

# Attention!

This is a *representative* syllabus.

The syllabus for the course when you enroll may be **different**.

Use the syllabus provided **by your instructor** for the most up-to-date information. Please refer to your instructor for more information for the specific requirements for a given quarter.

**ADVANCED BEHAVIORAL NEUROSCIENCE**  
**(proposed Semester Term version)**

**Psychology 501**  
 Fall Semester, 2012  
 M, W (10:30 - 11:50 am)  
 Office hours: Tues, noon or by appointment

**Dr. John P. Bruno**  
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 2-1770; bruno.1@osu.edu  
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**Required Readings: TEXT: *The Physiology of Behavior*, Neil R. Carlson, (10<sup>th</sup> Edition, Allyn & Bacon)  
 + occasional handouts**

**INSTRUCTIONAL POWERPOINT PRESENTATIONS WILL BE PROVIDED IN CLASS AND AVAILABLE, IN COLOR, ON CARMEN**

<u>DATES</u>	<u>LECTURE TOPICS</u>	<u>READINGS</u>
	<b><u>I. ADVANCED NEUROSCIENCE</u></b>	
week 1	INTRODUCTION/CHEMOTRANSMISSION	Chpts. 1-3
week 1	SITES & MECHANISMS OF DRUG ACTION	Chpts. 4,5
week 2	SITES & MECHANISMS OF DRUG ACTION	“ ”
week 2	RECEPTOR-GENERATED TRANSDUCTION MECHANISMS	“ ”
week 3	RECEPTOR SUBTYPES; NEUROMODULATION/ <b>**<u>QUIZ #1</u>**</b>	“ ”
week 3	NEUROMODULATION; NEURON-GLIAL INTERACTIONS	“ ”
week 4	NEURON-GLIAL INTERACTIONS	“ ”
week 4	<b>****<u>EXAM #1</u>****</b>	
	<b><u>II. NEURODEGENERATIVE DISEASE + THERAPEUTICS</u></b>	
week 5	PARKINSON'S DISEASE: SYMPTOMS + ETIOLOGY	pp 119-120; 287-288
week 5	PARKINSON'S DISEASE: ETIOLOGY	“ ” “
week 6	PARKINSON'S DISEASE: ANIMAL MODELS/TREATMENT	pp 537-541
week 6	PARKINSON'S DISEASE: TREATMENT/ <b>**<u>QUIZ #2</u>**</b>	“ ”
week 7	ALZHEIMER'S DEMENTIA: SYMPTOMS + ETIOLOGY	pp 543-553
week 7	ALZHEIMER'S DEMENTIA: ETIOLOGY	“ ” “
week 8	ALZHEIMER'S DEMENTIA: ETIOLOGY + ANIMAL MODELS	Handout

<u>DATES</u>	<u>LECTURE TOPICS</u>	<u>READINGS</u>
week 8	ALZHEIMER'S DEMENTIA: THERAPEUTICS	“ ” “
week 9	ALZHEIMER'S DEMENTIA/ NOVELS THERAPEUTICS	“ ” “
week 9	**** <u>EXAM #2</u> ****	

### III. BIOLOGICAL BASES OF PSYCHOPATHOLOGY

week 10	STRESS DISORDERS: SYMPTOMS	pp 601-612
week 10	STRESS DISORDERS: ETIOLOGY/ <u>**QUIZ #3</u>	“ ” “
week 11	STRESS DISORDERS: TREATMENT	“ ” “
week 11	STRESS DISORDERS: TREATMENT	“ ” “
week 12	SCHIZOPHRENIA: SYMPTOMS	pp 556-571
week 12	SCHIZOPHRENIA: NEUROPATH/ETIOLOGY	“ ” “
week 13	SCHIZOPHRENIA: ETIOLOGY	“ ” “
week 13	SCHIZOPHRENIA: ANIMAL MODELS	“ ” “
week 14	SCHIZOPHRENIA: THERAPEUTICS/ <u>**QUIZ #4</u>	“ ” “
week 14	SCHIZOPHRENIA: NOVEL THERAPEUTICS	“ ” “

**\*\*\*EXAM #3 WILL BE ADMINISTERED DURING FINALS PERIOD\*\*\***

#### STUDENT EVALUATIONS:

The course grade will be based upon **3 non-comprehensive exams (each worth 25% of grade); 4 quizzes (5% each), and classroom participation (5%)**. The quizzes and exams will be composed of multiple choice questions and short answer (no more than 1 paragraph each).

#### CLASS ATTENDANCE:

It is essential that you attend class and participate in classroom discussions in order to do well in this course. While attendance will not be explicitly taken, absences will undoubtedly be noticed and be reflected in both your classroom participation scores as well as your quiz and exam scores. If you miss class it is in your best interest to contact Professor Bruno in a timely fashion.

**ACADEMIC MISCONDUCT:**

All students at the Ohio State University are bound by the Code of Student Conduct (see <http://oaa.ohio-state.edu/coam/code.html>). Violations of the code in this class will be dealt with according to the procedures detailed in that code. Specifically, any alleged cases of misconduct will be referred to the Committee on Academic Misconduct.

**Any student who feels that she/he may need an accommodation based on the impact of a disability should contact Professor Bruno (2-1770) privately to discuss her/his specific needs. Also, contact the Office of Disability Services (2-3307) to coordinate such accommodations.**

**INTERDISCIPLINARY MINORS:**

This course is a core course in the Cognitive Science Minor and a highly recommended elective in the Neuroscience Minor. Information regarding these minors and their requirements may be found online at <http://artsandsciences.osu.edu/interdisciplinary>