

Brigham Young University
Department of Audiology & Speech-Language Pathology
ASLP 321 Speech Science – Winter 2001

Instructor

Dr. Christopher Dromey

Office: 133 TLRB

Phone: 378-6461

Email: dromey@byu.edu

URL: <http://aslp.byu.edu/CDromey/index.htm>

Office hours: Tuesday 1-4 or by appointment

CourseInfo

Please note that this semester we will be using a web-based application called CourseInfo. This is a required component of the course. To access it you will need a computer and a current web browser. All campus computer labs provide this level of technology. This application will allow you to post information about yourself, learn about other students in the class, take quizzes, review lecture materials, participate in discussion groups, and more. You can access this by going to http://maeser.byu.edu/courses/ASLP_321-cdd32-00/ or by following the link on my web page. You log on by entering your Route Y ID as your user name and the last 4 digits of your social security number as the password.

Prerequisites

A good understanding of the material from ASLP 320 (speech anatomy and physiology) and Physics 167 (acoustics of music and speech) is absolutely necessary to your success in this course. If you did not take these prerequisites, please drop this class and take them before registering for this course next year. This semester's work will build on the foundation provided by the prerequisite courses and will not involve re-teaching of what you should already know.

Course Objectives

The goal of this course is to familiarize you with ways of objectively measuring clinically relevant parameters of speech and voice. Speech-language pathologists can serve their clients better and provide quantitative evidence of the effectiveness of their treatment if they are competent in applying modern technology in a clinical setting. Computers are all around us, and it is in your personal and professional interest to learn to use them effectively. The material in this course will cover more advanced research instrumentation as well as the more basic clinical tools so that you will be better able to understand the papers published in our professional journals.

Required Text

Clinical Measurement of Speech and Voice. Second Edition (2000) R.J. Baken & R.F. Orlikoff. Singular – Thomson Learning.

Do not be alarmed by the size and complexity of this text! We will focus in class on the most salient sections.

Examinations and Quizzes

The two mid-term exams will cover material presented in the first and second portions of the course respectively. The final will be cumulative, although the focus will be more on material from the latter part of the semester. All examinations will be taken in the Testing Center.

Ten open-book quizzes will be given throughout the semester, and will allow you to gauge how well you are progressing with this material. They will cover material from the textbook that we will not have time to cover in detail in class. These quizzes will be administered using the CourseInfo system, allowing you to take them on-line. If you fail to take one by the due date, it will no longer be available, and you will have missed the credit for that quiz.

As a student at Brigham Young University, you are expected to uphold the highest standards of integrity. With regard to exams and quizzes, this means that you work entirely alone, and agree not to disclose to others any information about the exam or quiz you may have already taken, which they are about to take.

Research Project

Equipment will be made available for you to gain experience in using clinically relevant instrumentation. You will be expected to conduct a small experiment to collect numeric data relevant to speech measurement.

Grading

The two midterm examinations will be worth 20% each of the course grade and the final will count for 30%. The open-book text-based quizzes will contribute 20% to your overall grade. The mini research project will contribute 10%.

Class Schedule

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

Month	Day	Topic	Reading	Read	Skip
January	8	introduction to speech measurement	Ch1	all	none
	10	analog electronics	Ch2	6-10	11-15
	15	holiday - no class			
	17	analog electronics	Ch2	16-19;32-34	20-31
	22	digital systems	Ch3	36-40;50	41-49
	24	basic instruments	Ch4	54-81	82-91
	29	basic instruments	Ch4		
	31	basic instruments	Ch4		
February	5	exam 1			
	7	speech intensity	Ch5	all	none
	12	speech intensity	Ch5		
	14	speech intensity/fundamental freq.	Ch5, Ch6	all	none
	20	<u>Tuesday class</u> – fundamental freq.	Ch6		
	21	fundamental frequency	Ch6		
	26	spectrography	Ch7	all	none
	28	spectrography	Ch7		
March	5	spectrography	Ch7		
	7	exam 2			
	12	air pressure	Ch8	all	none
	14	air pressure	Ch8		
	19	air flow and volume	Ch9	all	none
	21	air flow and volume	Ch9		
	26	laryngeal function	Ch10	all	none
	28	laryngeal function	Ch10		
April	2	laryngeal function	Ch10		
	4	velopharyngeal function	Ch11	all	none
	9	electromyography	Ch12	all	none
	11	palatometry, articulatory kinematics	Ch12		
	16	respiratory measurements	Ch12		