

Mondays at 10 am, Physiology Main Lecture Theatre (this has been *changed* from the location advertised in the Lecture List, which was Zoology).

Lecture 1 (Monday 13 January). Cerebral cortex. The two visual streams. Visual streams (1): object processing.

Lecture 2 (Monday 20 January). Visual streams (2): motion processing. Spatial cognition. Parietal cortex.

Lecture 3 (Monday 27 January). Attention. The binding problem.

Lecture 4 (Monday 3 February). Neural basis of memory (1).

Lecture 5 (Monday 10 February). Neural basis of memory (2).

Reading week

Lecture 6 (Monday 24 February). The prefrontal cortex.

Objectives. By the end of the course, you should be acquainted with some of the major developments and current theories in cognitive neuroscience. You should be familiar with the principles of cortical information processing; visual processing and its modularity; object perception; spatial cognition; attention; neglect; the binding and selection problems; types of memory; amnesic syndromes; neural structures underpinning memory storage, consolidation, and retrieval; ‘executive’ functions and the contributions of the prefrontal cortex.

- Please note the early start to the course and the unusual venue.
- Handouts with reading lists and sample essay titles will accompany each lecture topic.
- The course covers material in both psychology and neuroscience — so don’t let a lack of background in either put you off! I assume that you will have done some basic neuroscience previously (either as part of MVST 1B, or NST 1B Experimental Psychology or Neurobiology). If you haven’t, it may be worthwhile to get hold of previous handouts for these courses, or to read a general neuroscience textbook, and to seek supervisions early. However, I will try to make the course broadly accessible.
- If you wish to have supervision on the course, possible supervisors include myself, Dr Roshan Cools (rc245@cam.ac.uk) and Dr Luke Clark (lc260@cam.ac.uk, *Easter term only*). Please contact me if any problems arise.

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