

PSYC 342: INTELLIGENCE

Instructor: Dr. Ariel N. James

Office: Olin-Rice 323

Email: ajames2@macalester.edu

Phone: 319-215-7601

Office drop-in hours:

Wed. & Fri. 10-11 am | and by appt.
via <https://calendly.com/ajames2>

Macalester College
Fall 2023

When: Tues. & Thurs.
3:00 - 4:30 pm

Where: Olin-Rice 300

What is intelligence?

How can you tell if someone is intelligent? Can intelligence be measured objectively? How are ideas around intelligence guided by theory, evidence, culture, and context?

There are no easy answers to these questions, but we will work together to make sense of this huge topic. In this class, our discussions will be guided by close readings of both review papers and original research. By the end of class, you will each produce a review paper of your own that synthesizes some of the existing literature on intelligence in a novel way.

I'm a cognitive psychologist, which influences how I approach this topic, but I've included many readings from other fields. I depend on *you* to bring in perspectives from other classes, within psychology and otherwise, and for us to use our reading skills to tackle unfamiliar material together.

Learning goals

Build proficiency in finding, reading, and thinking about empirical and theoretical work in psychology & Gain confidence in a variety of communication styles & Think through applications of psychology to the wider world.

Nuts and bolts of the course

Letter grades	
A	≥ 93
A-	≥ 90
B+	≥ 87
B	≥ 83
B-	≥ 80
C+	≥ 77
C	≥ 73
C-	≥ 70
D+	≥ 67
D	≥ 63
D-	≥ 60
F	< 60

Grade Composition		
Preparation: 35%		
Group work: 15%		
Class discussion: 10%		
The Writing Project: 40%	Topic proposal	5%
	Annotated bibliography	10%
	First draft	10%
	Final draft	15%

Materials

All readings for this course will be linked or directly uploaded to the course Moodle page. We will also use Google Drive and *maybe* VoiceThread and Zoom.

Assignments

There are no exams in this course; writing is the primary way that you will engage deeply with the material and demonstrate mastery of core concepts. There is one major writing assignment (**chapter update**) that we will work on throughout the semester. We'll also have minor assignments (**class prep**) to facilitate your understanding of the course material and prepare you for in-class discussions. Any informal in-class writing will count toward your participation grade.

Chapter update: You will choose a chapter from the Cambridge Handbook to update. Essentially, you will revise a section of the chapter to describe relevant literature that was published *after* the chapter was written (2011). You will complete intermediate stages of the project (a proposal, a list of references, and an annotated bibliography) before writing the full paper towards the end of the term. Each piece of this assignment will come with specific instructions and grading criteria. Tentative due dates are given on the schedule.

Class preparation: I would like you to prepare for our class sessions by writing a little something *outside* of class. You will create a Google Doc **journal** for writing personal reflections on the course content (~1 per class session) and 1 **Discussion Role worksheet** that you will work on in small groups (once a week for some weeks). Specific instructions for each of these tasks will be posted to Moodle. Participation in 1-on-1 meetings with me will also be part of your **class prep** grade.

Group work refers to activities that happen during class on “group work” days, and **participation** refers to activities on the other days. Part of these grades is just showing up, but it's also about *how* you show up as a member of our class. Assigning participation grades will involve a conversation with me about how you'd like to show up and whether you are reaching those goals.

Academic integrity

Honestly, in real life, it can be confusing to determine what counts as “plagiarism”, or even what counts as “cheating”. [Macalester's webpage on academic integrity](#) provides useful definitions and examples, but you may still feel unsure. **When in doubt, ask me!** In the context of this class, examples of integrity violations include directly quoting from a text without using quotation marks or providing the in-text citation (with page numbers!), closely paraphrasing a text without an in-text citation, copying a classmate's work or having one student write on behalf of multiple students (except when explicitly allowed in group activities), copying your own work from a different class without permission or acknowledgment, and using ChatGPT (or a similar tool) without acknowledgement. **Basically, be straightforward about where your work is coming from and err on the side of citing too much.**

If I suspect that a violation has occurred, intentionally or not, I will contact you and have a discussion. Afterwards, I will decide what is the most appropriate next step, which may include a 0 on the assignment and/or a referral to Ann Minnick, the Director of Academic Programs. **No one enjoys this, so let's avoid it, please!**

Accessibility & Resources

I encourage you to **make your well-being a priority** throughout this semester and beyond. Investing time into taking care of yourself will help you engage more fully in your academic experience. Remember that beyond being a student, **you are a human being** carrying your own experiences, thoughts, emotions, and identities with you. It is important to acknowledge any stressors you may be facing, which can be mental, emotional, physical, cultural, financial, etc., and how they can have an impact on your academic experience. I encourage you to remember to **attend to and advocate for your needs**. Outside of the classroom, sleeping, moving your body, and connecting with others can be strategies to help you be resilient at Macalester. If you are having difficulties maintaining your well-being, please don't hesitate to **contact me** and/or find support from other resources listed on Moodle under **"Resources"**. If you think you might need **accommodations** for a disability (e.g. depression, anxiety, chronic pain, etc.), please contact the **Disability Services Office** (disabilityservices@macalester.edu) at your earliest convenience.

Absences & late work

You have **4 "flex tokens"** this semester that you can use to:

- miss a day of in-class work
- miss a weekly assignment
- get a 48-hour extension on a major assignment

without penalty or explanation!
Just let me know that you're using a token.

*You do **NOT** need to use a token for religious observances, COVID-related absences, or accommodations via Disability Services.*

If you need more than the 4 tokens, exceptions can be granted under many circumstances. **Please reach out to me ASAP** so we can discuss!

FAQ

- **"What should I call you?"** Either Ariel (pronounced AIR-ee-uhl) or Dr. J (which I think sounds very cool).
- **"COVID?"** At minimum, we will follow all guidance from our [Mac Stays Safer commitment](#). Whether we want to have additional precautions in our classroom will be an ongoing conversation. Stay home if you are sick! We'll get you caught up. If I get sick/need to isolate, we can go virtual for as long as needed.
- **"When will you reply to my email?"**
Within 36 hours on "business days"
- **"When can we meet?"** come during drop-in hours or go to <https://calendly.com/ajames2> to set up an appointment

Tentative Course Schedule

Week	Class dates	Topic	Events & Deadlines
1	Sept. 5 & 7	Introductions; Theories	
2	Sept. 12 & 14	Theories	
3	Sept. 19 & 21	Theories	Sept. 21: Chapter update proposal
4	Sept. 26 & 28	Biology	All week: 1-on-1s
5	Oct. 3 & 5	Biology	
6	Oct. 10 & 12	Cognitive mechanisms	Oct. 12 - References
7	Oct. 17 & 19	Cognitive mech., brain training	
8	Oct. 24 26: No class	Brain training wrap-up	
9	Oct. 31 & Nov. 2	Gender	
10	Nov. 7 & 9 10: Withdraw deadline	Race	All week: 1-on-1s Nov. 12: Annotated bib
11	Nov. 14 & 16	Race, language & culture	
12	Nov. 21 23: No class	Disability	Nov. 21: First draft
13	Nov. 28 & 30	Giftedness	First draft 1-on-1s
14	Dec. 5 & Dec. 7	Non-human intelligence	First draft 1-on-1s
15	Dec. 12	Wrap-up/flex	Dec. 19: Final draft

Tentative Reading List

Pay attention to the **Who reads?** column! I've arranged the groups to try and balance reading load over the term.

***Cambridge Handbook:** Sternberg, R. J., & Kaufman, S. B. (Eds.). (2011). *The Cambridge handbook of intelligence*. Cambridge University Press

Topic	#	Reading	Who reads?
1: Introduction	#1	Cambridge Chapter 1: History of Theories and Measurement of Intelligence (Mackintosh, pp. 3-19)	all
	#2	Ogbu, J. U. (2002). Cultural Amplifiers of Intelligence: IQ and Minority Status in Cross-Cultural Perspective. In Fish (ed.) <i>Race and Intelligence: Separating Science From Myth</i> , pp. 241-278, Mahwah, NJ.	all
2: Theories & Tests	#3	Deary, I. J., Lawn, M., & Bartholomew, D. J. (2008). A conversation between Charles Spearman, Godfrey Thomson, and Edward L. Thorndike: The International Examinations Inquiry Meeting 1931-1938. <i>History of Psychology</i>, 11(2), 122-142.	
	#4	Cambridge Handbook Ch. 2	all
	#5	Gardner, H. (1987). The theory of multiple intelligences. <i>Annals of Dyslexia</i> , 37(1), 19-35.	all
3: Genes	#6	Plomin, R. & Deary, I. J. (2015). Genetics and intelligence differences: five special findings. <i>Molecular Psychiatry</i> , 20, 98-108.	Group 2 & 4
	#7	Turkheimer, E. (2000). Three laws of behavior genetics and what they mean. <i>Current Directions in Psychological Science</i> , 9(5), 160-164.	all
	#8	Wilson, R. S. (1978). Synchronies in mental development: An epigenetic perspective. <i>Science</i> 202(4371), 939-948.	Groups 1 & 3
	#9	Galton, F. (1904). Eugenics: Its definition, scope, and aims. <i>American Journal of Sociology</i> , 10(1), 1-25.	all
3: Information processing	#10	Kovacs, K. & Conway, A. R. A. (2019). What is IQ? Life beyond "general intelligence". <i>Current Directions in Psychological Science</i> , 28(2), 189-194.	Group 3
	#11	Ackerman, P. L., Beier, M.E., & Boyle, M.O. (2005). Working memory and intelligence: The same or different constructs? <i>Psychological Bulletin</i> , 131(1), 30-60. AND Kane et al (2005). Working memory capacity and fluid intelligence are strongly related constructs: Comment on Ackerman, Beier, and Boyle (2005). <i>Psychological Bulletin</i> , 131(1), 66-71.	Group 1 Note: you can skim or skip the group reading
	#12	Sheppard, L.D. & Vernon, P. A. (2008). Intelligence and speed of information processing: A review of 50 years of research. <i>Personality and Individual Differences</i> , 44, 535-551.	Group 2 & 4
	#13	Cambridge Handbook Ch. 22: Intelligence and the Cognitive Unconscious (Kaufman, pp. 442-467)	all

Tentative Schedule, cont.

4: Training	#14	Redick, T. S., Shipstead, Z., Harrison, T. L., Hicks, K. L., Fried, D. E., Hambrick, D. Z., ... & Engle, R. W. (2013). No evidence of intelligence improvement after working memory training: a randomized, placebo-controlled study. <i>Journal of Experimental Psychology: General</i> , 142(2), 359-379.	all
	#15	Clarke, N. (2006). Emotional intelligence training: A case caveat emptor. <i>Human Resource Development Review</i> , 5(4), 422-441.	all
	#16	Gathercole, S. E., Dunning, D. L., Holmes, J. & Norris, D. (2019). Working memory training involves learning new skills. <i>Journal of Memory and Language</i>, 105, 19-42.	Group 3
	#17	Jaeggi, S. M., Buschkuhl, M., Jonides, J., & Perrig, W.J. (2008). Improving fluid intelligence with training on working memory. <i>Proceedings of the National Academy of Sciences</i> , 105(19), 6829-6833.	all
5: Race	#18	Ogbu, J. U. (2002). Cultural Amplifiers of Intelligence: IQ and Minority Status in Cross-Cultural Perspective. In Fish (ed.) <i>Race and Intelligence: Separating Science From Myth</i> , pp. 241-278, Mahwah, NJ.	Group 1 Note: read from p. 249 to "Epistemology..." on p. 263
	#19	Sternberg, R. J., Grigorenko, E. L., & Kidd, K. K. (2005). Intelligence, race, and genetics. <i>American Psychologist</i> , 60(1), 46-59.	Group 4
	#20	Reich, D. (2018, March 23). How genetics is changing our understanding of "race". <i>The New York Times</i> . https://www.nytimes.com/2018/03/23/opinion/sunday/genetics-race.html	Groups 2 & 3
	#21	Klein, E. (2018, March 17). Sam Harris, Charles Murray, and the allure of race science. <i>Vox</i> . https://www.vox.com/policy-and-politics/2018/3/27/15695060/sam-harris-charles-murray-race-iq-forbidden-knowledge-podcast-bell-curve	all
6: Non-human animals	#22	Pepperberg, I. M. (1994). Numerical competence in an African gray parrot (<i>Psittacus erithacus</i>). <i>Journal of Comparative Psychology</i> , 108(1), 36.	Group 2
	#23	Pilley, J. W. & Reid, A. K. (2011). Border collie comprehends object names as verbal referents. <i>Behavioural Processes</i> , 86, 184-195.	Group 4
	#24	Shettleworth, S. J. Clever animals and killjoy explanations in comparative psychology. <i>Trends in Cognitive Sciences</i> , 14(11), 477-481.	Groups 1 & 3
	#25	Cambridge Handbook Ch. 16: Animal Intelligence (Zentall, pp. 309-327)	all
7: Wrap-up			