

PSYC3209: Cognitive Neuroscience

[View Online](#)

This reading list belongs to the advanced undergraduate level Psychology course named "Cognitive Neuroscience" (PSYC3209). The course is also taken by Masters students (PSYCG209/PSYCM209). The associated Moodle page is <https://moodle.ucl.ac.uk/course/view.php?id=22137>

1.

Cognitive Neuroscience: The Biology of the Mind [Internet]. W. W. Norton & Company; 5th International student edition edition (5 Nov 2013); Available from: https://www.amazon.co.uk/Cognitive-Neuroscience-Biology-Michael-Gazzaniga/dp/0393667812/ref=sr_1_3?crid=1TP7LE7TAQUZF&keywords=gazzaniga+cognitive+neuroscience+the+biology+of+the+mind&qid=1579090487&srefix=gazza%2Caps%2C146&sr=8-3

2.

Michael S. Gazzaniga, et al. Structure and function of the nervous system. In: Cognitive neuroscience: the biology of the mind. 4th ed., International student ed. New York: W.W. Norton; 2014. p. 22–79.

3.

Gazzaniga, Ivry and Mangun. A Brief History of Cognitive Neuroscience. Chapter 1 of the textbook. In: A brief history of cognitive neuroscience Chapter 1 in Cognitive Neuroscience: The Biology of the Mind [Paperback]. W. W. Norton & Company; 5th International student edition edition (5 Nov 2013); p. 2–21.

4.

Rösler F, Ranganath C. On how to reconcile mind and brain. In: Neuroimaging of Human Memory Linking cognitive processes to neural systems [Internet]. Oxford University Press; 2009. p. 15–24. Available from: <https://doi.org/10.1093/acprof:oso/9780199217298.003.0002>

5.

Kosslyn SM. If neuroimaging is the answer, what is the question? [Internet]. Available from: <http://rstb.royalsocietypublishing.org/content/354/1387/1283.full.pdf>

6.

Neuroimaging: Separating the Promise from the Pipe Dreams - Dana Foundation [Internet]. Available from: <https://www.dana.org/article/neuroimaging-separating-the-promise-from-the-pipe-dreams/>

7.

Klein C. Philosophical Issues in Neuroimaging. *Philosophy Compass*. 2010 Feb;5(2):186–98.

8.

Landmarks in human functional brain imaging [Internet]. Available from: <https://wellcome.ac.uk/sites/default/files/wtvm052606.pdf>

9.

Moran JM, Zaki J. Functional Neuroimaging and Psychology: What Have You Done for Me Lately? *Journal of Cognitive Neuroscience*. 2013 Jun;25(6):834–42.

10.

Behrens TEJ, Fox P, Laird A, Smith SM. What is the most interesting part of the brain? *Trends in Cognitive Sciences*. 2013 Jan;17(1):2–4.

11.

Michael S. Gazzaniga, et al. *Methods of Cognitive Neuroscience*. Chapter 3 of textbook. In: *Methods of cognitive neuroscience The Biology of the Mind*. W. W. Norton & Company; 4th International student edition edition (5 Nov 2013); p. 72–123.

12.

Bandettini PA. What's New in Neuroimaging Methods? Annals of the New York Academy of Sciences [Internet]. 2009 Mar;1156(1):260–93. Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2716071/>

13.

Raichle ME. A brief history of human brain mapping. Trends in Neurosciences. 2009 Feb;32(2):118–26.

14.

Johnsrude, I., & Hauk, O. Neuroimaging: techniques for examining human brain function. Chapter 4 in Cognitive psychology: a methods companion. In Oxford: Oxford University Press in association with the Open University; 2005.

15.

Functional magnetic resonance imaging. Chapter 9 in Methods in Mind (Cognitive Neuroscience). Bandettini, P. A. In MIT Press (18 Sep 2009); Available from: <http://www.amazon.co.uk/Methods-Mind-Cognitive-Neuroscience-Senior/dp/0262513439>

16.

Logothetis NK. What we can do and what we cannot do with fMRI. Nature. 2008 Jun 12;453(7197):869–78.

17.

Rugg MD, Thompson-Schill SL. Moving Forward With fMRI Data. Perspectives on Psychological Science. 2013 Jan 1;8(1):84–7.

18.

Gratton G, Fabiani M. Shedding light on brain function: the event-related optical signal. Trends in Cognitive Sciences. 2001 Aug;5(8):357–63.

19.

Reite M, Teale P, Rojas DC. Magnetoencephalography: applications in psychiatry. *Biological Psychiatry* [Internet]. 1999 Jun;45(12):1553–63. Available from: [https://doi.org/10.1016/S0006-3223\(99\)00062-1](https://doi.org/10.1016/S0006-3223(99)00062-1)

20.

Rippon G. Electroencephalography. Chapter 10 in *Methods in Mind (Cognitive Neuroscience)* [Paperback]. In MIT Press (18 Sep 2009); Available from: <http://www.amazon.co.uk/Methods-Mind-Cognitive-Neuroscience-Senior/dp/0262513439>

21.

Coles, Michael G. H., Rugg, M. D. Event-related brain potentials: an introduction. Chapter 1 in *Electrophysiology of mind: event-related brain potentials and cognition*. Vol. Oxford psychology series. Oxford: Oxford University Press; 1995.

22.

Cyranoski D. Neuroscience: Thought experiment. *Nature*. 2011 Jan 13;469(7329):148–9.

23.

Walsh V, Cowey A. Magnetic stimulation studies of visual cognition. *Trends in Cognitive Sciences*. 1998 Mar;2(3):103–10.

24.

Priori A. Brain polarization in humans: a reappraisal of an old tool for prolonged non-invasive modulation of brain excitability. *Clinical Neurophysiology*. 2003 Apr;114(4):589–95.

25.

Thut G, Miniussi C. New insights into rhythmic brain activity from TMS-EEG studies. *Trends in Cognitive Sciences*. 2009 Apr;13(4):182–9.

26.

POLDRACK R. Can cognitive processes be inferred from neuroimaging data? Trends in Cognitive Sciences. 2006 Feb;10(2):59-63.

27.

Weber MJ, Thompson-Schill SL. Functional Neuroimaging Can Support Causal Claims about Brain Function. Journal of Cognitive Neuroscience. 2010 Nov;22(11):2415-6.

28.

Benton AL. Neuropsychological Assessment. Annual Review of Psychology. 1994 Jan;45(1):1-23.

29.

Structure and function of the nervous system. Chapter 2 of Cognitive Neuroscience: The Biology of the Mind [Paperback]. In W. W. Norton & Company; 4th International student edition edition (5 Nov 2013); Available from:
http://www.amazon.co.uk/Cognitive-Neuroscience-The-Biology-Mind/dp/0393922286/ref=sr_1_1?ie=UTF8&qid=1390474967&sr=8-1&keywords=gazzaniga+cognitive+neuroscience

30.

Gazzaniga MS, Ivry RB, Mangun GR. Language. Chapter 11 of Cognitive Neuroscience: The Biology of the Mind [Paperback]. In: Cognitive Neuroscience: The Biology of the Mind. W. W. Norton & Company; 4th International student edition; 2014.

31.

Devlin JT, Watkins KE. Stimulating language: insights from TMS. Brain. 2007 Mar 1;130(3):610-22.

32.

Duncan KJ, Pattamadilok C, Devlin JT. Investigating Occipito-temporal Contributions to

Reading with TMS. *Journal of Cognitive Neuroscience*. 2010 Apr;22(4):739–50.

33.

Sack AT. Transcranial magnetic stimulation, causal structure–function mapping and networks of functional relevance. *Current Opinion in Neurobiology*. 2006 Oct;16(5):593–9.

34.

Seyal M, Mull B, Bhullar N, Ahmad T, Gage B. Anticipation and execution of a simple reading task enhance corticospinal excitability. *Clinical Neurophysiology*. 1999 Mar;110(3):424–9.

35.

Walsh V. A theory of magnitude: common cortical metrics of time, space and quantity. *Trends in Cognitive Sciences*. 2003 Nov;7(11):483–8.

36.

Cappelletti M, Chamberlain R, Freeman ED, Kanai R, Butterworth B, Price CJ, et al. Commonalities for Numerical and Continuous Quantity Skills at Temporo-parietal Junction. *Journal of Cognitive Neuroscience*. 2013 Dec 17;1–14.

37.

Bueti D, Walsh V. The parietal cortex and the representation of time, space, number and other magnitudes. *Philosophical Transactions of the Royal Society B: Biological Sciences*. 2009 Jul 12;364(1525):1831–40.

38.

Harvey BM, Klein BP, Petridou N, Dumoulin SO. Topographic Representation of Numerosity in the Human Parietal Cortex. *Science*. 2013 Sep 6;341(6150):1123–6.

39.

Mauk MD, Buonomano DV. THE NEURAL BASIS OF TEMPORAL PROCESSING. Annual Review of Neuroscience. 2004 Jul 21;27(1):307-40.

40.

Butterworth B, Walsh V. Neural basis of mathematical cognition. Current Biology. 2011 Aug;21(16):R618-21.

41.

Gazzaniga MS, Ivry RB, Mangun GR. Memory. Chapter 9 of Cognitive Neuroscience: The Biology of the Mind [Paperback]. In: Cognitive Neuroscience: The Biology of the Mind. W. W. Norton & Company; 4th International student edition; 2014.

42.

Corkin S. TIMELINE What's new with the amnesic patient H.M.? Nature Reviews Neuroscience. 2002 Feb 1;3(2):153-60.

43.

Kim H. Neural activity that predicts subsequent memory and forgetting: A meta-analysis of 74 fMRI studies. Neurolmage. 2011 Feb;54(3):2446-61.

44.

Paller KA, Wagner AD. Observing the transformation of experience into memory. Trends in Cognitive Sciences. 2002 Feb;6(2):93-102.

45.

Uncapher MR, Wagner AD. Posterior parietal cortex and episodic encoding: Insights from fMRI subsequent memory effects and dual-attention theory. Neurobiology of Learning and Memory. 2009 Feb;91(2):139-54.

46.

Cohen N, Pell L, Edelson MG, Ben-Yakov A, Pine A, Dudai Y. Peri-encoding predictors of

memory encoding and consolidation. *Neuroscience & Biobehavioral Reviews*. 2014 Nov;

47.

Galli G, Gebert AD, Otten LJ. Available processing resources influence encoding-related brain activity before an event. *Cortex*. 2013 Sep;49(8):2239–48.

48.

Gruber MJ, Otten LJ. Voluntary Control over Prestimulus Activity Related to Encoding. *Journal of Neuroscience*. 2010 Jul 21;30(29):9793–800.

49.

Park H, Rugg MD. Prestimulus hippocampal activity predicts later recollection. *Hippocampus*. 2009;NA-NA.

50.

Gazzaniga MS, Ivry RB, Mangun GR. Cognitive Control. Chapter 12 of *Cognitive Neuroscience: The Biology of the Mind* [Paperback]. In: *Cognitive Neuroscience: The Biology of the Mind*. W. W. Norton & Co.; 4th International student edition; 2014.

51.

Gilbert SJ, Burgess PW. Executive function. *Current Biology*. 2008 Feb;18(3):R110–4.

52.

Bechara A, Damasio H, Damasio A. Emotion, Decision Making and the Orbitofrontal Cortex. *Cerebral Cortex*. 2000 Mar 1;10(3):295–307.

53.

Duncan J. An adaptive coding model of neural function in prefrontal cortex. *Nature Reviews Neuroscience* [Internet]. 2001 Nov;2(11):820–9. Available from: <https://www.nature.com/articles/35097575>

54.

Miller EK, Cohen JD. An Integrative Theory of Prefrontal Cortex Function. *Annual Review of Neuroscience*. 2001 Mar;24(1):167–202.

55.

Burgess P, Alderman N, Volle E, Benoit R, Gilbert S. Mesulam's frontal lobe mystery re-examined. *Restorative Neurology and Neuroscience*. 2009;27(5):493–506.

56.

Gilbert SJ, Bird G, Brindley R, Frith CD, Burgess PW. Atypical recruitment of medial prefrontal cortex in autism spectrum disorders: An fMRI study of two executive function tasks. *Neuropsychologia*. 2008 Jul;46(9):2281–91.

57.

Gilbert SJ, Spengler S, Simons JS, Steele JD, Lawrie SM, Frith CD, et al. Functional Specialization within Rostral Prefrontal Cortex (Area 10): A Meta-analysis. *Journal of Cognitive Neuroscience*. 2006 Jun;18(6):932–48.

58.

Ramnani N, Owen AM. Anterior prefrontal cortex: insights into function from anatomy and neuroimaging. *Nature Reviews Neuroscience*. 2004 Mar;5(3):184–94.

59.

Verhoeven JS, Cock P, Lagae L, Sunaert S. Neuroimaging of autism. *Neuroradiology*. 2010 Jan;52(1):3–14.

60.

White SJ, Frith U, Rellecke J, Al-Noor Z, Gilbert SJ. Autistic adolescents show atypical activation of the brain's mentalizing system even without a prior history of mentalizing problems. *Neuropsychologia*. 2014 Apr;56:17–25.

61.

White SJ. The Triple I Hypothesis: Taking Another('s) Perspective on Executive Dysfunction in Autism. *Journal of Autism and Developmental Disorders*. 2013 Jan;43(1):114–21.

62.

Frith U, Happé F. Autism spectrum disorder. *Current Biology*. 2005 Oct 11;15(19):R786–90.

63.

Adolphs R. Cognitive neuroscience: Cognitive neuroscience of human social behaviour. *Nature Reviews Neuroscience*. 2003 Mar;4(3):165–78.

64.

Rugg MD, Vilberg KL. Brain networks underlying episodic memory retrieval. *Current Opinion in Neurobiology*. 2013 Apr;23(2):255–60.

65.

Duverne S, Motamedinia S, Rugg MD. Effects of Age on the Neural Correlates of Retrieval Cue Processing are Modulated by Task Demands. *Journal of Cognitive Neuroscience*. 2009 Jan;21(1):1–17.

66.

Hutchinson JB, Uncapher MR, Wagner AD. Posterior parietal cortex and episodic retrieval: Convergent and divergent effects of attention and memory. *Learning & Memory*. 2009 May 23;16(6):343–56.

67.

Squire LR, Stark CEL, Clark RE. The Medial Temporal Lobe. *Annual Review of Neuroscience*. 2004 Jul 21;27(1):279–306.

68.

Rugg MD, Wilding EL. Retrieval processing and episodic memory. Trends in Cognitive Sciences. 2000;4:108-15.

69.

Gazzaniga MS, Ivry RB, Mangun GR. Social cognition. Chapter 13 of Cognitive Neuroscience: The Biology of the Mind [Paperback]. In: Cognitive Neuroscience: The Biology of the Mind. W. W. Norton & Company; 4th International student edition; 2014.

70.

Decision making. Chapter 24 of Principles of cognitive neuroscience. Sunderland, Mass: Sinauer Associates; 2008.

71.

Levy I, Lazzaro SC, Rutledge RB, Glimcher PW. Choice from Non-Choice: Predicting Consumer Preferences from Blood Oxygenation Level-Dependent Signals Obtained during Passive Viewing. Journal of Neuroscience. 2011 Jan 5;31(1):118-25.

72.

Rangel A, Camerer C, Montague PR. A framework for studying the neurobiology of value-based decision making. Nature Reviews Neuroscience. 2008 Jul;9(7):545-56.

73.

Lee VK, Harris LT. How social cognition can inform social decision making. Frontiers in Neuroscience. 2013;7.