

SPLH 826 – Phonatory Disorders

Fall 2009

(2 credit hours)

Monday & Wednesday

1:15 – 2:55PM

Jeff Searl, Ph.D.

Course Description

This course focuses on organic and non-organic phonatory disorders in individuals of all ages. The relevant anatomy and physiology will be presented with an emphasis on understanding the normal mechanism by which voice is generated and manipulated. Causes and prevention of voice disorders, principles and means of evaluation, and remediation (behavioral, surgical/medical, pharmacological) will be addressed.

Course Objectives as Related to ASHA Knowledge Standards

The overall goal of this course is for students to have sufficient knowledge of voice disorders for entry level professional practice (with appropriate CFY supervision) and/or advanced study in the area. This course meets the requirements of the ASHA Knowledge Standards III-B Normal Processes, III-C Communication Disorders, and III-D Clinical Application in the area of Phonation and Resonance. By the end of this course, students should be able to demonstrate knowledge and understanding in the areas listed below with associated ASHA Knowledge Standards in the area of Phonation and Resonance referenced in bold italics:

1. Anatomy and physiology related to normal and disordered voice production.

The following activities will be used to enable students to demonstrate knowledge and understanding: classroom lectures, demonstrations, and discussions; assigned readings; a homework assignment specifically related to respiratory and laryngeal muscles involved in phonation; and a written examination (short answer, essay, multiple choice, and true/false questions) requiring integration of information, problem solving, and critical thinking abilities with a focus on application of the information within a clinical context.

Understand basic concepts, terminology, & theory

2. Causes and (to a lesser extent) prevention of those conditions that can cause voice disorders.

The following activities will be used to enable students to demonstrate knowledge and understanding: classroom lectures and discussions; assigned readings; and a written examination (short answer, essay, multiple choice, and true/false questions) requiring integration of information, problem solving, and critical thinking abilities with a focus on application of the information within a clinical context.

Understand basic concepts, terminology, & theory

3. Primary voice-related characteristics likely to be associated with a sampling of etiologies.

The following activities will be used to enable students to demonstrate knowledge and understanding: classroom lectures and discussions; assigned readings; in class assignments with discussion on the topic; homework assignment(s) involving perceptual judgments of voice samples and prediction of voices from endoscopic/other information; and a written examination (short answer, essay, multiple choice, and true/false questions) requiring integration of information, problem solving, and critical thinking abilities with a focus on application of the information within a clinical context.

4. Assessment planning and execution for identification of voice disorders in children and adults. A model for the diagnostic process and review of various clinical and instrumental evaluation techniques will be covered.

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assignments and activities with discussion on the topic; completion of an assignment involving perceptual evaluation of voice with peers/self; and a written examination (short answer, essay, multiple choice, and true/false questions) requiring integration of information, problem solving, and critical thinking abilities with a focus on application of the information within a clinical context.

Develop an assessment plan;

Analyze and integrate assessment findings;

Determine presence of disorder and related factors

5. Behavioral, surgical, medical, prosthetic and pharmacological treatments for voice disorders. Selection of the intervention approach, implementation of a sampling of behavioral interventions, coordination of behavioral intervention with other types of therapy, therapy termination criteria, and common difficulties in the therapeutic process will be covered.

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Develop a treatment plan based on available evidence

Please see the Appendix to the syllabus for a listing of the AHSA Knowledge Outcomes and the IPCD Program Goals that are met via successful completion of this course.

Text/Readings/Materials

The text is: **NOTE- there is a 2009, 8th edition of this book. You can use either one. I do not lecture from the book, but it does serve as a very good supplement to topics covered in class.**

Boone, DR, McFarlane, SC, and VonBerg, SL. (2005). The Voice and Voice Therapy, Pearson Education, Inc.

Additional readings are needed for some portions of the course. These are listed on in the outline of the course at the end of the syllabus. The additional readings are available in the main office of the Hearing & Speech Dept. in the appropriate course box (ask Nancy or Eva to point you in the right direction if you don't know where you are going – or ask one of the second year students – they're nice.) You can copy these readings or check them out overnight (please don't check them out early in the day and hold on to them, limiting other students from being able to get to them).

Format of Classes

I generally try to mix up the classroom activities a bit for fun and to keep both you and me awake. There will be some straight lecturing, but I really do try to get you guys involved even in this. I like to ask questions of you or solicit questions from you throughout the lectures. Please feel free to stop me at any point to ask questions or to ask for a repeat of something – I'd rather we get it straight in your mind from the get-go rather than letting you sit there confused. I am pretty informal in class, so just pipe up or raise your hand. I've never gotten used to the "doctor Searl" thing, so, please call me Jeff. I don't mind backtracking (the review is usually good for everybody). We will also be doing some in class exercises together – looking at endoscopy images, listening to audio samples and making judgments of voice and other fun stuff. This year, I along with a doc student are going to be trying out a set of listening labs and exercises designed to get you all used to rating voices – should be fun.

I like to work off of outlines in class. I will post these on Blackboard ahead of each class so that you can print it out to have with you for each lecture if you'd like. I will do the same with any PowerPoint presentations that I use, although I don't use them throughout the whole course.

Grading

Course grades are based on the following activities (more details below):

1. Homework	<u>POINTS</u>
a. Anatomy & Physiology	10
b. Cochrane reviews	20
c. Voice log with reflection	10
2. Listening Lab + famous person audio/video sample	40
3. Group Project	25
4. Mid-term Exam	85
5. Final Exam	100
6. In-class participation	<u>10</u>
TOTAL:	300

1. Homework Assignments.

- a. Anatomy and Physiology. I'll give this to you in two parts with the first one going out to you in a day or two and the second one shortly after that. The first part covers respiratory and laryngeal muscles and their activity during speaking and breathing. The second part involves an understanding of various parameters of phonation (pitch, loudness, quality; duration of voicing) and how these are manipulated/affected by different physiological manipulations.
 - b. Cochrane reviews. There are 5 Cochrane reviews related to voice treatment (actually, one of these is more focused on prevention). You are to read them. Mostly I want you to start thinking about what it means to do evidenced-based treatment in the area of voice and have some sense of where we are at as a profession. You are to write a short summary and reflection of each review (by short, I mean an abstract length summary – half a page single spaced – and then about the same for a reflection (any thoughts you have on the issue at hand. Mostly I just want some way of knowing that you actually read the article and had to think about it some, i.e., gimme points, but a helpful activity none-the-less in getting you to the goal of evidence-based practice.
 - c. Voice Log. I will have you do a voice log at some point during the semester so you can see what we ask our patients to do (and so you can see how big a deal it is to do one). Basically is you keeping notes/rating yourself daily for two weeks.
2. **Listening Lab** + famous person audio/video sample – details to follow. This will be a combo of in-class listening as well as individual assignments involving listening to voices and rating them. The intent is to get you used to listening to voices and see if we can maximize your rating reliability (both your intra and your inter-rater reliability).
 3. **Group project** in which you and a classmate (or two), will be assigned a case a portion at a time (history first, ENT findings next, endoscopic exam next or something of the sort). From the info at each stage you will have to make certain observations or predictions. This will also involve doing some treatment planning. More details to come in a few weeks. We may share these cases with everyone during class if time allows.
 4. **In class participation**. A couple of tips to get these points. Stay awake in class. Don't throw things at the teacher. Ask questions when you have them. Comment or contribute to discussions. Laugh at my jokes. Seriously though – I do try to encourage as much interaction as possible in class. Grad school classes should be a comfort zone for you in many respects. It is ok to show what you don't know and equally ok to show what you know. There may be some in-class activities (individual and group dealies). These will be things like watching an endoscopic exam and then predicting what the voice will sound like or hearing an audio sample and describing what's going on with the anatomy/physiology. The other portion of the points in this category are truly for your general in-class participation. The in-class activities will provide opportunities for you to jump into discussion with

your mates and me. And during the lectures, I will be paying attention to your participation as well. To get the full portion of these points you need to participate. I will be keeping track after each lecture (0=absent, disruptive, clearly not attentive; 1=present and attentive, not disruptive, few [if any] active attempts at participation; 2=contributing actively to the class). You'll have many opportunities and I'm not very mean, so the points are there for the taking if you jump in.

5. **Mid-term examination.** This will be a take-home exam that happens somewhere near the middle of the course (once I see how we are progressing I will give you specific dates for handing it out and returning it). It will be a mix of short answer, multiple choice, etc. that deals with material we've covered to that point.
6. **Final examination.** The final exam will be completed at the scheduled time for this course. The test will focus mainly on info from the second half of the course, although it is impossible to not also know info from the 1st half (things like the anatomy/physiology, eval. procedures, etc.). I'll focus you more re: content as the time approaches.

The grade for this course is based on the total points accumulated from the items listed above. The usual 10% intervals are used to determine the final grade. I.e., 295-266 = A; 265-236 = B, 235-207 = C, etc.

Course Outline with associated readings

<u>CLASS #</u>	<u>TOPIC</u>	<u>READINGS</u>
1-2 (or3)	Course Overview Respiratory and Laryngeal Anat./Phys.	Boone et al, 2005, Ch 2
3 (?)	Parameters and Processes of Phonation Age/Gender Influences	Aronson, 1985, Ch 3 (pp. 43-54)
4-6	Disorders Overview (organic vs. inorganic) Voice Evaluation: Diagnostic Model & Differential Diagnosis Voice Evaluation: History & Perceptual Exam Procedures Voice Evaluation: Instrumental Measures	Boone et al, 2005, Ch. 5 Colton & Casper, 1996, Ch. 2 Stemple et al (1996), Ch 6 (not a skim, but not for full detail either)
7	Voice Treatment: Behavioral Options	Colton & Casper, 1996, Ch. 9 Boone et al, 2005, Ch. 6 & 7
8	Non-organic Disorders: Non-Psych	Boone et al, 2005, Ch. 3 (pp. 51-76)
9	Non-organic Disorders: Psych	Aronson, 1985, Ch. 6 and Ch. 13
10	Catch-up day; video and audio reviewing	
11	Medical Treatment Options <i>(might just have you review the PowerPoint show on your own without lecture)</i>	Colton & Casper, 1996, Ch. 8
12	Organic Disorders: Neurological	Boone et al, 2005, Ch. 3 (pp.76-92) & Ch.4
13	Organic Disorders: Other	Colton & Casper, 1996, Ch. 4 and Ch. 6

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| 14 | Special Pops: PVFM, TG, ProV | Galivan, et al (1996)
Andrews (1995)
Stemple et al, 1995, Ch. 9 |
| 15 | Chips and Drinks and more video and audio reviewing (or we just play catch-up) | |

Statement of Disability

If you need accommodations to meet the requirements of this course because of a disability/condition, please notify the instructor or the Equal Opportunity/Disability Specialist (913-588-7813; TDD 913-588-7963). Counseling and educational support are available without cost and with full confidentiality through the Student Center (913-588-6580).