SYLLABUS
Psychology 6345, Section 13361
Developmental Neuropsychology
Fall 2006

Instructor: Dr. Merrill Hiscock
Heyne Building 239D
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Supplemental Materials:
Handouts and articles to be collected during semester

Evaluation:
Short Papers (40%)
Presentations (40%)
Class Participation and Quizzes (20%)

Attendance: Perfect attendance is expected in graduate classes. More than one unexcused absence from class will result in the student being removed from the class rolls.

Class meetings: Wednesday, 5:30-8:30 p.m., Room 226

Office hours: Wednesday, 4-5:30 p.m., or by appointment

Learning objectives:
1. The student will learn how human development is enabled and constrained by the maturation of the nervous system and by interaction between brain development and the individual's environment.

2. The student will become familiar with a variety of developmental and acquired disorders of the nervous system that are observed in childhood, and with the effects of those disorders on subsequent development.
## Class Schedule

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<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Notes</th>
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<tr>
<td>23 August</td>
<td><strong>Introduction</strong></td>
<td>(a) Course overview</td>
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<td>(b) Characterizing developmental neuropsychology</td>
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<td></td>
<td><strong>Reading Assignment:</strong> Obtain textbook and read prefatory material; read Hiscock’s (1995) review of Spreen et al. text.</td>
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<td>30 August</td>
<td><strong>Normal Development, Part 1</strong></td>
<td>(a) Brain development and behavioral concomitants</td>
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<td>(b) Netter’s illustrations of the developing nervous system</td>
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<td><strong>Reading Assignment:</strong> Chapters 1-3; Cowan, 1979</td>
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<td>06 September</td>
<td><strong>Normal Development, Part 2</strong></td>
<td>(a) Cognitive development</td>
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<td>(b) Lateralization of the developing brain</td>
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<td><strong>Reading Assignment:</strong> Chapters 4 &amp; 5; Hiscock &amp; Kinsbourne, 1995/2007</td>
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<td><strong>Supplemental presentations and discussions:</strong></td>
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<td>13 September</td>
<td><strong>Normal Development, Part 3</strong></td>
<td>(a) Lateralization, continued</td>
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<td>(b) Sex differences</td>
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<td>(c) Assessment of the neonate and infant</td>
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<td>(d) Critical periods, plasticity and recovery of function</td>
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<td><strong>Reading Assignment:</strong> Chapters 6-8</td>
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<td><strong>Supplemental presentations and discussions:</strong></td>
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20 September  
**Developmental and Acquired Disorders, Part 1**
(a) Disconnection syndromes 
(b) Classification, epidemiology and research designs 
(c) Pathophysiology of congenital damage  
*Reading Assignment: Chapters 9&10; Towbin, 1978; Goldman, 1974; Kolb, 1989*  
Supplemental presentations and discussions:

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27 September  
**Developmental and Acquired Disorders, Part 2**
(a) Chromosomal and genetic disorders 
(b) Structural abnormalities 
(c) prematurity and low birth weight  
*Reading Assignment: Chapters 11-13; Isaacson, 1975; St. James-Roberts, 1981*  
Supplemental presentations and discussions:

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04 October  
**Developmental and Acquired Disorders, Part 3**
(a) Infections 
(b) Toxic damage 
(c) Nutritional disorders  
*Reading Assignment: Chapters 14-16*  
Supplemental presentations and discussions:

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11 October  
**Developmental and Acquired Disorders, Part 4**  
(a) Anoxic episodes  
(b) Traumatic brain injury  
(c) Focal neurological disorders  

**Reading Assignment: Chapters 17-19**  
Supplemental presentations and discussions:

18 October  
**Developmental and Acquired Disorders, Part 5**  
(a) Convulsive disorders  
(b) Hemispherectomy and other surgical manipulations  

**Reading Assignment: Chapters 20-21**  
Supplemental presentations and discussions:

25 October  
**Learning Disabilities and Related Problems, Part 1**  
(a) Soft neurological signs and their significance  
(b) Attention disorders and hyperactivity  
(c) LD concepts, definitions and classification schemes  
(d) Identifying emergent conditions  

**Reading Assignment: Chapters 22-23; Douglas, 1983; Hiscock & Hiscock, 1991**  
Supplemental presentations and discussions:
01 November Learning Disabilities and Related Problems, Part 2  
(a) Motor, sensorimotor and praxis disorders  
(b) Visual disorders  
(c) Auditory disorders  
(d) Characterizing LD children and specifying the neural defect  
Reading Assignment: Chapters 24-26; Kinsbourne, 1973  
Supplemental presentations and discussions:

08 November Learning Disabilities and Related Problems, Part 3  
(a) Language disorders  
(b) Developmental handicap  
(c) Cerebral lateralization in LD children  
Reading Assignment: Chapters 27-28; Hiscock & Kinsbourne, 1987  
Supplemental presentations and discussions:

15 November Learning Disabilities and Related Problems, Part 4  
(a) Learning disorders revisited  
(b) Learning ability, learning disability and IQ  
(c) Psychiatric disorders  
Reading Assignment: Chapters 29-30  
Supplemental presentations and discussions:

22 November No class (Thanksgiving holiday)
29 November

**Synthesis**

(a) Controversies regarding assessment and remediation
(b) Right-brain training and other dubious undertakings
(c) The future of developmental neuropsychology and developmental cognitive neuroscience

**Reading Assignment:** Brown & Campione, 1986; Segalowitz & Hiscock, 2003

Supplemental presentations and discussions:
References


Rourke, B.P. (1976). Reading retardation in children: Developmental lag or deficit? In R.M. Knights & D.J. Bakker (Eds.), The neuropsychology of learning disorders (pp. 125-137).


