**INTRODUCTION TO BIOLOGICAL PSYCHIATRY**

*(PSYCH 5613H – SPRING SEMESTER, 2013)*

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**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 of a given semester.

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***PDFs of Most Readings and All PPTs from Lectures are on Carmen***

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**TOPICAL SYLLABUS**

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<th>WEEK</th>
<th>TOPIC TO BE DISCUSSED</th>
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<td>I. REVIEW – FUNDAMENTALS OF NEUROSCIENCE</td>
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| 1 | INTRODUCTION TO BIOLOGICAL PSYCHIATRY  
CHEMOTRANSMISSION: RECEPTOR SUBTYPES; NEURONAL TRANSDUCTION |
| 2 | NEUROMODULATION; DISTRIBUTED NEURAL NETWORKS; EPIGENETICS |

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II. **MOOD DISORDERS**

| 3. | SYMPTOMS; DSMIV (VIDEO); AFFECTIVE NEUROSCIENCE |
| 4. | SUBCORTICAL/CORTICAL DYSFUNCTIONS |
| 5. | EXECUTIVE FUNCTION DEFICITS/CURRENT THERAPEUTICS |
| 6. | EXPERIMENTAL THERAPEUTICS/EXAM #1 |
III. GENERALIZED ANXIETY DISORDER

7. SYMPTOMS; DSMIV (VIDEO); PATHOPHYSIOLOGY

8. NEUROBIOLOGY/THERAPEUTICS

IV. PTSD/DISSOCIATIVE DISORDERS

9. SYMPTOMS; DSMIV (VIDEO); PATHOPHYSIOLOGY

10. THERAPEUTICS/EXAM #2

V. SCHIZOPHRENIA

11. SYMPTOMS; DSMIV (VIDEO); PATHOPHYSIOLOGY

12. ETIOLOGY; NEURODEVELOPMENTAL HYPOTHESES

13. CURRENT/EXPERIMENTAL THERAPEUTICS

14. GRADUATE STUDENT TEAM PRESENTATIONS

***EXAM #3 – DURING FINALS PERIOD***

Required Readings and Power Points:
The goal of this course is to provide a high-level, contemporary discussion of the scientific literature, thus, each section contains several required journal articles from the primary literature (see preliminary list below). Electronic copies of all articles, not distributed in class, along with color versions of the Power Points used during class, will be available on Carmen (https://carmen.osu.edu/) under my name/Spring 2013/H5613.

Recommended Background Reading:
Professor Bruno will be happy to recommend (and possibly provide) a few background chapters/texts on neurophysiology, neuroanatomy and psychopharmacology.
Course Objectives:
The purpose of this course is to provide a contemporary survey of our understanding of the biological bases of several significant psychopathologies. The course will highlight five disorders—depression, anxiety disorders, post-traumatic stress disorder (PTSD), dissociative identity disorder (DID) and schizophrenia. For each disorder, students will learn the diagnostic classifications, presenting symptomatology, underlying neurobiological dysfunctions, theories regarding etiology, and current and future (experimental) therapeutic strategies. As appropriate, the utility of animal models for each of these disorders will also be discussed.

An important goal of this course is to train advanced students to critically read the primary literature. The required readings in this course are complex, written at a high scholarly level and will require a significant effort to process. You will have to devote sufficient time at the beginning of each week to read these articles in preparation for the discussions in class. This is a high level course and the instructor expects that all students will read the material prior to class and come prepared to discuss the readings.

An additional goal of this course is to develop critical thinking and writing skills that are vital to any post-graduate training experience. Thus, the examinations will consist of short essay questions focusing on the ability to support or refute hypotheses on the basis of the scientific literature.

Student Evaluation:
There will be three examinations in this course. The 1st exam will contribute 25% of the grade whereas the 2nd and 3rd exams will each contribute 30% of the grade. The exams will be short-essay. Importantly, the quality of classroom participation will contribute significantly to your final grade (15%). Thus, class attendance and active participation is critical to your success in this course. Rather than assuming that performance in this class will follow a theoretical normal distribution, with 90% = A, 80% = B, etc; the course grades may be curved depending upon overall class performance.

Graduate students in the class will have an additional requirement, presentations on psychopathologies not covered in the course. These will be presented to the class during Week 14. Most likely, they will involve working in teams, reading additional articles, and developing PPTs for teaching. Each member of the team will be expected to present for the team.
**Academic Misconduct:**
All students at the Ohio State University are bound by the Code of Student Conduct (see [http://studentaffairs.osu.edu/pdfs/csc_12-31-07.pdf](http://studentaffairs.osu.edu/pdfs/csc_12-31-07.pdf)). 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.

**Students with Special Needs:**
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.