

PSYCH-UA9029L01, Cognition

NYU London

Instructor Information

- TBA

Course Information

- Cognition Spring 2019
- Wednesday 17:00– 20:00
- Room TBC
- No co-requisites or prerequisites

Course Overview and Goals

This course provides a detailed introduction to the major topics in cognitive psychology and cognitive neuroscience, including perception, memory, language, problem solving, reasoning, and decision making. The course will discuss cutting-edge developments from research using behavioural, neuroimaging, and clinical methods. The class will involve lectures, student presentations, discussion, video material to accompany lectures, and occasional example class experiments. The course also has a practical component, for which students work in small groups and conduct an empirical study, which they write up in a research report.

Upon Completion of this Course, students will be able to:

1. Demonstrate understanding of the basic cognitive functions, based on key research findings.
2. Demonstrate knowledge of the main theories of cognition.
3. Demonstrate knowledge of the basic methods of cognitive research, plus their strengths and weaknesses.
4. Demonstrate understanding of the scientific process underlying cognitive research, and show a basic ability to assess the scientific quality of research.
5. Demonstrate ability to conduct and report a basic piece of empirical work.

Course Requirements

Grading of Assignments

The grade for this course will be determined according to these assessment components:

Assignments/ Activities	Description of Assignment	% of Final Grade	Due
Class presentation	a short (10 minute) class presentation on a topic selected by the student from a list provided by the lecturer.	10%	variable
Course essay	a 1500 word essay on a cognitive topic selected by the student, and agreed by the lecturer.	30%	week 6
Research report	A 1500 word report describing an empirical study conducted by the students. Students will work in groups of 4 or 5 students to test participants and analyse data. Each student will produce their own report of the study in the format of a research article.	30%	week 14
Final exam	consisting of a multiple-choice test and short answers.	30%	week 15

Failure to submit or fulfill any required course component results in failure of the class

Grades

Letter grades for the entire course will be assigned as follows:

Letter Grade	Percent	Description
A	Example: 93.5% and higher	Clear evidence of understanding, plus the ability to apply knowledge and reflect on the student's own learning.
B	Example: 82.5% - 87.49%	Evidence of good understanding and the ability to apply course content, but lacking reflectivity.
C	Example: 72.5% - 77.49%	Evidence of understanding, but lacking evidence of reflectivity and the ability to apply course content.
D	Example: 62.5% - 67.49	Evidence of understanding in a minimally acceptable way, and lacking reflectivity and the ability to apply course content.
F	Example: 59.99% and lower	Plagiarized, did not participate satisfactorily, did not hand in work, lack of understanding.

Course Materials

Required Textbooks & Materials

Smith, EE & Kosslyn, SM (2013) *Cognitive Psychology. Mind and Brain*. New Jersey: Pearson. ISBN: 978-1-292-02235-2 (this is the paperback version; other versions, including older editions, are also fine to use)

Optional Textbooks & Materials

Eysenck, MW & Keane, MT (2005) *Cognitive Psychology, A Student's Handbook (Fifth Edition)*. Hove: Psychology Press. ISBN: 1-84169-359-6

Ward, J. (2015). *The Student's Guide to Cognitive Neuroscience, 3rd edition*. Hove: Psychology Press. ISBN: 1841695343 (earlier editions are also fine to use)

Resources

- **Access your course materials:** [NYU Classes](http://nyu.edu/its/classes) (nyu.edu/its/classes)
- **Databases, journal articles, and more:** [Bobst Library](http://library.nyu.edu) (library.nyu.edu)
- **NYUL Library Collection:** [Senate House Library](http://catalogue.libraries.london.ac.uk) (catalogue.libraries.london.ac.uk)
- **Assistance with strengthening your writing:** [NYU Writing Center](http://nyu.mywconline.com) (nyu.mywconline.com)
- **Obtain 24/7 technology assistance:** [IT Help Desk](http://nyu.edu/it/servicedesk) (nyu.edu/it/servicedesk)

Course Schedule

Session/Date	Topic	Reading	Assignment Due
Session 1:	Introduction to cognitive psychology 1	1. Smith & Kosslyn chapter 1 2. Henson R. (2005) What can functional neuroimaging tell the experimental psychologist? <i>Quarterly Journal of Experimental Psychology A</i> , 58, 193-233. (.pdf available via NYU-Home Blackboard)	
Session 2:	Introduction to cognitive psychology 2	1. Smith & Kosslyn chapter 1	
Session 3:	Perception	1. Smith & Kosslyn chapter 2 2. Cohen Kadosh, R, & Henik, A (2007) Can synaesthesia research inform cognitive science? <i>Trends in Cognitive Sciences</i> , 11 (4), 177-184. (.pdf available via NYU-Home Blackboard)	

Session/Date	Topic	Reading	Assignment Due
Session 4:	Object recognition	1. Smith & Kosslyn chapter 2 2. Biederman, I (1987) Recognition-by-components: A theory of human image understanding. <i>Psychological Review</i> , 94, 115-147. (.pdf available via NYU-Home Blackboard)	
Session 5:	Attention 1	1. Smith & Kosslyn chapter 3, 7 2. Driver, J (2001) A selective review of selective attention research from the past century. <i>British Journal of Psychology</i> , 92, 53–78. (.pdf available via NYU-Home Blackboard)	
Session 6:	Attention 2	1. Smith & Kosslyn chapter 6 2. Corbetta M, Shulman GL. (2002) Control of goal-directed and stimulus-driven attention in the brain. <i>Nature Review Neuroscience</i> , 3, 201-215. (.pdf available via NYU-Home Blackboard)	essay
Session 7:	Memory 1	1. Smith & Kosslyn chapter 5 2. Ranganath, C & Blumenfeld, R (2005) Doubts about double dissociations between short- and long-term memory. <i>Trends in Cognitive Sciences</i> , 9 (8), 374-380. (.pdf available via NYU-Home Blackboard)	
Session 8:	Memory 2	1. Smith & Kosslyn chapter 4 2. Cabeza, R & St Jacques, P (2007) Functional neuroimaging of autobiographical memory. <i>Trends in Cognitive Sciences</i> , 11 (5), 220-227. (.pdf available via NYU-Home Blackboard)	
Session 9:	Concepts and Categories	1. Smith & Kosslyn chapter 12 2. Markman, A.B. & Ross, B. (2003) Category use and category learning. <i>Psychological Bulletin</i> 129, 592-613. (.pdf available via NYU-Home Blackboard)	
Session 10:	Language 1	1. Smith & Kosslyn chapter 12 2. Fiez, J & Petersen, S. (1998) Neuroimaging studies of word reading. <i>PNAS</i> 95, 914-921. (.pdf available via NYU-Home Blackboard).	
Session 11:	Language 2	1. Smith & Kosslyn chapter 12 2. Vigliocco, G., Hartsuiker, R.J. (2002). The interplay of meaning,	

Session/Date	Topic	Reading	Assignment Due
		sound, and syntax in sentence production. <i>Psychological Bulletin</i> 128(3), 442-472. (.pdf available via NYU-Home Blackboard)	
Session 12:	Problem solving	1. Smith & Kosslyn chapter 10 2. Bowden, E, Jung-Beeman, M, Fleck, J & Kounios, J (2005) New approaches to demystifying insight. <i>Trends in Cognitive Sciences</i> , 9 (7), 223-228. (.pdf available via NYU-Home Blackboard)	
Session 13:	Decision making	1. Smith & Kosslyn chapter 9, 10 2. Hastie, R (2001) Problems for judgment and decision making.	
Session 14:	Cognition and emotion	1. Smith & Kosslyn chapter 8 2. Dehaene, S & Naccache, L (2001) Towards a cognitive neuroscience of consciousness: basic evidence and a workspace framework. <i>Cognition</i> , 79, 1-37. (.pdf available via NYU-Home Blackboard)	report
Final Assessment:	Final exam		exam

Co-Curricular Activities

- None

Classroom Etiquette

Toilet breaks should be taken before or after class or during class breaks (there will be 3 short breaks during each class).

Food & drink, including gum, are not to be consumed in class.

Mobile phones should be set on silent and should not be used in class except for emergencies.

Laptops are only to be used for course-related purposes (e.g., taking notes, viewing hand-outs). You will not be allowed to use a laptop in class if you are caught using it for any other purpose.

NYUL Academic Policies

Attendance and Tardiness

- Key information on NYU London's absence policy, how to report absences, and what kinds of absences can be excused can be found on our [website](http://www.nyu.edu/london/academics/attendance-policy.html) (<http://www.nyu.edu/london/academics/attendance-policy.html>)

Assignments, Plagiarism, and Late Work

- You can find details on these topics and more on this section of our NYUL [website](https://www.nyu.edu/london/academics/academic-policies.html) (<https://www.nyu.edu/london/academics/academic-policies.html>) and on [the Policies and Procedures section of the NYU website](https://www.nyu.edu/academics/studying-abroad/upperclassmen-semester-academic-year-study-away/academic-resources/policies-and-procedures.html) for students studying away at global sites (<https://www.nyu.edu/academics/studying-abroad/upperclassmen-semester-academic-year-study-away/academic-resources/policies-and-procedures.html>).

Classroom Conduct

Academic communities exist to facilitate the process of acquiring and exchanging knowledge and understanding, to enhance the personal and intellectual development of its members, and to advance the interests of society. Essential to this mission is that all members of the University Community are safe and free to engage in a civil process of teaching and learning through their experiences both inside and outside the classroom. Accordingly, no student should engage in any form of behaviour that interferes with the academic or educational process, compromises the personal safety or well-being of another, or disrupts the administration of University programs or services. Please refer to the [NYU Disruptive Student Behavior Policy](#) for examples of disruptive behavior and guidelines for response and enforcement.

Disability Disclosure Statement

Academic accommodations are available for students with disabilities. Please contact the Moses Center for Students with Disabilities (212-998-4980 or mosescsd@nyu.edu) for further information. Students who are requesting academic accommodations are advised to reach out to the Moses Center as early as possible in the semester for assistance.

Instructor Bio

Jan de Fockert is a professor of psychology at Goldsmiths, University of London. Most of his research involves visual selective attention, and he uses both behavioural and neuroimaging methods. Some representative publications are:

De Fockert J. & Bremner A. (2011) Release of inattention blindness by high working memory load: elucidating the relationship between working memory and selective attention. *Cognition*, 121, 400-408.

De Fockert, J., Ramchurn, A., Van Velzen, J., Bergström, Z., & Bunce, D. (2009). Behavioural and ERP evidence of increased interference in old age. *Brain Research*, 1282, 67-73.

De Fockert, J., Rees, G., Frith, C., & Lavie, N. (2004). Neural Correlates of Attentional Capture in Visual Search. *Journal of Cognitive Neuroscience*, 16, 751-759.

De Fockert, J., Rees, G., Frith, C., & Lavie, N. (2001). The Role of Working Memory Load in Selective Attention. *Science*, 291, 1803-1806.