Psychology 574a
Electroencephalography and Event-related Brain Potentials
Fall 2017

Meeting Times: Monday & Thursday, 1:00 PM - 2:30 PM
Place: COR A069A
Instructor: Dr. Clay Holroyd
Email: holroyd@uvic.ca
Phone: 853-3910
Office: COR A272
Office Hours: By appointment
T. A.: Sepideh Heydari

Required Text: Steven Luck, An Introduction to the Event-related Potential Technique SECOND EDITION; and PDFs to be emailed.

Course description: PSYCH 574a will provide an introduction to the event-related brain potential (ERP) technique for investigating the neural mechanisms of cognition. Topics to be discussed include theories of ERP components and methods of ERP data acquisition and analysis. This is a laboratory class; students will conduct an actual ERP experiment in the laboratory. Students are advised that class attendance and participation are crucial and indispensable parts of the course.

Evaluation: Grades will be determined according to the following criteria:

<table>
<thead>
<tr>
<th>Evaluation</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Class Attendance</td>
<td>65%</td>
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<tr>
<td>Quizzes</td>
<td>15%</td>
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<tr>
<td>Class Participation</td>
<td>10%</td>
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<tr>
<td>Lab Experiment Write-up</td>
<td>10%</td>
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Class attendance: Attendance will be taken at each class and will account for 65% of the final grade. In addition to the lectures and lab sessions listed on the class schedule, THREE LAB SESSIONS must be scheduled independently with the T. A. or with another experimenter outside of class hours. Attendance includes participating in data acquisition and analysis on lab session days. Students who attend all classes will receive the maximum 65 percentage points; students are allowed to miss two class days without penalty. If more than two classes are missed, students must supply evidence documenting a valid reason for the absence (e.g., a note from a doctor). If more than two classes are missed and no such evidence is provided, the student will be penalized 5 percentage points for each additional absence.

Quizzes:
For discussion sessions, a short quiz will be given on the reading materials for the day’s discussion. Quizzes account for 15% of the final grade. Each student’s lowest scoring quiz will be dropped from their overall quiz average. Students who miss a quiz must supply evidence documenting a valid reason for the absence (e.g., a note from a doctor); they will then be assigned a score based on their average for the remaining quizzes taken. If a quiz is missed without a documented reason, a score of zero will be assigned.
Class Participation: Students are required to participate in class discussions. Class participation will account for a maximum of 10% of the final grade, and will be determined according to the following criteria:

- Exceptional: 10%
- Average: 5%
- Poor or None: 0%

Please note that I am not expecting students to have fully understood the readings before coming to class, but I will be looking for evidence of having read and being engaged with the material.

Lab Write-up: A written report presenting the results of the lab experiment must be submitted within one week following the last day of class (by December 8, 2017), which will account for 10% of the course grade. The format should be as follows (page estimates assume double-spaced lining): 1) Introduction (1-2 pages): summarize the purpose of the experiment. 2) Methods (1-2 pages): summarize the data acquisition and analysis methods. 3) Results (2-5 pages, including figures): present the results of the experiment; 4) Discussion (1-2 pages): interpret the results. Papers that are submitted late without a documented, valid reason will be assessed a 10% penalty (of the paper grade, not the course grade) for each day late.

Examinations: There will be no midterm or final exams.

Grades: Grades will be determined according to the Faculty of Graduate Studies Grading Scale – please see the attached table.

Location: Please note that lectures will take place in COR A069a (the CABS meeting room), data collection in COR A071 and A072 (the ERP labs), and data analysis in COR A067 (the LCCL data analysis room).