

## Introduction to Neuropsychology for School Psychologists (SPSY 6/77925)

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**Instructor:** Frank J. Sansosti, Ph.D.  
**Office:** 405-R White Hall  
**Office Phone:** 330.672.0059  
**Email:** fsansost@kent.edu

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### Required Readings:

1. Ohio Department of Education (2002). *Operating Standards for Ohio's Schools Serving Children with Disabilities*. Columbus, OH: Author (Available on OEC website)
2. Ohio Department of Education (2003). *Model Procedures for the Education of Children with Disabilities*. Columbus, OH: Author (Available on OEC website).
3. Additional Readings (available from the instructor).
4. Related web sites will be identified for selected topics. Reviewing information or selected topics from these websites are intended to help illustrate content in greater depth.

### Recommended Texts:

1. D'Amato, R.C., Fletcher-Janzen, E., Reynolds, C.R. (Eds.) (2005). *Handbook of school neuropsychology*. Hoboken, NJ: John Wiley & Sons.
2. Phelps, L (Ed.) (1998). *Health-related disorders of children and adolescents*. Washington, DC: American Psychological Association.

### Catalog Description:

Introduces basic concepts in child neuropsychology with relevance for applied school psychological practice. Topics include biological bases of behavior and implications for educational interventions.

### Course Content:

This course is designed to provide students with an understanding of how childhood behavior and learning problems are conceptualized and treated through a transactional neuropsychological perspective. Specifically, information will be provided regarding (a) basic neuroanatomy and its relationship to behavior, (b) differences in brain functioning among children with various learning disabilities and typical learners, (c) what is known about brain functioning among children with metabolic, biogenetic, seizure, and neuromotor disorders of childhood, (d) how various types of traumatic brain injury (e.g., frontal lobe damage) impact children's behavior, and (e) how school psychologists can best meet the needs of children with various disorders by understanding neuropsychological functioning.

### Course Objectives:

The overall objective of this course is for students to become familiar with basic concepts related to the biological bases of behavior in children and adolescents. In order to achieve this goal, students will:

1. identify major structures and functions of the human central nervous system;
2. identify characteristics and educational implications of selected neurodevelopmental disorders in children and adolescents;
3. demonstrate knowledge and understanding of neuropsychologically based models of educational intervention.

### Organization of Course:

Class sessions will typically be devoted to the scheduled topic for the day, which will be covered through illustrated lectures, discussions, presentations, and experiential learning formats.

Students are expected to attend each class, to have read the assigned material before each class period, and to turn in assignments for each class period on time. **Make sure you know what is coming up and manage your time effectively. If you find yourself having difficulty with any aspect of this course, please see me as soon as possible. I am happy to help you...but you must let me know when you need assistance.** Failure to complete all course requirements during the semester will result in a grade of Incomplete until all course requirements have been fulfilled.

### **Course Competencies:**

This course provides competencies toward the following Blueprint III goals:

- Diversity Awareness and Sensitive Service Delivery
- Professional, Legal, Ethical, and Social Responsibility
- Data-Based Decision Making and Accountability
- Enhancing the Development of Cognitive and Academic Skills

### **Course Assignments/Evaluation:**

Assignments and the evaluation criteria are based on the idea that students learn more and perform better when high expectations are established, when they attend regularly, participate actively, and receive frequent feedback on their work. The assignments for this course are:

#### **1. Professional Development Handout**

**Due Date: Monday, June 25**

**Points Possible: 30 Points**

Each student is required to develop a parent and/or teacher handout on a topic related to biological bases of behavior. The topic must: (a) have a neurobiological focus, (b) not duplicate material covered in detail in the readings or in class, (c) be original and created exclusively for this class, and (d) be suitable for dissemination to teachers or parents. Sample topics include a specific neurodevelopmental disorder not otherwise addressed in class, guidelines for brain-based teaching, and implications of pharmacological interventions for parents and/or teachers. It is expected that the handout will reflect original research and synthesis. This product is designed for inclusion in the student's portfolio, and should utilize an appropriate format such as a brochure, newsletter, or PowerPoint.

#### **2. ETR Summary**

**Due Date: Friday, June 29**

**Points Possible: 10 Points**

Students will be provided with data about a student who has been evaluated for a suspected Specific Learning Disability (SLD), and will be required to complete selected sections of an Evaluation Team Report (ETR). This is a mastery activity that requires a grade of B or better!! Your final ETR summary will be due on Friday, July 6.

#### **3. In-Class Exam**

**Due Date: Friday, June 15**

**Points Possible: 20 Points**

This short answer exam will cover structure and function of the CNS and basic neuropsychological assessment approaches. The exam will be scheduled for the **first 30 minutes of class** on Friday, June 15.

**4. Take-Home (Final) Exam**  
**Due Date: Friday, June 29**  
**Points Possible: 40 Points**

The take-home exam will cover those neurodevelopmental disorders and neuropsychological modes of educational intervention that are discussed in class. A final copy of the take-home exam is due by **5:00 PM on Friday, June 29**. *The exam may be emailed, but it is your responsibility to check for receipt*

**Criteria for Evaluation of Student Performance**

Below is a breakdown of how your grade will be calculated, as well as the grading scale for the class.

<b>Required Course Activities</b>	<b>Points Possible</b>
Professional Development Handout	30 points
ETR Summary	10 points
In-Class Exam	20 points
Take-Home (Final) Exam	40 points
<b>Total Points Possible:</b>	<b>100 points</b>

<b>Points for Grading</b>	<b>97 – 100 = A +</b>	<b>87 – 89 = B +</b>	<b>77 – 79 = C +</b>
	<b>93 – 96 = A</b>	<b>83 – 86 = B</b>	<b>73 – 76 = C</b>
	<b>90 – 92 = A -</b>	<b>80 – 82 = B -</b>	<b>79 – 75 = C -</b>

**IMPORTANT NOTES ABOUT THIS COURSE:**

**My Expectations and “How to Survive this Course”**

I expect everyone to come to class well prepared and ready to learn and discuss new material. This means that you should: (a) do the assigned readings or activities **prior** to coming to class, (b) review information periodically and prepare any questions that you may have, and (c) think about how the information relates to your own personal experience or the experiences you expect to have when working as an educator. In addition, you should always be ready to discuss relevant material with the rest of the class. Please be advised that I will call on students to answer questions or provide viewpoints on class topics **EVEN WHEN they are not actively volunteering to do so**.

The following are suggestions from students in previous semesters for how future students can best survive this course:

1. Coming to class is the most important way to survive Frank’s class!
2. Track your points, if your grade falls below 70%, make an appointment to talk to Frank!
3. If you are confused about something from the class, first ask your other classmates for clarification. If you need additional direction, please make an appointment to discuss it further.  
**Be proactive rather than reactive...it is far more effective!!!**

*My Commitment to Help You:* I will do my best to grade your assignments in time for the next scheduled class session. I will also make myself available to meet with you during my scheduled office hours or by appointment. If you ever need any help in this class, or even if you have general questions about the field, PLEASE don’t hesitate to contact me. I’ve listed my office phone number and email above and I encourage you to use them whenever you have a question. So please don’t feel embarrassed or ashamed for asking for help. Those who ask for it always do best on assignments.

Notes About Grading: All assignments are due at the beginning of class on the assigned dates. The quality of assignments/activities will be considered in determining your grade. Please attend to the “appearance” of your written work and refer frequently to a dictionary and/or APA publications manual for article summaries and application project. Finally, students are encouraged to learn from each other by discussing their work. Any student who believes they are having difficulty understanding the lectures, readings, or assignments should see the instructor as soon as possible.

Academic Dishonesty: **Do Not Cheat or Plagiarize!** If you are caught cheating on an exam, or any other assignment, or you are caught plagiarizing you will be immediately referred to the Dean’s office for disciplinary action. Punishment for Academic Dishonesty will depend on the seriousness of the offense and will be handled in accordance with departmental and Kent State University-based policy.

Plagiarism is defined as “literary theft” and consists of the unattributed quotation of the exact words of a published text, or the unattributed borrowing of original ideas by paraphrase from a published text. On written papers for which the student employs information gathered from books, articles, or oral sources, each direct quotation, as well as ideas and facts that are not generally know to the public at large must be attributed to its author by means of the appropriate citation procedure. Citations may be made in footnotes or within the body of the text. Plagiarism also consists of passing off as one’s own, segments or the total of another person’s work.

Disability Policy: University policy 3342-3-18 requires that students with disabilities be provided reasonable accommodations to ensure their equal access to course content. If you have a documented disability and require accommodations, please contact the instructor at the beginning of the semester to make arrangements for necessary classroom adjustments. Please note, you must verify your eligibility through Student Disability Services (330-672-3391 or visit [www.kent.edu/sds](http://www.kent.edu/sds) for more information).

Electronic Equipment: All beepers, cell phones, or any other device that makes an audible noise should be **TURNED OFF** prior to coming to class. Such devices are distracting to both the instructor and other students. If you wish to use a laptop during class time, please discuss this with the course instructor by the second class meeting.

## Course Calendar: Topics, Readings, and Assignments

(NOTE: The Course Calendar is subject to change as deemed appropriate or necessary)

Date	Topic(s) and Reading Assignments	Assignment Due
	<p align="center"><b>Course Introduction/ Structure &amp; Function of the Central Nervous System</b></p> <ul style="list-style-type: none"> <li>▪ <i>Required Readings:</i> <ul style="list-style-type: none"> <li>○ # 1</li> <li>○ # 2</li> </ul> </li> <li>▪ <i>Required Web-Sites to Review:</i> <ul style="list-style-type: none"> <li>○ <a href="http://www.brainconnection.com">www.brainconnection.com</a></li> <li>○ <a href="http://www.neuroguide.com/neuroimg.html">www.neuroguide.com/neuroimg.html</a></li> </ul> </li> </ul>	<p align="center">None</p>
	<p align="center"><b>Neuropsychological Assessment Approaches</b></p> <ul style="list-style-type: none"> <li>▪ <i>Required Readings:</i> <ul style="list-style-type: none"> <li>○ # 3</li> <li>○ # 4</li> </ul> </li> <li>▪ <i>Required Web-Sites to Review:</i> <ul style="list-style-type: none"> <li>○ <a href="http://www.ds-health.com">www.ds-health.com</a></li> <li>○ <a href="http://www.nlm.nih.gov/medlineplus/brainandnervoussystem.html">www.nlm.nih.gov/medlineplus/brainandnervoussystem.html</a></li> <li>○ <a href="http://www.kidsource.com?NICHCY/brain.html">www.kidsource.com?NICHCY/brain.html</a></li> <li>○ <a href="http://www.nidcd.nih.gov/health/voice/tbrain.asp">www.nidcd.nih.gov/health/voice/tbrain.asp</a></li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>▪ <b>In-Class Exam</b></li> </ul>
	<p align="center"><b>Metabolic, Biogenetic, Seizure, &amp; Neuromotor Disorders</b></p> <ul style="list-style-type: none"> <li>▪ <i>Required Readings:</i> <ul style="list-style-type: none"> <li>○ # 5</li> <li>○ # 6</li> <li>○ # 7</li> <li>○ # 8</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>▪ <b>Disorder Worksheets</b></li> </ul>
	<p align="center"><b>Acquired Neurological Disorders</b></p> <ul style="list-style-type: none"> <li>▪ <i>Required Readings:</i> <ul style="list-style-type: none"> <li>○ # 9</li> <li>○ # 10</li> </ul> </li> <li>▪ <i>Required Web-Sites to Review:</i> <ul style="list-style-type: none"> <li>○ <a href="http://www.cdc.gov/ncbddd/fas/">www.cdc.gov/ncbddd/fas/</a></li> <li>○ <a href="http://www.traumaticbraininjury.com">www.traumaticbraininjury.com</a></li> </ul> </li> </ul>	<p align="center">None</p>
	<p align="center"><b>Understanding and Serving Children with Learning Disabilities</b></p> <ul style="list-style-type: none"> <li>▪ <i>Required Readings:</i> <ul style="list-style-type: none"> <li>○ Review Chapter 12 in Mash &amp; Barkley text</li> <li>○ # 11</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>▪ <b>PD Handout</b></li> </ul>
	<p align="center"><b>No Class Scheduled</b></p>	<ul style="list-style-type: none"> <li>▪ <b>Take-Home Exam Due</b></li> <li>▪ <b>ETR Summary Due</b></li> </ul>

## Appendix A Required Readings List

1. Willis, W.G., (2005). Foundations of developmental neuroanatomy. In R.C. D'Amato, E. Fletcher-Janzen, & C.R. Reynolds (Eds.), *Handbook of School Neuropsychology* (pp. 41-60). Hoboken, NJ: John Wiley & Sons.
2. Davis, A.S., & Dean, R.S. (2005). Lateralization of cerebral functions and hemispheric specialization: Linking behavior, structure, and neuroimaging. In R.C. D'Amato, E. Fletcher-Janzen, & C.R. Reynolds (Eds.), *Handbook of School Neuropsychology* (pp. 120-141). Hoboken, NJ: John Wiley & Sons.
3. Fletcher-Janzen, E. (2005). The school neuropsychological examination. In R.C. D'Amato, E. Fletcher-Janzen, & C.R. Reynolds (Eds.), *Handbook of School Neuropsychology* (pp. 172-212). Hoboken, NJ: John Wiley & Sons.
4. Telzrow, C.F., Beebe, A., & Wojcik, J. (2005). Providing neuropsychological services to early childhood learners. In R.C. D'Amato, E. Fletcher-Janzen, & C.R. Reynolds (Eds.), *Handbook of School Neuropsychology* (pp. 533-560). Hoboken, NJ: John Wiley & Sons.
5. Clark, E., & Christiansen, E. (2005). Neurological and psychological issues for learners with seizures. In R.C. D'Amato, E. Fletcher-Janzen, & C.R. Reynolds (Eds.), *Handbook of School Neuropsychology* (pp. 444-459) Hoboken, NJ: John Wiley & Sons.
6. Ramirez, S.Z., & Morgan, V. (1998). Down Syndrome. In L. Phelps (Ed.), *Health-related disorders in children and adolescents* (pp. 254-265). Washington, D.C.: American Psychological Association.
7. Klaiman, R.S., & Phelps, L. (1998). Fragile X Syndrome. In L. Phelps (Ed.), *Health-related disorders in children and adolescents* (pp. 299-308). Washington, D.C.: American Psychological Association.
8. Harrington, R.G. (1998). Tourette Syndrome. In L. Phelps (Ed.), *Health-related disorders in children and adolescents* (pp. 299-308). Washington, D.C.: American Psychological Association.
9. Semrud-Clikeman, M., Kutz, A., & Strassner, E. (2005). Providing neuropsychological services to learners with traumatic brain injuries. In R.C. D'Amato, E. Fletcher-Janzen, & C.R. Reynolds (Eds.), *Handbook of School Neuropsychology* (pp. 425-443). Hoboken, NJ: John Wiley & Sons.
10. Arnstein, L.M., & Brown, R.T. (2005). Providing neuropsychological services to children exposed to prenatally and perinatally to neurotoxins and deprivation. In R.C. D'Amato, E. Fletcher-Janzen, & C.R. Reynolds (Eds.), *Handbook of School Neuropsychology* (pp. 574-595). Hoboken, NJ: John Wiley & Sons.
11. Joseph, L.M. (2005). Understanding and implementing neuropsychologically based literacy interventions. In R.C. D'Amato, E. Fletcher-Janzen, & C.R. Reynolds (Eds.), *Handbook of School Neuropsychology* (pp. 738-757). Hoboken, NJ: John Wiley & Sons.