

PSYC323: Laboratory in Attention Fall session, 2022

Syllabus

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Class Time: Monday 4:00pm – 5:30pm and Wednesday 2:30pm – 4:00pm
Class Location: Humphrey Hall 219

Learning Outcomes

- Develop an understanding of experimental methods for the study of human visual cognition.
- Be able to conduct a visual cognition experiment
- Be able to manage, statistically analyze, and interpret experimental data.
- Be able to research in depth an issue regarding visual cognition.
- Be able to effectively communicate research concepts within the field of visual cognition.

Course Format

Hybrid Offering:

- Classes which provide background information for tutorials and research units will be replaced with online material to provide that information. I will be available online during the class time to address any questions (see schedule below).
- In-person classes will be used to work on tutorial assignments and for data analysis and writing for research units.

Research Units:

- There will be three research units, each focusing on a particular topic in visual cognition.
- Each research unit will last two weeks (four classes).
- The first class of each research unit will be replaced with online material in which the professor will provide a lecture introducing the topic, and relevant readings.
- Readings and reflection papers must be completed prior to the second class.
- During the second class, the readings will be discussed and experimental data will be collected.
- During the third class, the results will be analyzed.
- During the fourth class, students will work on the writing of their lab reports.

Tutorials:

- There will be three tutorials, each focusing on a particular research tool used in visual cognition.
- Tutorials will last one week (2 classes)
- The first class of each tutorial will be replaced with online material in which the professor will provide background material relevant to that tutorial.
- During the second class, students will complete the tutorial assignment.

Research Proposal Poster:

- Four classes at the end of the term will be used to present your research proposals.
- Each student will provide a virtual poster and prepare a 5 minute presentation describing their research proposal.
- Students and instructors will observe and evaluate your poster presentation and ask questions.

Date	Topic
Wed. Sept. 7	Introduction to Visual Cognition
Mon. Sept. 12	Data Management Tutorial (online)
Wed. Sept. 14	Data Management Tutorial
Mon. Sept. 19	Lecture: Selective Attention (online)
Wed. Sept. 21	Lab Day: Readings Discussed / Data Collection
Mon. Sept. 26	Lab Day: Data Analysis
Wed. Sept. 28	Lab Day: Report Writing
Mon. Oct. 3	Signal Detection Tutorial (online)
Wed. Oct 5	Signal Detection Tutorial
Mon. Oct. 10	Thanksgiving (no class)
Wed. Oct. 12	Fall Break (no class)
Mon. Oct. 17	Lecture: Working Memory (online)
Wed. Oct. 19	Lab Day: Readings Discussed / Data Collection
Mon. Oct. 24	Lab Day: Data Analysis
Wed. Oct. 26	Lab Day: Report Writing
Mon. Oct. 31	Eye-Tracking Tutorial (online)
Wed. Nov. 2	Eye-Tracking Tutorial
Mon. Nov. 7	Lecture: Object-Based Attention (online)
Wed. Nov. 9	Lab Day: Readings Discussed / Data Collection
Mon. Nov. 14	Lab Day: Data Analysis
Wed. Nov. 16	Lab Day: Report Writing
Mon. Nov. 21	Presentations (Group 1)
Wed. Nov. 23	Presentations (Group 2)
Mon. Nov. 28	Presentations (Group 3)
Wed. Nov. 30	Presentations (Group 4)

Workload

Reflection Papers

- Reflection papers assess your understanding and critical thinking with respect to the material presented in each research topic's readings. At the beginning of each research unit, one or two discussion questions will be presented that center around core theories, methodologies, or results.
- The papers will be marked with an overall mark (out of 10). Responses should be no longer than one page single-spaced.
- Reflection papers are due prior to the second class of each research unit.
 - Reflection paper #1: due Sept. 21
 - Reflection paper #2: due Oct. 19
 - Reflection paper #3: due Nov. 9

Lab Reports

- For each research 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 (intro, method, results, and discussion). Reports will be due at 11:55pm the day following the writing class.
 - Lab report #1: due Sept. 29
 - Lab report #2: due Oct. 27
 - Lab report #3: due Nov. 17

Tutorial Assignments

- After each tutorial section, a short assignment will be provided that tests your understanding of the research tool presented during that tutorial. Tutorial assignments will be due at 11:55pm on the second day of that tutorial.
 - Tutorial #1: due Sept. 14
 - Tutorial #2: due Oct. 5
 - Tutorial #3: due Nov. 2

Research Proposal Poster

- Each student will submit a research proposal poster.
- The research proposal posters will be presented to the class in a poster session.
- The content and execution of your presentation will be evaluated by the instructors and by your peers. Both the instructors' and the peer evaluations will be counted toward your presentation grade.

Evaluation

Reflection Papers	9% (3% each)
Lab Report 1	15%
Lab Report 2	18%
Lab Report 3	20%
Tutorial Assignments	18% (6% each)
Research Proposal Poster	20%

Readings

There is no textbook. Readings will be posted about a week prior to each of the research units. Readings will typically consist of one research article that provides some background information on the research area.

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:

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
F	49 and below

Academic Integrity

Queen's students, faculty, administrators and staff all have responsibilities for upholding the [fundamental values of academic integrity](#); honesty, trust, fairness, respect, responsibility and courage. These values are central to the building, nurturing, and sustaining of an academic community in which all members of the community will thrive. Adherence to the values expressed through academic integrity forms a foundation for the "freedom of inquiry and exchange of ideas" essential to the intellectual life of the University (see the [Senate Report on Principles and Priorities](#)).

Students are responsible for familiarizing themselves with the regulations concerning academic integrity and for ensuring that their assignments and their behaviour conform to the principles of academic integrity. Information on academic integrity is available in the Arts and Science Calendar (see [Academic Regulation 1](#)), on the [Arts and Science website](#), and from the instructor of this course. Departures from academic integrity include plagiarism, use of unauthorized materials, facilitation, forgery, use of forged materials, contract cheating, unauthorized use of intellectual property, unauthorized collaboration, failure to abide by academic rules, departure from the core values of academic integrity, and falsification, and are antithetical to the development of an academic community at Queen's. Given the seriousness of these matters, actions which contravene the regulation on academic integrity carry sanctions appropriate to the severity of the departure that can range from a warning or the loss of grades on an assignment to the failure of a course to a requirement to withdraw from the university.

Disability Accommodations

Queen's University is committed to achieving full accessibility for people 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 their academic activities. The Senate Policy for Accommodations for Students with Disabilities was approved at [Senate in November 2016](#). If you are a student with a disability and

think you may need academic accommodations, you are strongly encouraged to contact the **Queen's Student Accessibility Services (QSAS)** and register as early as possible. For more information, including important deadlines, please visit the [QSAS website](#).

Academic Considerations for Students with Extenuating Circumstances

Academic consideration is a process for the university community to provide a compassionate response to assist students experiencing unforeseen, short-term extenuating circumstances that may impact or impede a student's ability to complete their academics. This may include but is not limited to:

- Short-term physical or mental health issues (e.g., stomach flu, pneumonia, COVID diagnosis, vaccination)
- Responses to traumatic events (e.g., Death of a loved one, divorce, sexual assault, social injustice)
- Requirements by law or public health authorities (e.g., court date, isolation due to COVID exposure, etc.)

Queen's University is committed to providing academic consideration to students experiencing extenuating circumstances. For more information, please see the [Senate Policy on Academic Consideration for Students in Extenuating Circumstances](#).

Each Faculty has developed a protocol to provide a consistent and equitable approach in dealing with requests for academic consideration for students facing extenuating circumstances. Arts and Science undergraduate students can find the Faculty of Arts and Science protocol and the [portal where a request can be submitted](#). Students in other Faculties and Schools who are enrolled in this course should refer to the protocol for their home Faculty.

For guidance on **submitting requests**, please see refer to the Resource Guides available on the [Academic Consideration website](#) under "Applying for Academic Consideration."

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