BIOS/PSCH/PHIL 485: NEUROSCIENCE II
SPRING 2011
MWF 1:00 – 1:50
205 GH

COORDINATOR:
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Psychology, 2010 BSB
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INSTRUCTORS:
John Hetling  jhetli1@uic.edu  Bioengineering
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Kara Morgan-Short  karams@uic.edu  Spanish, Linguistics & Psych.
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Thomas Park  tpark@uic.edu  Biology
Mitchell Roitman  mroitman@uic.edu  Psychology
David Wirtshafter  davew@uic.edu  Psychology

TEACHING ASSISTANT: Mary Clare Kane  mkane1@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 3/18/10. Details of this assignment will be provided in class.
<table>
<thead>
<tr>
<th>Week/Topic</th>
<th>Instructor</th>
<th>Date</th>
<th>Topic</th>
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</thead>
<tbody>
<tr>
<td>1. <strong>Somatosensory Systems</strong></td>
<td>Thomas Park</td>
<td>1/10/11</td>
<td>Sensory Coding</td>
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<td>1/12/11</td>
<td>Mechanosensory Function</td>
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<td>1/14/11</td>
<td>Vertebrate Somatosensory System</td>
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<td>2. <strong>Audition</strong></td>
<td>Thomas Park</td>
<td>1/19/11</td>
<td>Cochlea</td>
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<td></td>
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<td>1/21/11</td>
<td>Auditory Processing in the CNS</td>
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<td>3. <strong>Vision</strong></td>
<td>Mike Levine</td>
<td>1/24/11</td>
<td>Retina I</td>
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<td>1/26/11</td>
<td>Retina II</td>
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<td></td>
<td>Paul Malchow</td>
<td>1/28/11</td>
<td>Retinal Physiology</td>
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<td>4. <strong>Vision II / Philosophical Perspectives</strong></td>
<td>Mike Levine</td>
<td>1/31/11</td>
<td>Higher Visual Processing I</td>
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<td></td>
<td>2/2/11</td>
<td>Higher Visual Processing II</td>
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<td>Dave Hilbert</td>
<td>2/4/11</td>
<td>Philosophy of Perception</td>
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<td>5. <strong>Motor Control I</strong></td>
<td>A. Don Murphy</td>
<td>2/7/11</td>
<td>The Mechanism of Muscular Contraction</td>
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<td></td>
<td>2/9/11</td>
<td>Neural Control of Muscle Contraction</td>
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<td>2/11/11</td>
<td>Spinal Cord Mechanisms</td>
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<td>6. <strong>Motor Control II</strong></td>
<td>David Wirtshafter</td>
<td>2/14/11</td>
<td>Cortical Control of Movement</td>
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<td>2/16/11</td>
<td>Cerebellum and Basal Ganglia</td>
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<td>2/18/11</td>
<td>First Hour Exam</td>
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<td>7. <strong>Neuroethology</strong></td>
<td>A. Don Murphy</td>
<td>2/21/11</td>
<td>Neuroethology I</td>
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<td>2/23/11</td>
<td>Neuroethology II</td>
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<td>2/25/11</td>
<td>Neuroethology III</td>
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<td>8. <strong>Smell, Taste, and Motivation</strong></td>
<td>David Wirtshafter</td>
<td>2/28/11</td>
<td>Chemical Senses I</td>
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<td>3/2/11</td>
<td>Chemical Senses II</td>
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<td>3/4/11</td>
<td>Motivated Behaviors</td>
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</tbody>
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9. Motivation Continued  
David Wirtshafter  3/7/11  Ingestive Behavior I  
3/9/11  Ingestive Behavior II  
3/11/11  Reward/Reinforcement

10. Learning and Memory  
Kara Morgan-Short  3/14/11  Neural Basis of Language  
3/16/11  Neural Basis of Second Languages  
3/18/11  Poster Session

11.  
Mitchell Roitman  3/28/11  Limbic System & Learning I  
3/30/11  Limbic System & Learning II  
4/1/11  Second Hour Exam

12. Neuropsychology / Hormonal Influences  
Melissa Lamar  4/4/11  Neuropsychology  
Pauline Maki  4/6/11  Estrogen, Cognition & Brain Function  
4/8/11  Testosterone Cognition and the Aging Male

13. Theoretical and Human Neuroscience  
Deborah Little  4/11/11  Cognitive Neuroscience I  
4/13/11  Cognitive Neuroscience II  
David Wirtshafter  4/15/11  Interhemispheric Connections

14. Neuroengenering and Philosophical Perspectives on Neuroscience  
David Wirtshafter  4/18/11  Interhemispheric Connections II  
John Larson  4/20/11  Diseases of the Nervous System  
4/22/11  Disorders of Thought & Mood

15. Philosophy and Disturbances of the Human Nervous System  
Dave Hilbert  4/25/11  Historical Perspectives on Consciousness  
4/27/11  Modern Views of Consciousness  
4/29/11  Free Will