



© Queen's University. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior written permission of the copyright holder. Inquiries should be addressed to: Faculty of Arts and Science, Continuing and Distance Studies.

Course Notes material are based on content provided by:

Dr. M. Valsangkar-Smyth, Department of Psychology, Queen's University

Graphics, figures, animations, videos from the text J.P. Pinel's *Biopsychology (8e)*, (2010), Pearson Canada, Toronto, and from the text website, <http://www.mypsychlab.com>

Dr. M. Valsangkar-Smyth

I received a Bachelor of Science with Honours from Queen's University and earned a doctoral degree in Psychology from the University of Alberta. I was then a Research Fellow at Dartmouth College. I have been lucky enough to work in various areas within biopsychology including neuroanatomy, neurophysiology, neuropsychology and cognitive neuroscience. My main interest lies in lateralization issues in attention and I have used case studies, traditional cognitive psychology experiments and fMRI research to investigate these processes. I have taught courses in Intro Psychology, Brain and Behaviour II, Neuropsychology and Perception in the past and am looking forward to teaching this course again!

Email: mv3@queensu.ca

If you have any questions about the course or its content, Dr. Valsangkar-Smyth will be pleased to answer them at any time over email. Please email her at mv3@queensu.ca and she will get back to you with an answer. Or, if it is a general question that you feel others in your class may also have, you can post your question to the *Questions Forum* found on the Moodle Course homepage and then the entire class will see the response.

If you would like to arrange an online virtual meeting, please email Dr. Valsangkar-Smyth and she will set up a time using Buddy Meeting.

There are 2 TAs for the course whose primary responsibilities will be marking:

Charelle Dunn-Orto 11doco@queensu.ca

Rana Pishva rana.pishva@queensu.ca

After students have been separated into groups (after Jan. 18th) each group will have an assigned Marker who will be responsible for reviewing and marking the assignments. Any questions should be directed to your assigned Marker.

PSYC 271 is a course designed to introduce you to the field of Behavioural Neuroscience. This course initially focuses on the basics of how neurons function, neuroanatomy, neurophysiology, behavioural neuroscience methods, genetics and evolution. This will be followed by an examination of the sensory and motor systems and finally, topics relevant to lateralization of function will be covered.

This course has a 2-part learning objective:

First, it is imperative to gain a working knowledge of basic brain terminology and functioning. This information can then be used to gain an understanding of how the brain is able to process complex information and respond accordingly.

Second, you will learn about theories developed to explain how the brain works and also how scientists study the brain in order to assess these theories.

What does taking this course look like?

MyPsychLab standalone access code card (includes ebook) ISBN: 020522637X

MyPsychLab standalone access code card (**without** ebook) Purchase online through <https://pearsonmylabandmastering.com/> when registering



Textbook Website

Please see the Powerpoint presentation for accessing the textbook website (Moodle Course Homepage).

The Course ID is **valsangkar-smyth99583**.

The textbook website has online videos, simulations and review quizzes which can be found on the homepage under _____ and _____.

Below is a general time guideline (1 week or 1.5 weeks), but some modules may take you less time to work through than other modules.

Unit	Topic	
Unit 1 (1 week)	Biopsychology as a Neuroscience	Ch. 1
Unit 2 (1 week)		

Unit 4 (1 week)	Neural Conduction and Synaptic Transmission	Ch. 4
Unit 5 (1 week)	The Research Methods of Biopsychology	Ch. 5
Unit 6 (1.5 weeks)	The Visual System	Ch. 6
Unit 7 (1.5 weeks)	Mechanisms of Perception	Ch. 7
Unit 8 (1.5 weeks)	The Sensorimotor System	Ch. 8
Unit 9 (1.5 weeks)	Lateralization, Language and the Split Brain	Ch. 16

Component	% of final mark
Assignments: Includes Group Discussion and Individual Report (2 @ 10% each)	20%
Midterm	20%
Final exam	60%
	100%

Assignments:

After the January 18th 2013 deadline for adding/dropping the course, students will be added to the course (18)JTJETBTh%

Evaluation	Component	Due Date
------------	-----------	----------

Assignment 1-NeuroanatomyETB1 0 0

to withdraw from the university.

A few comments on how to approach the material

Throughout the course, as well as the textbook, four major themes are repeated and should be kept in mind when studying the material.

Thinking creatively or thinking in productive, unconventional ways is the cornerstone of science and there are many research examples of this principle in Biopsychology.

Much of what we have learned about the brain has come from various patient populations, so this course also has strong **clinical implications** that highlight the interplay between brain dysfunction and biopsychology.

There is also an important **evolutionary perspective** that must be considered in biopsychological research, especially with comparative studies.

Finally, the principles of **neuroplasticity** will be introduced: that the brain is a ‘plastic’ organ that grows and responds to an individual’s genes and environment.

The material on this website is copyrighted and is for the sole use of students registered in PSYC 271. The material on this website may be downloaded for a registered student’s personal use, but shall not be distributed or disseminated to anyone other than students registered in PSYC 271. Failure to abide by these conditions is a breach of copyright, and may also constitute a breach of
