BIOS/PSCH/PHIL 485: NEUROSCIENCE II
SPRING 2016
MWF 1:00 – 1:50
4289 SEL

COORDINATOR:
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INSTRUCTORS:
John Hetling   jhetli1@uic.edu   Bioengineering
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Kara Morgan-Short  karams@uic.edu  Psychology, Hispanic & Ital. Studies
Thomas Park    tpark@uic.edu    Biology
Marya Schechtman marya@uic.edu    Philosophy
David Wirtshafter  davew@uic.edu  Psychology

TEACHING ASSISTANT: Laura Manning   (manning5@uic.edu)

OFFICE HOURS: Students should contact the teaching assistant, coordinator or instructor to arrange for an appointment at a mutually convenient time.


GOALS AND OBJECTIVES: To explore in depth brains and nervous systems and present current information on how they are studied.

ATTENDANCE:
Attendance is expected at all scheduled lectures; each exam will be based on material discussed in class.
Attendance is required at all scheduled exams, except in cases of illness, mandatory religious obligations or official University activities. To be excused from attending an exam an official medical certificate or an affidavit is required.
Students are able to drop a course without penalty through Friday of the second week of the semester. Late drops are subject to the College of LAS rules (Consult with the College advisor, 996-3366).

GRADING: There will be a total of three exams which will stress material discussed in class. Eighty-five percent of the total points will come from exams (two "hour exams" worth 25% of your grade each, and a comprehensive final worth 35%). The remaining 15% of points will from a poster presentation, tentatively scheduled for 3/18/16. Details of this assignment will be provided in class.
<table>
<thead>
<tr>
<th>Week/Topic</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Somatosensation</strong></td>
<td>Thomas Park 1/11/16 Sensory Coding 1/13/15 Mechanosensory Function 1/15/16 Somatosensory System</td>
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<tr>
<td><strong>2. Pain/Audition I</strong></td>
<td>Thomas Park 1/20/16 Pain 1/22/16 Cochlea</td>
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<td><strong>3. Audition II/Vision I</strong></td>
<td>Thomas Park 1/25/16 Auditory Processing in the CNS 1/27/16 Auditory Processing in the CNS Paul Malchow 1/29/16 Retinal Physiology I</td>
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<td><strong>4. Vision II / Philosophical Perspectives</strong></td>
<td>Paul Malchow 2/1/16 Retinal Physiology II David Wirtshafter 2/3/16 Cortical Visual Processing I 2/5/16 Cortical Visual Processing II</td>
</tr>
<tr>
<td><strong>5. Motor Control I</strong></td>
<td>David Hilbert 28/16 Philosophy of Perception David Wirtshafter 2/10/16 Mechanisms and Control of Muscle Contraction 2/12/16 Spinal Cord Mechanisms</td>
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<td><strong>6. Motor Control II</strong></td>
<td>David Wirtshafter 2/15/16 Cortical Control of Movement 2/17/16 Cerebellum 2/19/16 First Hour Exam</td>
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<td><strong>7. Motor Control III / Chemical Senses</strong></td>
<td>David Wirtshafter 2/22/16 Basal Ganglia and Movement 2/24/16 Olfaction I 2/26/16 Olfaction II</td>
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<td><strong>8. Taste, and Motivation</strong></td>
<td>David Wirtshafter 2/29/16 Taste 3/2/16 Motivated Behaviors I 3/4/16 Motivated Behaviors II</td>
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### 9. Motivation and Commissures
- David Wirtshafter 3/7/16
  - Reward/Reinforcement
- 3/9/16 Interhemispheric Connections I
- 3/11/16 Interhemispheric Connections II

### 10. Language
- Kara Morgan-Short 3/14/16
  - Neural Basis of Language
- 3/16/16 Neural Basis of Second Languages
- 3/18/16 Poster Session

### 11. Disorders of the Nervous System
- John Larson 3/28/16
  - Diseases of the Nervous system
- 3/30/16 Disorders of Thought and Mood
- 4/1/16 Second Hour Exam

### 12. Neural Basis of Learning and Memory
- David Wirtshafter 4/4/16
  - Learning and Memory I
- 4/6/16 Learning and Memory II
- 4/8/16 Learning and Memory III

### 13. Ageing and Hormonal Influences
- Melissa Lamar 4/11/16
  - Neuropsychology of Aging
- Pauline Maki 4/13/16
  - Estrogen, Cognition & Brain Function
- 4/15/16 Testosterone, Cognition and the Aging Male

### 14. Philosophical Perspectives on Neuroscience
- Marya Schectman 4/18/16
  - Personal Identity
- 4/20/16 Free Will
- David Hilbert 4/22/16
  - Historical Perspectives on Consciousness

### 15. Neuroscience Potpourri
- David Hilbert 4/25/16
  - Modern Views on Consciousness
- John Hettling 4/27/16
  - Bioengineering and the Nervous System
- David Wirtshafter 4/29/16
  - Sleep