

Brigham Young University  
Department of Communication Disorders  
ComD 675 Motor Speech Disorders – Winter 2008

**Instructor**

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Office hours: Tuesday 1:30-3:30 or feel free to make an appointment

**Blackboard**

We will be using BlackBoard to allow you to review the lecture slides and access readings for the course.

**General Objectives**

We will initially discuss models of speech motor control in order to put our subsequent discussions into a logical theoretical framework. We will briefly review relevant details of the central and peripheral nervous system, and discuss how speech movements are controlled by the brain. You will learn about specific motor speech disorders, how they can be clinically assessed, and what can be done to treat them. Emphasis will be placed on adherence to the ASHA Code of Ethics.

**Specific Objectives**

By the end of the course, you will be expected to demonstrate knowledge and competence in areas corresponding to ASHA's CAA standards in the Knowledge and Skills Acquisition (KASA) guidelines:

Basic principles and current theories of speech motor control, including biological and neurological aspects (standard III-B)

The etiology and characteristics of the different dysarthria subtypes, as well as apraxia of speech, including anatomic, physiologic, aerodynamic and acoustic features (standard III-C)

Principles and methods of assessment and intervention in motor speech disorders, based on a sound grasp of the physiologic rationale for any treatment provided (standard III-D)

The application of principles from the current research literature in motor speech disorders, with particular regard to evidence-based practice (standard III-F)

**Required Text**

Duffy, J.R. (2005). Motor speech disorders. St. Louis: Mosby Year Book. This is an excellent text, written by a leader in the field of neurological speech pathology. I encourage you to read it carefully in preparation for lectures, because it covers the different disorders in detail. Each Monday please send me an email to tell me that you are up to date with that week's reading.

Additional required readings are posted in PDF format on BlackBoard. Videos will be available in the Learning Resource Center of the Lee Library.

### **Examinations**

The exam format will be mostly short answer, with some short essay responses. The final exam will be conceptually cumulative, but will focus more on the material presented after the midterm exam.

### **Journal Article Summaries**

During the semester, read 4 articles from recent (within about the last 5 years) journals that relate to dysarthria. Write a one page (single spaced) summary of each article, including the methods used, the clinical implications, and what you think the next logical step would be to follow up on this work. Suitable journals include the Journal of Speech, Language and Hearing Research, the Journal of Medical Speech-Language Pathology, the Journal of the Acoustical Society of America or others with instructor approval. Due dates for journal summaries are noted <sup>js</sup> on the schedule.

Watch two videos (#VC11362 and #VC11644) relating to cleft palate speech in the Learning Resource Center on the 4<sup>th</sup> floor of the library, and write a total of one page to summarize these two videos. Due date is marked <sup>vs</sup> on the schedule.

### **Term Paper**

This should be 10-12 typed, double spaced pages with a minimum of 12 references from refereed journals, cited to support your comments. You may include a maximum of two Internet references, if they provide information that is relevant to your topic, and which is not addressed in the academic journals. The topic must be related to some aspect of disordered speech motor control, and must be approved by the instructor. It will be due on the last day of class.

### **Grading**

The midterm examination will be worth 25% of the course grade and the final will count for 30%. The term paper will be worth 25%. Journal article/video summaries will be worth 15%. While I do not take attendance, your punctuality, level of reading preparedness, and participation in class discussions will account for the final 5% of your grade.

I do not grade on a curve. The following letter grades for the semester correspond to the percentages listed. The percentages come from the weighted sum of all course assignments and tests.

A 95  
A- 92  
B+ 89  
B 86  
B- 83

When you receive a letter grade for a paper or report, I will assign a numeric score that corresponds to the midpoint for that letter grade. Thus, if you write an 'A' paper, you get a numeric score of 97.5, which is half way between 95 and 100. Likewise, B+ gives a numeric grade of 90.5, which is half way through the B+ to A- range.

### **Preventing Sexual Harassment**

Title IX of the Education Amendments of 1972 prohibits sex discrimination against any participant in an educational program or activity receiving federal funds. The act is intended to eliminate sex discrimination in education. Title IX covers discrimination in programs, admissions, activities, and student-to-student sexual harassment. BYU's policy against sexual harassment extends not only to employees of the university but to students as well. If you encounter unlawful sexual harassment or gender based discrimination, please talk to your professor; contact the Equal Employment Office at 422-5895 or 367-5689 (24-hours); or contact the Honor Code Office at 422-2847.

### **Students With Disabilities**

Brigham Young University is committed to providing a working and learning atmosphere that reasonably accommodates qualified persons with disabilities. If you have any disability, which may impair your ability to complete this course successfully, please contact the Services for Students with Disabilities Office (422-2767). Reasonable academic accommodations are reviewed for all students who have qualified documented disabilities. Services are coordinated with the student and instructor by the SSD Office. If you need assistance or if you feel you have been unlawfully discriminated against on the basis of disability, you may seek resolution through established grievance policy and procedures. You should contact the Equal Employment Office at 422-5895. D-382 ASB.

### **Course Alignment with the Aims of the College**

The Conceptual Framework Aims of the David O. McKay School of Education (MSOE) are, 1) Embrace and Apply the Moral Dimensions of Teaching, 2) Demonstrate Academic Excellence, 3) Model Collaboration, and 4) Act with Social Competence. As part of the School of Education, the Department of Communication Disorders provides coursework that is consistent with the conceptual framework of the college. This course addresses the issue of academic excellence by providing a thorough grounding in both theory and clinical practice relating to the diagnosis and treatment of motor speech disorders. This will include models of motor control, and the association between neurological conditions and the way these are manifest in speech production. The issue of collaboration will be discussed in the context of a team approach in treating patients. Working effectively as a team requires that clinicians understand and respect the expertise and roles of other professionals with whom they will interact, thus demonstrating a high level of social competence.

## Class Schedule

(subject to change... this is just the plan ☺)

Month	Day	Topic	Reading
Jan	7	Introduction; speech motor control	Duffy Ch 1
	9	Speech motor control	Kent et al. chapter
	14	Speech motor development	Strand chapter
	<sup>js</sup> 16	Neuroimaging	
	21	Holiday – no class	
	23	Muscles and motor control	Perkell article
	28	Review of neural bases, site of lesion	Duffy Ch 2
	<sup>js</sup> 30	Motor speech clinical assessment	Duffy Ch 3
Feb	4	Motor speech clinical assessment	Duffy Ch 3
	6	Flaccid dysarthria, spastic dysarthria	Duffy Ch 4 and Ch 5
	11	Ataxic dysarthria, hypokinetic dysarthria	Duffy Ch 6 and Ch 7
	<sup>js</sup> 13	Hyperkinetic dysarthria	Duffy Ch 8
	18	Holiday – no class	
Tue	19	UUMN dysarthria	Duffy Ch 9
	20	Mixed dysarthrias	Duffy Ch 10
	25	Apraxia of speech	Duffy Ch 11
	27	Midterm examination	
Mar	3	Psychogenic and other disorders	Duffy Chs 12, 13 and 14
	5	No class today – conference	
	10	Differential diagnosis	Duffy Ch 15
	12	Cleft palate speech	Videos in LRC
	<sup>vs</sup> 17	Principles of motor learning	
	19	Treating motor speech disorders	Duffy Ch 16
	24	Treating motor speech disorders	
	26	Treatment of dysarthria	Duffy Ch 17, ASHA handout
	<sup>js</sup> 31	Treating specific dysarthria subtypes	
Apr	2	Treating apraxia of speech	Duffy Ch 18
	7	Treating resonance disorders	
	9	Treatment issues	
	14	Special topics	

**js** = journal summary due at the beginning of class

**vs** = video summary due at the beginning of class