

**SYLLABUS**  
**SPHR 222: Neuromotor Disorders**  
**Summer 2008**  
**Mondays, 5:30-8:00, Rome 352**

---

**CONTACT INFORMATION:**

**Instructor:** Adrienne B. Hancock, Ph.D.

**Contact Info:** hancock@gwu.edu (202) 994-0975

**Office Hours:** Tues/ Thurs by appointment, Room 215 Hall of Government

**COURSE DESCRIPTION:**

The emphasis of this course will be on diagnosing and treating the various types of motor speech disorders. Accordingly, this course will integrate academic and clinical aspects of motor speech disorders. Emphasis will be placed on the neurophysiologic bases of motor speech disorders. Case presentations via videotaped sessions will be made where possible and the integration of instrumentation used to diagnose and/or treat these disorders will be highlighted.

**COURSE MATERIALS:**

**Blackboard site:** Articles, lectures, grades, most handouts, and helpful resources will be posted on the course blackboard site.

**Required Texts:**

Duffy, Joseph R. (2005) *Motor Speech Disorders: Substrates, Differential Diagnosis, and Management*, St Louis, MO, Mosby, Second Edition

Swigert, Nancy (1997) *The Source for Dysarthria*, East Moline, IL, LinguiSystems

**Supplementary Readings:** (This list may change with advance notice)

Clark, H.M. (2003). Neuromuscular treatments for speech and swallowing: A tutorial. *American Journal of Speech-Language Pathology*, 12, 400-415.

Clark, H.M. (2005). Clinical decision making and oral motor treatments. *The ASHA Leader*, 8-9, 34-35.

Gildersleeve-Neumann, C. (2007). Treatment for childhood apraxia of speech: A description of integral and stimulation and motor learning. *The ASHA Leader*, 12(15), 10-13, 30.

Hustad, K.C. (2006). Estimating the intelligibility of speakers with Dysarthria. *Folia Phoniatrica and Logopaedica*, 58, 217-228.

Hustad, K.C., Jones, T. & Dailey, S. (2003) Implementing speech supplementation strategies: Effects on intelligibility and speech rate of individuals with chronic severe dysarthria. *Journal of Speech, Language, and Hearing Research*, 46, 462-474.

Kendall, D.L. et al. (2006). Influence of intensive phonomotor rehabilitation on apraxia of speech, *Journal of Rehabilitation Research and Development*, 43(3), 409-418.

Kent, R.D. (2000). Research on speech motor control and its disorders: A review and prospective. *Journal of Communication Disorders*, 33, 391-428.

Kent, R.D. (2004). Uniqueness of Speech among motor systems. *Clinical Linguistics and Phonetics*, 18, 6-8, 495-505.

McHenry, M.A. (2003). The effect of pacing strategies on the variability of speech movement sequences in dysarthria. *Journal of Speech, Language, and Hearing Research*, 46, 702-710.

- Ruscello, D. (2007). Childhood apraxia of speech: An update. *Perspectives on Neurophysiology and Neurogenic Speech and Language Disorders*, 17(4), 18-22.
- Yorkston, K.M. (1996). Treatment efficacy: Dysarthria. *Journal of Speech and Hearing Research*, 39, S46-S57.
- Yorkston, K.M., Hakel, M. Beukelman, D.R. & Fager, S. (2007). Evidence for effectiveness of treatment of loudness, rate, or prosody in dysarthria: Systematic review. *Journal of Medical Speech-Language Pathology*, 15(2), xi-xxxvi.
- Yorkston, K.M., Strand, E.A., Kennedy, M.R.T. (1996). Comprehensibility of dysarthric speech: Implications for assessment and treatment planning. *American Journal of Speech-Language Pathology*, 5(1), 55-66.

**COURSE OBJECTIVES:**

<i>The student will:</i>	<i>Assessment method</i>	<i>KASA Standard</i>
1. Outline neurophysiologic, acoustic, and perceptual characteristics of motor speech disorders	Chapter Presentations Test 1	III-C
2. Describe the parameters assessed during evaluation to differentially diagnose motor speech disorders	Final Report/ Case presentation	III-D
3. Determine appropriate methods (including instrumentation) for each parameter of voice assessment.	Final Report/ Case presentation	III-D
4. Distinguish normal and abnormal findings in motor speech assessment	Final Report/ Case presentation MSD Summary Sheet	III-C, III-D
5. Distinguish signs and symptoms associated with each type of motor speech disorder.	MSD Summary Sheet	III-D
6. Select and provide rationale for treatment methods using evidence-based practice guidelines.	Article discussions Final Report/ Case presentation	III-D
7. Explain and implement principles of motor learning when appropriate.	Test 2	III-D
8. Discuss advantages/disadvantages of several acoustic and perceptual measures to be used in assessment and goal writing.	Test 2	III-D
9. Demonstrate treatment methods and measurement, including but not limited to: MLG, PROMPT, Oral Motor Exercises, multi-dimensional scoring, acoustic measures	Test 2	III-D
10. Describe additional influences on motor speech diagnosis and treatment (e.g., psychosocial and multicultural considerations)	Outing with patients Reflection paper	III-C, III-D
11. Counsel patients, family, and caregivers regarding various motor speech issues.	Test 2	III-D

## **COURSE REQUIREMENTS (500 points possible)**

*Specific instructions and grading rubrics will be provided separately.*

**50 points: Test 1 (online):** Anatomy and neurology of speech motor system

**100 points: Disorder Presentation:** Students will present a motor speech disorder to the class using a PowerPoint slideshow. Student is expected to schedule a meeting with the professor to review presentation prior.

**85 points: Motor Speech Disorder Summary Sheet:** Make a chart or table to use for future differential diagnosis. Include aspects of nervous system and speech systems that differentiate Flaccid, Spastic, Ataxic, Hyperkinetic, Hypokinetic, and Mixed, as well as Apraxia and Developmental Apraxia.

**50 points: Test 2 (oral exam, schedule with Dr. Hancock):** Treatment

**20 points: Reflection paper: Patient outing experience**

**100 points: Case Study Presentation:** present case from intake form to dismissal criteria as though in rounds. Turn in 2-3 page written paper in format of a final clinical report. Paper is worth 75 points, presentation is 25 points.

**60 points: Pop-quizzes:** added motivation to read before class!

**35 points: Participation:** This includes attending and being prepared for class, speaking regularly and knowledgably during class. Each class is worth 3 points. 3 points= active participation and quality contributions, 2= occasional contributions, 1= minimal, off-topic, or low-quality contributions, mostly just listening, 0= absent, not paying attention, disrespectful/disruptive.

***Include the following in your e-portfolio:***

- 1. Disorder Presentation PowerPoint***
- 2. Motor Speech Disorder Summary sheet***
- 3. Case Study Report***

Graduate School Grading Scale:

	89-86% B+	79-76% C+	69-0% F
100-94% A	85-83% B	75-73% C	
93-90% A-	82-80% B-	72-70% C-	

## **COURSE POLICIES**

**If you miss class for ANY reason:** For an absence to be “excused”, you must present documentation and preferably tell the instructor in advance. In addition, in-class assignments (e.g., article discussion) cannot be made up. **You are responsible** for all material and announcements made in class. Make arrangements to get information from another class member. After one unexcused absence you will be penalized by **5 points per absence** from your total class grade.

### **Academic Honor Code:**

As students at George Washington University, you are expected to uphold the Code of Academic Integrity (<http://www.gwu.edu/~ntegrity/code.html#definition> ). Academic dishonesty is defined as **cheating of any kind, including misrepresenting one's own work, taking credit for the work of others without crediting them and without appropriate authorization, and the fabrication of information**. Reported infractions will be discussed privately with the student(s). If it is determined that someone has violated the Academic Honor Code, that person(s) will earn 0 points for that assignment, or possibly receive a failing grade for the course. Violations will be reported to the University Judicial Officer in the Office of Academic Integrity.

**Americans with Disabilities Act:**

Students with disabilities needing academic accommodation should: (1) register with and provide documentation to the Student Disability Resource Center; (2) bring a letter to the instructor indicating the need for accommodation and what type. This should be done during the first week of class.

For more information about services available to GWU students with disabilities, contact Disability Support Services: Marvin Center Suite 242, V/TDD: (202) 994-8250, <http://gwired.gwu.edu/dss/> (This syllabus and other class materials are available in alternative format upon request.)

**SYLLABUS CHANGE POLICY:**

This syllabus is a guide for the course and is subject to change with advanced notice. Changes will be posted on Blackboard.

<i>Date</i>	<i>Topic</i>	<i>Readings to be completed BEFORE class</i>
May 19	Ch 1& 2 Overview Anatomical and Neurological Development/ Bases	
May 26	<i>No class</i> <b>Test 1</b> (on-line) DUE by Wednesday, May 28 <sup>th</sup> at midnight	Kent (2000) Review and Prospective
June 2	Ch 3 Assessment Ch 15 Differential Diagnosis Ch 12-14 "Others" (don't need to read 12-14)	Kent (2004) Uniqueness of Speech among motor systems
June 9	Disorder Presentations: Flaccid & Spastic &UUMN	Clark (2003) Neuromotor tutorial Clark (2005) OM Tx Decision Making
June 16	Disorder Presentations: Hypo & Hyper & Ataxic	
June 23	Disorder Presentations: Mixed & Apraxia	Gildersleeve-Neumann (2007) tx childhood integral and ML Ruscello (2007) update CAoS Kendall (2006) phonomotor apraxia tx
June 30	Measures (assessment and goals)	<b>MSD Summary Sheet</b> DUE Yorkston (1996) Comprehensibility of Dys Hustad (2006) Measuring Intel Yorkston (1996) Dysarthria Tx efficacy
July 7	Ch 17 Treatment methods	Yorkston (2007) systematic review of evid
July 14	Ch 18, 19, 20 Treatment methods (don't need to read 19 & 20) Test 2 (take home)	Hustad (2003) Hanson (2004) Speech Supplementation McHenry (2003) Pacing Strategies
July 21	Case Presentations	<b>Test 2</b> (oral exam to be scheduled with Dr.H)