 17(11), 4302-4311.
2. Tsao, D. Y., Freiwald, W. A., Tootell, R. B., & Livingstone, M. S. (2006). A cortical region consisting entirely of face-selective cells. *Science*, 311(5761), 670-674.
3. Schalk, G., Kapeller, C., Guger, C., Ogawa, H., Hiroshima, S., Lafer-Sousa, R., ... & Kanwisher, N. (2017). Facephenes and rainbows: Causal evidence for functional and anatomical specificity of face and color processing in the human brain. *Proceedings of the National Academy of Sciences*, 114(46), 12285-12290.

Due: Weekly Response #1

Wednesday, February 14th – Gaze-Following

1. Friesen, C. K., & Kingstone, A. (1998). The eyes have it! Reflexive orienting is triggered by nonpredictive gaze. *Psychonomic bulletin & review*, 5(3), 490-495.
2. Weisbuch, M., Pauker, K., Adams Jr, R. B., Lamer, S. A., & Ambady, N. (2017). Race, power, and reflexive gaze following. *Social Cognition*, 35(6), 619-638.
3. Mason, M. F., Tatkow, E. P., & Macrae, C. N. (2005). The look of love: Gaze shifts and person perception. *Psychological science*, 16(3), 236-239.

Due: Weekly Response #2

Wednesday, February 21st – The influence of early exposure to faces

1. Sugita, Y. (2008). Face perception in monkeys reared with no exposure to faces. *Proceedings of the National Academy of Sciences*, 105(1), 394-398.
2. Wood, S. M., & Wood, J. N. (2015). Face recognition in newly hatched chicks at the onset of vision. *Journal of Experimental Psychology: Animal Learning and Cognition*, 41(2), 206.
3. Ratan Murty, N. A., Teng, S., Beeler, D., Mynick, A., Oliva, A., & Kanwisher, N. (2020). Visual experience is not necessary for the development of face-selectivity in the lateral fusiform gyrus. *Proceedings of the National Academy of Sciences*, 117(37), 23011-23020.

Due: Weekly Response #3

Wednesday, February 28th – Variations in the ability to perceive faces

1. Benton, A. L., & Van Allen, M. W. (1968). Impairment in facial recognition in patients with cerebral disease. *Cortex*, 4(4), 344-351.
2. Russell, R., Duchaine, B., & Nakayama, K. (2009). Super-recognizers: People with extraordinary face recognition ability. *Psychonomic bulletin & review*, 16(2), 252-257.
3. Dalrymple, K. A., Fletcher, K., Corrow, S., das Nair, R., Barton, J. J., Yonas, A., & Duchaine, B. (2014). "A room full of strangers every day": The psychosocial impact of developmental prosopagnosia on children and their families. *Journal of psychosomatic research*, 77(2), 144-150.

Due: Weekly Response #4; Brief Report

Wednesday, March 6th – Experience shapes how we perceive faces

1. Bar-Haim, Y., Ziv, T., Lamy, D., & Hodes, R. M. (2006). *Nature and nurture in own-race face processing*. *Psychological science*, 17(2), 159-163.
2. Pascalis, O., de Haan, M., & Nelson, C. A. (2002). Is face processing species-specific during the first year of life?. *Science*, 296(5571), 1321-1323.
3. Sugden, Nicole A., Marwan I. Mohamed-Ali, and Margaret C. Moulson. "I spy with my little eye: typical, daily exposure to faces documented from a first-person infant perspective." *Developmental psychobiology* 56.2 (2014): 249-261.

Due: Weekly Response #5

Wednesday, March 13th: Context shapes how we perceive faces

1. Hugenberg, K., & Bodenhausen, G. V. (2003). Facing prejudice: Implicit prejudice and the perception of facial threat. *Psychological Science*, 14(6), 640-643
2. Wittlin, N. M., Dovidio, J. F., LaFrance, M., & Burke, S. E. (2018). About face: Memory for transgender versus cisgender targets' facial appearance. *Journal of Experimental Social Psychology*, 78, 77-92.
3. Fincher, K. M. (2019). Social antecedents and perceptual consequences of how we look at others. *Journal of Experimental Psychology: General*, 148(1), 143.

Due: Weekly Response #6; Article selection for presentation

Wednesday, March 20th – No Class, Spring BreakWednesday, March 27th: Article Presentations

Wednesday, April 3rd: Faces draw attention

1. Baron-Cohen, S., Wheelwright, S., & Jolliffe, A. T. (1997). Is there a "language of the eyes"? Evidence from normal adults, and adults with autism or Asperger syndrome. *Visual Cognition*, 4(3), 311-331.
2. Lavie, N., Ro, T., & Russell, C. (2003). The role of perceptual load in processing distractor faces. *Psychological science*, 14(5), 510-515.
3. Birmingham, E., Bischof, W. F., & Kingstone, A. (2008). Social attention and real-world scenes: The roles of action, competition and social content. *Quarterly journal of experimental psychology*, 61(7), 986-998.

Due: Weekly Response #7; Experiment Proposal

Wednesday, April 10th – Faces communicate emotions

1. Ekman, P., & Friesen, W. V. (1971). Constants across cultures in the face and emotion. *Journal of personality and social psychology*, 17(2), 124.
2. Aviezer, H., Trope, Y., & Todorov, A. (2012). Body cues, not facial expressions, discriminate between intense positive and negative emotions. *Science*, 338(6111), 1225-1229.
3. Shepherd, J. L., & Rippon, D. (2023). The impact of briefly observing faces in opaque facial masks on emotion recognition and empathic concern. *Quarterly Journal of Experimental Psychology*, 76(2), 404-418.

Due: Weekly Response #8

Wednesday, April 17th – Faces are represented holistically

1. Young, A. W., Hellawell, D., & Hay, D. C. (1987). Configurational information in face perception. *Perception*, 16(6), 747-759.
2. Tanaka, J. W., & Farah, M. J. (1993). Parts and wholes in face recognition. *The Quarterly Journal of Experimental Psychology Section A*, 46(2), 225-245.
3. Jenkins, R., White, D., Van Montfort, X., & Burton, A. M. (2011). Variability in photos of the same face. *Cognition*, 121(3), 313-323.

Due: Weekly Response #9

Wednesday, April 24th – Faces are processed rapidly

1. Bentin, S., Allison, T., Puce, A., Perez, E., & McCarthy, G. (1996). Electrophysiological studies of face perception in humans. *Journal of cognitive neuroscience*, 8(6), 551-565.
2. Pitcher, D., Walsh, V., Yovel, G., & Duchaine, B. (2007). TMS evidence for the involvement of the right occipital face area in early face processing. *Current Biology*, 17(18), 1568-1573.
3. Parvizi, J., Jacques, C., Foster, B. L., Withoft, N., Rangarajan, V., Weiner, K. S., & Grill-Spector, K. (2012). Electrical stimulation of human fusiform face-selective regions distorts face perception. *Journal of Neuroscience*, 32(43), 14915-14920.

Due: Weekly Response #10; Dataset submission

Wednesday, May 1st: First impressions

1. Rule, N. O., & Ambady, N. (2010). Democrats and Republicans can be differentiated from their faces. *PLoS one*, 5(1), e8733.
2. Todorov, A., & Porter, J. M. (2014). Misleading first impressions: Different for different facial images of the same person. *Psychological science*, 25(7), 1404-1417
3. Miller, E. J., Steward, B. A., Witkower, Z., Sutherland, C. A., Krumhuber, E. G., & Dawel, A. (2023). AI Hyperrealism: Why AI Faces Are Perceived as More Real Than Human Ones. *Psychological Science*, 34(12), 1390-1403.

Due: Weekly Response #11

Wednesday, May 8th: No Class, Psychology Program Board WeekWednesday, May 15th: Final Presentations

Due: Final Paper