Introduction to Cognitive Psychology

PSY 102, Term I, Summer 2019 MTuWThF, 11:00 a.m. – 12:15 p.m., Allen 226 May 15th to June 24th http://cogpsychduke2019.github.io/

Course Instructor:

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What is this course about?

How do psychologists today study the mind and how it works? This is a course for anyone interested in what the mind is, how contemporary researchers study the mind, and what researchers have discovered about how the mind works.

In our first module, we will examine what constitutes engaging story-telling and scientific knowledge (Science Communication), why some methods are better for investigating specific research questions than others as well as current methodological issues within psychology (Cognitive Methods), and how you construct the world you see and feel around you (Perception). We will begin to critically consume academic journal articles and science communication pieces.

Next we will consider how our brain prioritizes and processes information in a world that bombards our senses (Attention), in addition to how we feel and construct emotions (Emotion) and how these constructs shape and are shaped by perception. The third module will consider how we communicate (Language), remember information over varying durations (Working Memory), conjure possible and impossible scenarios as well as past events (LTM: Structure, Processes & Mechanisms). We will evaluate how to convey these core cognitive psychology concepts to a broad audience with science communication pieces.

We will then apply our theories and skills to understanding more complex feats of the human mind, such as how we construct our own life stories (Autobiographical Memory) and make decisions (Decision-Making, Motivated Reasoning). In our final modules, we will think about how we take shortcuts when making choices (Cognitive Biases), how our memory and mind can be tricked and shaped by external events (False Memory, Misinformation, Collective Memory), how our mind processes information (Imagery) and solves problems (Creativity & Problem-Solving), and what factors promote better learning (Education, Learning & Motivation).

The first half of the course is primarily focused on basic science concepts within cognitive psychology, while the second half considers how these concepts are interlinked and directly applicable to other aspects of life (e.g., policy, education, history). Through weekly quizzes and several writing assignments, you will have many opportunities to reflect on course material and receive prompt feedback on your learning. The bulk of your grade will be determined by (1) your ability to identify and apply rigorous concepts in cognitive psychology, as assessed with class discussion, reading worksheets, and quizzes, and (2) the clarity and ingenuity with which you can

explain scientific findings to a broad and academic audience, as assessed by your science communication and summary pieces.

The only prerequisite for this course is Introductory Psychology (or some equivalent). Because our time is abbreviated during Summer Term, this is course is intensive in its pace through material. You should expect to spend between 2 and 4 hours daily outside of meeting time on course materials.

What are the goals of this course?

The first goal of this course is for you, students, to develop skills as critical consumers of empirical findings within cognitive psychology through academic and news readings as well as facilitated discussions. You will learn to evaluate the strengths and weaknesses of various research methods, and to judge whether the conclusions drawn from using particular methods and obtaining specific findings are justified. You will also learn to identify common behavioral results and paradigms within the field.

The second goal is to develop your skills as communicators of empirical research within cognitive psychology. Through science communication and summary pieces, peer feedback, and reading responses to empirical articles, you will hone your ability to communicate effectively about cognitive psychology and learn how to synthesize academic findings.

The third goal is to apply your skills as critical consumers of cognitive psychology to current issues in psychology and neuroscience, such as open science, good pedagogical practices, and diversity. For example, you will write a Wikipedia page for a current female or underrepresented cognitive scientist, including their biography and three of their most cited findings, to promote a more visibly inclusive face of cognitive psychology (e.g., project first started by Jess Wade). At the end of the course, the instructor will email the scientist who you profiled, with you CC'd and your profile attached, so that you can continue to belong to the cognitive psychology community.

What will I do in class, and how will I learn?

To achieve our course goals, there are five required elements of this course: (1) class meetings, (2) readings, (3) weekly quizzes, (4) science communication pieces, and (5) a science summary piece.

1. Class Meetings

Please arrive no later than 11:00 am and stay until 12:15 pm. There are many excellent reasons why you may need to excuse yourself from a class meeting, both personal and professional. However, in this time-constrained summer course, our time together is the most precious resource we have. Even a single absence from the course will significantly affect your ability to be successful. Thus, if you anticipate attending class regularly to be a difficulty for you, I ask that you do not take this course and consider completing it at another time. I would be happy to help you brainstorm alternative strategies to learn more about the wonderful world of psychological research.

To take this course, you must plan to be able to attend each class session in full. While attendance is required, my expectations for your presence in class are much higher. In addition to your physical presence in class, you should prepare for class by reading and reflecting on assigned material; engaging in small group discussions; helping peers understand tricky concepts; significantly contributing to class discussions; and more.

Each class, you will evaluate your own contributions to the discussion by scoring yourself on a

discussion rubric that I will email. I will factor these self-evaluations into a participation score for each class. At the end of the semester, your two worst scores will be dropped before I calculate your final Participation grade. Absences will be counted as a dropped score.

2. Readings

We do not have a formal textbook for this course, although we will on occasion read a few chapters. Mostly, we will explore readings and media drawn from many sources, including podcasts and articles from the popular media and primary scientific literature. These are posted on our website.

3. Weekly Quizzes

We will have six weekly quizzes consisting of multiple-choice and short answer questions. These quizzes are designed to review the material and give you ongoing feedback about how well you are learning in the course. Your two lowest quiz scores will be dropped from your grade. You will also have the opportunity to correct your mistakes and receive half credit on answers you got wrong.

4. Science Communication Pieces

The science communication pieces (Duke research blog post, science communication pitch, Wikipedia project) are designed to help you learn how to discuss what you are learning with friends and loved ones, and to consume media summaries of psychological research with a critical eye. You will apply what you are learning from your weekly readings into these pieces, which are also aimed towards making you feel a part of the Duke and general cognitive psychology research communities. Along the way, you will complete several mini assignments designed to guide you through the processing of finishing these projects. Detailed guidelines are available on our course website, and we will discuss grading rubrics in class.

5. Science Summary Piece

Finally, you will apply what you are learning from your weekly readings into a piece summarizing an article for academic audience. Taken together, the science communication and summary pieces will help you think more critically about the role of the audience in discussing science findings broadly.

How will you be graded?

This course will be graded on a 100-point scale using standard cutoffs for letter grades (A,B,C,D,NP with +/-). Detailed grading rubrics will be provided on Sakai.

Your final course grade will be determined in the following way:

o Participation: 20% o Quizzes: 15%

o Science communication pitch: 5% o Duke research blog post: 20% o Science summary piece: 20% o Wikipedia project: 20%

What are the class policies?

Laptops and Classroom Technology

We will have the opportunity to learn about potential influences of technology on our psychology. For this reason, laptops are only allowed if you must take notes or cannot print the readings that we will discuss in class. Outside of specific class activities, cell phones should be dark and silent during our class meetings. If you are expecting an important message during class that requires you to check

your phone, speak to me. Feel free to step out for brief breaks to check texts, emails, etc.

To complete class assignments, you will need access to a personal computing device, such as a laptop, for accessing class readings, listening to podcasts, and completing and submitting class assignments. You can find available machines at the Duke University Libraries (hours: https://library.duke.edu/about/hours). I am committed to providing an equitable learning environment. If access to technology is a hardship for you, please reach out and you will be supported confidentially.

Missed class or work

If you are unable to attend class or meet an assignment deadline, please contact me as soon as possible, but no later than 48 hours, to discuss your missed work. More than two absences will require a conversation with me to discuss your progress and continued ability to succeed in the course. We may discuss options such as resources to support missed content, revised timelines for turning in assignments, or withdrawing from the course so you can learn this content at another time. You should seek support from your academic dean if you are experiencing long-term illnesses or personal emergencies. See <u>Trinity's illness policies</u> for details.

Commitment to Diversity and Equity

Adapted from https://www.brown.edu/sheridan/teaching-learning-resources/inclusive-teaching/statements by Brenda Yang

Our classroom does not exist in a vacuum: historical and systemic forces powerfully shape our beliefs, interactions with each other, and even the content of the course. It is my intent that students from diverse backgrounds and perspectives be served by this course, that students' needs be addressed both in and out of class, and that diversity be viewed as a resource, strength, and benefit. It is my goal to present materials and activities celebratory of diversity in multiple forms: gender, sexuality, ethnicity, race, culture, disability, age, veteran status, and socioeconomic status. I will encourage us as a community of learners to operate from a place of cultural humility and to assume best intent. Your suggestions are appreciated and encouraged.

Changes to the syllabus

I may make minor changes to the syllabus, such as eliminating or changing a reading assignment, or adjusting a deadline. Such changes will be made in consultation with the class to ensure that sufficient notice is given and that changes are fair and favorable.

Academic accommodations

I am committed to ensuring that students have every opportunity to succeed in our course. Students who have a disability, which may necessitate an academic accommodation or the use of auxiliary aids and services in a class, should initiate the request with the Student Disability Access Office (SDAO). The SDAO will evaluate the request with required documentation, recommend appropriate accommodations, and prepare a verification letter dated in the current academic term in which the request is being made. Please contact the SDAO as soon as possible.

Academic integrity

Students are expected to adhere to <u>Duke's Community Standard</u> and are responsible for understanding the University rules regarding academic integrity. In brief, conduct prohibited includes all forms of academic dishonesty: e.g., unpermitted collaboration, representing another's work as one's own, or helping or allowing someone else to do any of these things. The *minimum* penalty for academic dishonesty is receiving zero credit on the assignment in question.

Week	Day	Date, Day #	Topic	Feedback	Readings Due	Assignments Due
1	W	May 15, #1	Science Communication			Get to Know You Qualtrics survey
1	Th	May 16, #2	Cognitive Methods Chpt 2, Gazzaniga		Chapter on Methodology from Gazzaniga Ted Talk: Bad Science	
	E	M 17 #2	D .:		Lab Manual, Darling (2017)	
1	F	May 17, #3	Perception,		Gruters et al. (2018)	
	M	M 20 #4	Chpt 3, Goldstein	Worksheet	Science News: Yong (2018), Dean (2018)	T
2	M	May 20, #4	Attention Chpt 4, Goldstein	feedback	Kang and Wheatley (2017), Middlebrooks et al. (2017)	Tweet summary of SciComm article
			Chpt 4, Goldstein Chpt 6/7, Purves	теенраск	` ,	Reading worksheet
2	Tu	May 21, #5	Attention	Quiz &	Podcast: Hidden Brain (Buying Attention) Wechsler et al. (2018), Seli et al. (2018)	Headline of SciComm article
2	1 u	May 21, #3	Chpt 4, Goldstein	Worksheet	Podcast: Hidden Brain (Life, Interrupted)	Reading worksheet
			Chpt 6/7, Purves	feedback	rodeast. Fildden Brain (Life, Interrupted)	Reading worksheet
2	W	May 22, #6	Emotion	Tweet &	Kragel et al. (2016), Siegel et al. (2018)	
2	vv	1v1ay 22, #0	Chpt 10, Purves	Worksheet	Podcast: All in the Mind (The Creation of	
			Clipt 10, 1 dives	feedback	Emotions)	
2	Th	May 23, #7	Emotion	Headline	D'Arbeloff et al. (2018),	Opening paragraph SciComm article
4	111	1 VI $ay 23, \pi7$	Chpt 10, Purves	feedback	MacCormack and Lindquist (2019)	Opening paragraph selection article
			Clipt 10, 1 dives	recuback	Science News: Chen (2018), Strickland	
					(2016)	
2	F	May 24, #8	Review		Chapters 1 & 2 in Goldstein textbook	
		111ay 21, 110		27 Memorial Day -	no class, readings, or assignments	
3	Tu	May 28, #9	Language	Quiz	Bergelson and Aislin (2017), Yu et al. (2019)	Choose scientist for Wikipedia profile
3	14	111ay 20, 117	Chpt 11, Goldstein	Quiz	Science News: Gutman (2017)	Choose scientist for winipedia profile
3	W	May 29, #10	Working memory /	Opening	Kable et al. (2017), Yin et al. (2019)	Science pitch of Scicomm piece
J	••	111ay 22, 11 10	cognitive training	paragraph	Science News: Noë (2017), Duong (2019)	belefied pitch of beleginin piece
			Chpt 5, Goldstein	feedback	selence 1 (2017), 12 doing (2017)	
			Chpt 13, Purves			
3	Th	May 30, #11	LTM: Structure		Uitvlugt and Healey (2019)	
		,,	Episodic Memory		Ben-Yakov and Henson (2018)	
			Chpt 6, Goldstein		Scientist summary: Williams et al. (2019)	
			1 ,		Science News: Shute (2014)	
3	F	May 31, #12	LTM: Processes	Pitch feedback	Vaz et al. (2019), Chapter 7 in the Goldstein	Multiple paragraph SciComm article
		,	& Mechanisms		textbook, Scientist Summary: Gelinas (2019)	1 1 0 1
			Chpt 7, Goldstein			
4	M	June 3, #13	Autobiographical Memory	Quiz	Rubin et al. (2019), Stanley et al. (2017)	
		•	Chpt 8, Goldstein	-	Science News: Leung (2019)	
			-		Podcast: All in the Mind (A Highly Superior	
					Memory)	
4	Tu	June 4, #14	Knowledge /	Reverse outline	Chapter 9 in the Goldstein textbook	Opening paragraph of scientist audience
			Categorization	of paragraphs		summary article
			Chpt 9, Goldstein			Midsemester Qualtrics survey
4	W	June 5, #15	Review		Scientist Summary: Frankland & Josselyn	Biography of Wikipedia profile
					(2018), Ramirez (2018), Hutter & Wilson	
					(2018)	
					Podcast: Hidden Brain (Looking Back)	

4	Th	June 6, #16	Decision-making	Opening	Pryor et al. (2019), Pearson et al. (2018)	
•	111	june o, mio	Chpt 13, Goldstein	paragraph	Science News: Lombrozo (2014)	
			Chapt 14, Purves	feedback	3	
4	F	June 7, #17	Motivated Reasoning	Biography	Pennycook and Rand (2018),	
			Chpt 13, Goldstein	feedback	Stanley et al. (2019)	
			Chapt 14, Purves	Quiz	Podcast: Hidden Brain (I'm Right, You're	
					Wrong)	
5	\mathbf{M}	June 10, #18	Cognitive Biases		Levari et al. (2018),	Outline of Duke Research Blog
			Chpt 13, Goldstein		Klein and O'Brien (2018)	
			Chapt 14, Purves		Podcast: You Are Not So Smart (Active	
					Information Avoidance)	
					Oatmeal comic: Believe	
5	Tu	June 11, #19	False Memory	Outline feedback	Frenda et al. (2016), Zhu et al. (2019)	Multiple paragraphs scientist article
			Chpt 8, Goldstein		TED Radio Hour: Can Eyewitnesses Create	
					Memories?	
5	W	June 12, #20	Misinformation	Multiple	Fazio et al. (2015), Vosoughi et al. (2018)	
			Chpt 8, Goldstein	paragraph	Play computer game <u>ncase.me/crowds</u>	
				feedback	Scientist summary: Lazer et al. (2018)	
5	Th	June 13, #21	Review & Karl Bates		Grinberg et al. (2019), Lombrozo (2018)	Draft of Duke Research Blog
			visiting class			
5	F	June 14, #22	Collective Memory	Quiz	Maswood et al. (2019), Abel et al. (2019)	Outline of research for Wikipedia profile
			Wertsch & Roediger		Science News: Stix (2018), Cummins (2018)	
			(2008), Memory			
6	M	June 17, #23	Creativity & Problem-	Draft feedback	Addis et al. (2016), Beaty et al. (2018)	Outline scientist audience summary article
			Solving		Podcast: Scott Barry Kaufman (Creativity	
		T 10 1101	Chpt 12, Goldstein	0 11 0 11 1	with Constraints)	
6	Tu	June 18, #24	Learning & Motivation	Outline feedback	Marvin and Shohamy (2016),	
			Chpt 14, Purves		Lydon-Staley et al. (2018)	
			Charpentier et al. (2018)		Scientist summaries: Levy (2018), DiMenichi	
	XX 77	I 40 #05	& more	O 41: C 11 1	& Tricomi (2016)	E. 1D 1 D 1 D1
6	W	June 19, #25	Imagery	Outline feedback	Chapter 10 of Goldstein textbook	Final Duke Research Blog
			Chpt 10, Goldstein		Podcast: The Psych Files (How to Make	
	Th	Inno 20 #27	Education		Study Groups Effective)	Colombiat any
6	1 n	June 20, #26	Chpt 7, Goldstein		Smith et al. (2016), Hard et al. (2019) Scientist summary: Dunlosky et al. (2013)	Scientist summary article
6	F	June 21, #27	Education	Quiz	Ravizza et al. (2017), Sana et al. (2013)	
U	Г	June 41, #4/	Education	Quiz	Science News: Lombrozo (2013), Supiano	
					(2019)	
7 (3)	M	June 24, #28	Overview	Review	None	Wikipedia profile
, (3)	111	Jane 2 1, 1120	O TOTALE W	110 / 10 //	110110	" Impedia profite

Bibliography

Science Communication (#1/28 of class):

• None

Cognitive Methods (#2/28 of class):

- Gazzaniga, M., Ivy, R.B., Mangum, G.R. (2008). Methods of Cognitive Neuroscience. In: Cognitive Neuroscience: The Biology of the Mind, pp. 110-162. New York City: W.W. Norton & Company Third Edition.
- Goldacre, B. (2011). Battling bad science. Retrieved from https://www.ted.com/talks/ben_goldacre_battling_bad_science
- Lab manual (https://cogpsychduke2019.github.io/files/LabManual.pdf)
- Darling, N. (2017). Attracting WEIRD Samples. Retrieved from Psychology Today website: https://www.psychologytoday.com/blog/thinking-about-kids/201710/attracting-weird-samples

Perception (#3/28 of class):

Article:

 Gruters, K. G., Murphy, D. L. K., Jenson, C. D., Smith, D. W., Shera, C. A., & Groh, J. M. (2018). The eardrums move when the eyes move: A multisensory effect on the mechanics of hearing. *Proceedings of the National Academy of Sciences*, 115(6), E1309–E1318. https://doi.org/10.1073/pnas.1717948115

Science News:

- Yong, E. (2018, January 23). When Your Eyes Move, So Do Your Eardrums. Retrieved from The Atlantic website: https://www.theatlantic.com/science/archive/2018/01/when-your-eyes-move-so-do-your-eardrums/551237/
- Dean, S. (2018, January 25). Our Eye Movements Also Move Eardrums, And Nobody Knows Why. Retrieved from https://www.sciencealert.com/eye-movements-cause-vibrations-eardrums-hearing-weird-brain

Attention, Day 1 (#4/28 of class):

Articles

- Kang, O., & Wheatley, T. (2017). Pupil dilation patterns spontaneously synchronize across individuals during shared attention. *Journal of Experimental Psychology: General*, 146(4), 569–576. https://doi.org/10.1037/xge0000271
- Middlebrooks, C. D., Kerr, T., & Castel, A. D. (2017). Selectively Distracted: Divided Attention and Memory for Important Information. *Psychological Science*, 28(8), 1103–1115. https://doi.org/10.1177/0956797617702502

Podcast

Vedantam, S., Shah, P., & Boyle, T. (2018). Buying Attention | Hidden Brain: NPR. Retrieved from https://www.npr.org/2018/01/01/574073721/our-mental-space-under-attack

Attention, Day 2 (#5/28 of class):

Articles:

• Wechsler, K., Drescher, U., Janouch, C., Haeger, M., Voelcker-Rehage, C., & Bock, O. (2018). Multitasking During Simulated Car Driving: A Comparison

- of Young and Older Persons. Frontiers in Psychology, 9. https://doi.org/10.3389/fpsyg.2018.00910
- Seli, P., Carriere, J. S. A., Wammes, J. D., Risko, E. F., Schacter, D. L., & Smilek, D. (2018). On the Clock: Evidence for the Rapid and Strategic Modulation of Mind Wandering. *Psychological Science*, 29(8), 1247–1256. https://doi.org/10.1177/0956797618761039

Podcast

• Vedantam, S. (2017). Radio Replay: Life, Interrupted | Hidden Brain: NPR. Retrieved from https://www.npr.org/2017/12/01/567834281/radio-replay-life-interrupted

Emotion, Day 1 (#6/28 of class):

Articles

- Kragel, P. A., Knodt, A. R., Hariri, A. R., & LaBar, K. S. (2016). Decoding Spontaneous Emotional States in the Human Brain. *PLOS Biology*, *14*(9), e2000106. https://doi.org/10.1371/journal.pbio.2000106
- Siegel, E. H., Wormwood, J. B., Quigley, K. S., & Barrett, L. F. (2018). Seeing What You Feel: Affect Drives Visual Perception of Structurally Neutral Faces. *Psychological Science*, 29(4), 496–503. https://doi.org/10.1177/0956797617741718

Podcast:

• Malcolm, L. (2017, July 5). The creation of emotions | All in the Mind. Retrieved from https://www.abc.net.au/radionational/programs/allinthemind/the-creation-of-emotions/8576540

Emotion, Day 2 (#7/28 of class):

Articles

- d'Arbeloff, T. C., Kim, M. J., Knodt, A. R., Radtke, S. R., Brigidi, B. D., & Hariri, A. R. (2018). Microstructural integrity of a pathway connecting the prefrontal cortex and amygdala moderates the association between cognitive reappraisal and negative emotions. *Emotion*, 18(6), 912–915. https://doi.org/10.1037/emo00000447
- MacCormack, J. K., & Lindquist, K. A. (2019). Feeling hangry? When hunger is conceptualized as emotion. *Emotion*, 19(2), 301–319. https://doi.org/10.1037/emo0000422

Science News

- Chen, A. (2018). How Hunger Pangs Can Make Nice People "Hangry." Retrieved from NPR.org website: https://www.npr.org/sections/health-shots/2018/06/11/618395072/how-hunger-pangs-can-make-nice-people-hangry
- Strickland, A. (2016). This is what emotions look like in your brain. Retrieved from CNN website: https://www.cnn.com/2016/10/06/health/spontaneous-emotions-brain-scans/index.html

Review (#8/28 of class):

Textbook Chapter

• <u>Chapter 1</u> and <u>Chapter 2</u> from the 4th edition of Bruce Goldstein's Cognitive Psychology textbook https://www.cengage.com/c/cognitive-psychology-connecting-mind-research-and-everyday-experience-4e-goldstein/9781285763880

Language (#9/28 of class):

Articles

- Bergelson, E., & Aslin, R. N. (2017). Nature and origins of the lexicon in 6-mo-olds. *Proceedings of the National Academy of Sciences*, 114(49), 12916–12921. https://doi.org/10.1073/pnas.1712966114
- Yu, C., Suanda, S. H., & Smith, L. B. (2019). Infant sustained attention but not joint attention to objects at 9 months predicts vocabulary at 12 and 15 months. *Developmental Science*, 22(1), e12735. https://doi.org/10.1111/desc.12735

Science news:

- Gutman, R. (2017, November 20). The Connected Vocabularies of Six-Month-Olds. Retrieved from The Atlantic website: https://www.theatlantic.com/science/archive/2017/11/babies-language-vocabularies/546320/
- Hayakawa, S., & Marian, V. (2019). How Language Shapes the Brain. Retrieved from Scientific American Blog Network website: https://blogs.scientificamerican.com/observations/how-language-shapes-the-brain/

Working Memory / Cognitive Training (#10/28 of class):

Articles

- Kable, J. W., Caulfield, M. K., Falcone, M., McConnell, M., Bernardo, L., Parthasarathi, T., ... Lerman, C. (2017). No Effect of Commercial Cognitive Training on Brain Activity, Choice Behavior, or Cognitive Performance. *Journal of Neuroscience*, 37(31), 7390–7402. https://doi.org/10.1523/INEUROSCI.2832-16.2017
- Yin, S., Sui, J., Chiu, Y.-C., Chen, A., & Egner, T. (2019). Automatic Prioritization of Self-Referential Stimuli in Working Memory. *Psychological Science*, 30(3), 415–423. https://doi.org/10.1177/0956797618818483

Science News

- Noe, A. (2017). More Bad News For Brain-Training Games. Retrieved from NPR.org website: https://www.npr.org/sections/13.7/2017/07/14/536759455/more-bad-news-for-brain-training-games
- Duong, Y. (2019). It's Not Your Fault -- Your Brain is Self-Centered. Retrieved from https://today.duke.edu/2019/03/its-not-your-fault-your-brain-self-centered

LTM Structure (Episodic Memory) (#11/28 of class):

Articles

- Uitvlugt, M. G., & Healey, M. K. (2019). Temporal Proximity Links Unrelated News Events in Memory. Psychological Science, 30(1), 92–104. https://doi.org/10.1177/0956797618808474
- Ben-Yakov, A., & Henson, R. N. (2018). The Hippocampal Film Editor: Sensitivity and Specificity to Event Boundaries in Continuous Experience. *Journal of Neuroscience*, 38(47), 10057–10068. https://doi.org/10.1523/JNEUROSCI.0524-18.2018

Scientist Summary:

 Williams, A. N., Postans, M., & Hodgetts, C. J. (2019). How the Human Brain Segments Continuous Experience. *Journal of Neuroscience*, 39(17), 3172–3174. https://doi.org/10.1523/JNEUROSCI.3041-18.2019 • Shute, N. (2014). Our Brains Rewrite Our Memories, Putting Present In The Past. Retrieved from NPR.org website: https://www.npr.org/sections/health-shots/2014/02/04/271527934/our-brains-rewrite-our-memories-putting-present-in-the-past

LTM Processes & Mechanisms (#12/28 of class):

Articles

- Chapter 7 from the 4th edition of Bruce Goldstein's Cognitive Psychology textbook https://www.cengage.com/c/cognitive-psychology-connecting-mind-research-and-everyday-experience-4e-goldstein/9781285763880
- Vaz, A. P., Inati, S. K., Brunel, N., & Zaghloul, K. A. (2019). Coupled ripple oscillations between the medial temporal lobe and neocortex retrieve human memory. *Science*, 363(6430), 975–978. https://doi.org/10.1126/science.aau8956

Scientist Summary

• Gelinas, J. (2019). Ripples for memory retrieval in humans. Science, 363(6430), 927–928. https://doi.org/10.1126/science.aaw6767

Autobiographical Memory (#13/28 of class):

Articles

- Rubin, D. C., Deffler, S. A., & Umanath, S. (2019). Scenes enable a sense of reliving: Implications for autobiographical memory. *Cognition*, 183, 44–56. https://doi.org/10.1016/j.cognition.2018.10.024
- Stanley, M. L., Parikh, N., Stewart, G. W., & De Brigard, F. (2017). Emotional intensity in episodic autobiographical memory and counterfactual thinking. *Consciousness and Cognition*, 48, 283–291. https://doi.org/10.1016/j.concog.2016.12.013

Science News

• Leung, W. (2019). Record and replay: How a Canadian-made app is aiming to help Alzheimer's patients improve their daily lives - The Globe and Mail. Retrieved from https://www.theglobeandmail.com/canada/article-toronto-teams-hippocamera-a-high-tech-memory-aid-for-alzheimers/

Podcast

• Malcolm, L. (2019). A highly superior memory | All in the Mind. Retrieved from https://www.abc.net.au/radionational/programs/allinthemind/a-highly-superior-memory/11021088

Knowledge / Categorization (#14/28 of class):

Textbook Chapter:

Chapter 9 from the 4th edition of Bruce Goldstein's Cognitive Psychology textbook https://www.cengage.com/c/cognitive-psychology-connecting-mind-research-and-everyday-experience-4e-goldstein/9781285763880

Review Day (#15/28 of class):

Science Summaries

 Hutter, S. A., & Wilson, A. I. (2018). A Novel Role for the Hippocampus in Category Learning. *Journal of Neuroscience*, 38(31), 6803–6805. https://doi.org/10.1523/JNEUROSCI.1085-18.2018

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- DiMenichi, B. C., & Tricomi, E. (2016). Are You Smarter Than a Teenager? Maybe Not When It Comes to Reinforcement Learning. *Neuron*, 92(1), 1–3. https://doi.org/10.1016/j.neuron.2016.09.043

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