Department of Psychology
Trent University
PSYC 4225H: Advanced Topics in Physiological Psychology and Neuroscience

Coordinator: Liana Brown
Trent email: lianabrown@trentu.ca
Office Location: OC 146

Course Description: This course will examine how perception, cognition, and action are influenced by the sensory and movement capabilities of our bodies. All topics will be approached from a systems-neuroscience perspective.

Required Readings: See course outline

Evaluation:
1. Presentation (1 x 20%)  20%
2. Discussion Papers (2 x 15%)  30%
3. Verbal participation  15%
4. Thought notes  10%
4. Research proposal (10% + 15%)  25%

Explanation of Assignments

Presentation (20%): On one occasion over the course of the semester, each student will be responsible for presenting (25-35 minutes) an assigned reading to the class. It is expected that students will present enough background information to clearly explain the rationale for the study, and that the description of the methods, research, and implications of the study will be well-organized and accurate.

Discussion Papers and Role of the Discussant (30%): On two different occasions, each student will be responsible for leading the discussion of an assigned reading. One cannot be the discussion leader and presenter for the same article. The discussion leader’s role is to read the article carefully (as carefully as the presenter) and assemble a set of questions or issues that he/she believes will stimulate discussion. The discussion leader must also submit a paper that both summarizes the article and describes one or more criticisms or theoretical positions in relation to the article. Paper format: 3-5 pages, double spaced.

Verbal Discussion Participation (15%): This is a discussion-based course, so plan to attend and discuss! Students are expected to be prepared to share a position in relation to the article.

Thought Notes (aka Written Participation; 10%). The purpose of the thought notes assignment is to help you prepare for the verbal discussion. It’s much easier to participate in a discussion/debate if you’ve thought about the points you’d like to make in advance. Each week of student presentations in which you are not a presenter or discussant, you will be required to submit a short (one page) set of thought notes on the readings for the week at the beginning of class. The thought notes must be typed but can be in point-form or numbered.

Research Proposal Paper (25%): Each student will propose a research study to be conducted on any topic related to the course. The paper will define the research question, identify the populations and/or variables to be measured/manipulated, present the hypothesis and the predictions, and finally outline the methods (target participation group(s), apparatus, procedure, design, and proposed statistical analyses). Draft proposals are due February 9 (worth 10% of your grade). You will receive feedback on your drafts by February 23. Final proposals are due March 30. Additional details will be provided.

Meeting Format
At our first meeting, the coordinator and students will form a schedule of presentations and discussion leaders for the entire semester. For the remainder of the semester, the majority of class time will be focused on student presentations. The instructor will lecture on (set up) the topic when necessary.

Course Policy on Late Homework and Papers and Homework Submissions
Homework and papers that are more than one week late will receive a grade of 0. Documentation will be required to support requests for extensions (see policy below).

WHEN IT COMES TO ASKING FOR EXTENSIONS OR DEFERRALS, TIMING IS IMPORTANT. CONTACT ME (lianabrown@trentu.ca) AS SOON AS YOU KNOW THAT YOU ARE IN NEED.

Course Policy on attendance
Attendance is required and will be noted.

Liana Brown, Ph.D., OC 146 - E-mail: lianabrown@trentu.ca

Note: Please use your Trent email account when contacting me. During the week, please allow 24 hrs for a response. Do not expect a response on weekends.

Finally, always acknowledge that you received a response and let me know if your question was answered. If your question wasn’t answered or if I fail to respond in 24 hours, try again!
<table>
<thead>
<tr>
<th>Week</th>
<th>Themes</th>
<th>Topic and Readings</th>
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<tr>
<td>Jan. 12</td>
<td>Organization</td>
<td>Review course outline, assign readings to students for presentation and discussion papers, and determine method for photocopying.</td>
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| Jan. 19| Sensory Physiology; Linking Neural Systems to Complex Behaviour in Humans | Background reading is optional. The background readings are offered to provide context for the primary readings. If you are having trouble understanding the primary readings, take a look at the background reading. If it is your turn to present, the background reading is highly recommended.  
  
  
| Jan. 26| Definitions of Body Image and Body Schema   | Definitions  
  
  
  
  
  
  For presentation:  
  
  
  
  
  For presentation:  
  
  
  
| Feb. 16 | READING WEEK                                | No Class – Happy Reading!                                                                                                                                                             |
  
  For Presentation:  
  
  
Mar. 2  Perception, Experience and Tool-use


**For Presentation:**


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Mar. 9  Cognitive Definitions of Body Space – Changes in size due to Growth and Development


**For Presentation:**


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Mar. 16  Body Perception Disorders: Peripheral Neuropathy & Spinal-Cord Injuries


**For Presentation:**


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Mar. 23  Body Perception Disorders: Phantom Limb Syndrome


**For Presentation:**


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Mar. 30  Body Perception Disorders: Pain

**Guest Speaker:** Dr. Keith Nicholson, C. Psych., Comprehensive Pain Program, Toronto Western Hospital & Krembil Neuroscience Centre.

Readings TBA

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Apr. 6  Body Perception Disorders associated with Eating Disorders

**Guest Speaker:** Dr. Kim Van Walsum, C. Psych., and the Women’s Health Team, Women’s Health Clinic, Peterborough Regional Health Centre

Readings TBA