

PSYC323: Visual Cognition Lab

Fall session, 2014

Syllabus

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Office Hours: Wednesday 10:00-11:30pm

Class Time: Tuesday 11:30-1:00pm and Friday 1:00-2:30pm
Class Location: Humphrey Hall 219

Course Objectives

Learn principles of experimental methods in human visual cognition, including experimental design, programming (Matlab), data management, and statistical analysis.

This course combines lectures, discussions, and hands-on experimental exercises.

There will be three research units with each requiring submission of a
experiments, and to improve your scientific writing.

Course Format

Research Units:

There will be three research units, each focusing on a particular topic in visual cognition.
The topic will be introduced by the professor on the first day of the unit.

Workload

Thought Papers

Thought papers are designed to assess your understanding and critical thinking with respect to the material presented in each research topic's lecture and readings. At the end of each lecture, one or two discussion questions will be presented that center around core theories, methodologies, or results.

In a short paper, discuss each of these questions, critically evaluating the perspectives that can be taken on the issues. The papers will be marked with an overall mark (out of 10).

Typical responses should be about one page long. Please do not use more than 500 words.

Thought papers are due prior to the discussion class of each research unit.

Thought paper #1: **due Friday, September 19**

Thought paper #2: **due Friday, October 10**

Thought paper #3: **due Friday, October 31**

Lab Reports

For each unit, we will conduct an experiment.

All data files will be collected, and you will analyze the data.

For each research unit, you will complete and submit a research report (method, results, and discussion).

Lab report #1: **due Friday, Oct. 3**

Lab report #2: **due Friday, Oct. 24**

Lab report #3: **due Friday, Nov. 14**

Tutorial Assignments

After each tutorial section, a short assignment will be provided that tests your understanding of the research tool presented during that tutorial.

Readings

There is no textbook. Readings will consist of articles (typically, review articles).

Grading Scheme

All components of this course will receive numerical percentage marks. The final grade you receive for the course will be derived by converting your numerical course average to a letter grade according to Queen's Official Grade Conversion Scale:

Grade	Numerical Course Average (Range)
A+	90-100
A	85-89
A-	80-84
B+	77-79
B	73-76
B-	70-72
C+	67-69
C	63-66
C-	60-62
D+	57-59
D	53-56
D-	50-52

failure of a course to a requirement to withdraw from the university.

Disability Accommodations

Queen's University is committed to achieving full accessibility for persons with disabilities. Part of this commitment includes arranging academic accommodations for students with disabilities to ensure they have an equitable opportunity to participate in all of their academic activities. If you are a student with a disability and think you may need accommodations, you are strongly encouraged to contact the Disability Services Office (DSO) and register as early as possible. For more information, including important deadlines, please visit the DSO website at: <http://www.queensu.ca/hcds/ds/>

Readings

Working Memory and Attention:

Downing, P.E. (2000). Interactions between visual working memory and selective attention. *Psychological Science*, 11, 467-473.

Kiyonaga, A., & Egner, T. (2014). The working memory Stroop effect: When internal representations clash with external stimuli. *Psychological Science*, 25(8), 1619-1629.

Object-Based Attention:

Moore, C.M., Yantis, S. & Vaughan, B. (1998). Object-based visual selection: Evidence from perceptual completion. *Psychological Science*, 9, 104-110.

Alvarez, G. A., & Scholl, B. J. (2005). How does attention select and track spatially extended objects? New effects of attentional concentration and amplification. *Journal of Experimental Psychology*, 134, 461-476.

Object-Substitution Masking:

Enns, J. T. (2004). Object substitution and its relation to other forms of visual masking. *Vision Research*, 44, 1321-1331.

<2nd article to be added later>

Date	Topic
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