## **Psychology 1A3 Course Outline** (2000-01)

Listed below are the topics to be covered in this course, and the approximate dates on which they will be presented, and the required readings that accompany each module.

Topic:	Introduction to Experimental Psychology (Sept. 7 <sup>th</sup> and 8 <sup>th</sup> )
Readings:	None
Description:	During the first class you will meet your tutor and review the structure of the course, the evaluation methods, and the materials you will need. If your particular section of the course normally meets on both Thursday and Friday, only the Thursday meeting will be held.

Topic:	Research Methods in Psychology (Week of Sept. 11th)
Readings:	Basics and Beyond, section on Research Methods
Description:	In this section, we will discuss the basic logic of scientific research in psychology (and other sciences). The two lectures in this section deal with basic research methods, focusing on the logic of experiments.

Topic:	The Brain and Behavior (Weeks of Sept 18 <sup>th</sup> , 25 <sup>th</sup> and Oct. 2 <sup>nd</sup> )
Readings:	Basics and Beyond, section on The Brain and Behavior
Description:	We look at how our thoughts, feelings and behaviors are related to the brain activity. We begin with the neuron, the basic functional unit of the nervous system. After a tour of the brain from brainstem to cerebral cortex, considering the functions of the most important (or at least best understood) of the brain's internal structures, we examine the phenomena of sleep and dreaming, and consider the specialization of the two sides of the brain.

Topic:	Sensation and Perception (Weeks of Oct 9 <sup>th</sup> , 16 <sup>th</sup> and 23 <sup>rd</sup> )
Readings:	Basics and Beyond, section on Sensation and Perception
Description:	We examine how we construct our understanding of reality from sensory information. We emphasize vision, looking at how the brain takes information from the eye and constructs our perception of a world of stable objects. We consider how the eye and brain create the perception of colour and form.

Midterm Test Thursday, October 26 <sup>th</sup> and Friday, October 27 <sup>th</sup>
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Topic:	Basic Learning Processes (weeks of Oct. 30 <sup>th</sup> , Nov. 6 <sup>th</sup> , and 13 <sup>th</sup> )
Readings:	Basics and Beyond, section on Basic Learning Processes
Description:	We look at the most fundamental forms of learning: the learning of signals through classical conditioning, and the modification of behavior by its consequences - instrumental conditioning.

Topic:	<b>Human Cognition</b> (Weeks of Nov. 13 <sup>th</sup> , 20 <sup>th</sup> , and 27 <sup>th</sup> )
Readings:	Basics and Beyond, Section on Human Cognition
Description:	We discuss how we process information from and about the outside world. Our primary focus will be on memory. We will consider how information is encoded, stored, and retrieved. After considering several models of memory, we will ask how accurately we recall past experiences. We will end with a brief look at how we reason and make decisions.

Contact the course instructor, Dr. Richard B. Day (<a href="mailto:dayrich@mcmaster.ca">dayrich@mcmaster.ca</a>) for any additional information.