

COMD 4398 – Special Problems – Undergraduate Research in Occupational Voice

Monday, 9 – noon

Dr. McHenry

119 McElhinney

mmchenry@uh.edu

CRS 116

Office hours: by appointment

Purpose: This course is designed to explore the vocal demands of occupational voice users. The course will cover advanced anatomy of the vocal folds, mechanisms of vocal fold vibration, instrumentation based assessments, and vocal challenges encountered by occupational voice users. Students will design a study and collect, analyze, interpret, and present the acquired data.

Learner Objectives:

Students will be able to:

Discuss the mechanics vocal fold vibration.

Describe vocal fold mechanics associated with various vocal demands, such as extreme pitch and loudness.

Demonstrate proficiency with aerodynamic and acoustic assessment of voice production.

Analyze and interpret aerodynamic and acoustic data in relation to the individual's vocal demands.

Date	Topic	Student activity
1/25	Basics Intro to voice lecture	Discuss personal interests in voice and any connections with occupational voice users Discuss possible outside observations Assignment – See Don Giovanni and report on, Thursday (1/28), Saturday (1/30) or Sunday (1/31) at 7:30 pm at Moores School of Music and answer assigned questions (\$5.00 admission for students). Optional preview lecture 45 minutes before each performance. Report outline under assignments.
2/1	Beyond Basics Stroboscopy Model of vocal fatigue Vocal fatigue vs overuse Impact of personality on voice Semi-occluded vocal tract Resonant voice therapy McHenry current research	Discuss Don Giovanni and submit report (20 points) Complete and discuss Eysenck Personality Inventory and Voice Handicap Index Practice semi-occluded vocal tract exercises View RVT video

2/8	Assessment – meet in CRS lab Acoustic analysis Aerodynamic analysis O ₂ monitoring CAPE-V Ah prolongation s/z ratio	Score disordered voices with CAPE-V Assess each other's ah prolongation and s/z ratios Collect PTP and vocal effort rating data Assignment: Pick article to report on next week
2/15	Occupational Voice Users	Student reports (20 points) and discussion Assignment: Pick article to report on next week
2/22	Factors affecting OVUs	Student reports (20 points) and discussion
3/1	Observe theatre class	Meet in School of Theatre at 9. Have questions for Jim Johnson, Voice Professor. Observe class from 10 – 11:30. Follow up discussion. (5 points for active participation)
3/8	Observe singing class	Meet at Moores School of Music Room 129 at 10:00. Have questions for Joey Evans, Voice Professor. Observe Voice Studio 11 – 1. (5 points for active participation) Assignment: write up outside observation
3/15	NO CLASS – Spring Break	
3/22	Report and submit outside observations/ Research Concepts/Human Subjects considerations	Outside observation discussion and submit reports (20 points)
3/29	Design studies	Sign up for times to practice data collection and analysis
4/5	Practice Data Collection and analysis throughout week	Meet with Dr. McHenry to practice data collection and analysis
4/12	Collect and analyze data including inter and intra judge reliability	Meet as needed
4/19	Collect and analyze data including inter and intra judge reliability	Meet as needed
4/26	Discuss data	Regular class time to discuss collected data
5/3	Presentations/papers due	Presentation – 50 points/ paper 50 points