Fall 2019

Course info: T/Th 10:30-11:45 CLB 201 https://canvas.okstate.edu/courses/43263

Professor: Dr. Valerie Freeman ("Professor" or "Dr. Freeman") <u>valerie.freeman@okstate.edu</u>

Office hours: Murray 007 Tue 3:30 pm & by appointment

GTA: Tabitha Burleson Hours: CLB 001, TBA tabitha.burleson@okstate.edu

Course Objectives: In this course, you will increase your knowledge of:

- speech production and perception (KASA III-B)
- objective speech recording measures used in assessment of speech disorders (KASA III-D)
- the traditional classification of consonants and vowels (KASA III-B)
- the nature of sound and various attributes of sound (KASA III-A)
- the anatomy and physiology of the subsystems of speech production (respiratory, phonatory, resonatory, articulatory (KASA III-B))
- the role of nervous system in speech production (KASA III-B)

Required Materials

- **Textbook**: Ferrand, C. (2018). Speech Science: An Integrated Approach to Theory and Clinical Practice (**4th edition**). Pearson. ISBN: 0134481453. You may use the **print or e-text** version (you do not need both).
- **Praat** (free software): http://www.fon.hum.uva.nl/praat/. Install on your laptop/home computer, use in a lab, or run from USB flash drive. Installation will be demonstrated in class.
- Canvas: visit often for course materials, quizzes, assignments, grades, etc.

Workload

- Before each class: read 10-20 pages, prepare for in-class reading check (not shown on schedule)
- In class: individual and team reading checks, practice worksheets, group work, etc.
- After some classes: finish in-class work, small homework assignments (not shown on schedule)
- Weekly (before class): complete online timed quiz over previous chapter
- Every ~2 weeks: Optional online Practice Test for extra credit (open rest of semester)
- ~5 times/semester: Finish lab assignments

Course Grade Breakdown

- Reading checks (almost daily, in class) 10%
 - o Partial credit (-10%) if taken within 1 class after an absence (classroom/office hours)
- Worksheets, participation (in-class activities, practice homework)
 - o Partial credit (-10%) per class day late, not accepted after 3 class days
- Chapter quizzes (~12 total, online, timed, open book/note but not internet/friend) 15%
 - Open after we finish a chapter, close in ~5 days (see schedule)
- Lab assignments (4-5 total)
 25%
- Exams (4 total: 3 midterms + 1 cumulative final, in class on paper, no books/notes) 40%
 - Optional online practice tests contribute up to 10% of each exam score

Updated: 8/21/2019

Course Grade Conversion

- A > 90.0%
- B > 80.0%
- C ≥ 70.0%
- D > 60.0%

In-class Reading Checks & Teams

- Most class days will begin with a short closed-book reading check over the day's readings.
 - If you are absent, you can earn partial credit for the reading check if you take it by the next class (during office hours or in the classroom before/after/during class). If you cannot come to scheduled office hours or come to class 5 mins early or stay 5 mins after, email the professor or TA to schedule another time (otherwise, just show up).
- After lecture, you will work on another copy of the reading check in a team of 3-4 students.
 Your individual grade will average your individual and team check scores (if your team score is higher). We'll clear up uncertainties together.
 - You cannot make up team reading checks if you are absent; your reading check grade will be your individual score.
- Teams: form your team of 3-4 by the end of Week 2, and sit together from then on. Name your team something related to course material. Post your team name and membership to the Canvas discussion board by the end of Week 2.

Labs

• In 4-5 lab assignments, you will learn to use Praat to take acoustic measurements. Labs start with in-class demonstrations and involve time both in class and at home.

Practice Tests

- Practice Tests are similar to online chapter quizzes, but they have more questions and a longer time limit. They open after the last online quiz for the unit closes and remain open for the rest of the semester. Your first attempt will count up to 10% extra credit toward your next exam grade, but you can retake them as many times as you want to study throughout the rest of the semester. The questions are drawn randomly from the bank each time.
 - o Units: ch 1, ch 2-3, ch 4-5, ch 6-7, ch 8-9, ch 10-11, ch 12

Absences

- When you're absent, check Canvas for materials used in class. Check with your teammates for due dates on any in-class worksheets.
- If you're absent when something is due, upload a scan or clear photo to the assignment on Canvas (full credit if turned in before class, -10% for each class day late up to 3 days).
- There is no need to notify the professor or TA of an unexpected absence, but do contact one of
 us if you have an extended illness or planned absence.
 - If you have an excused absence (e.g., doctor's note), contact the professor and TA to arrange extensions for missed work.

Tutoring

- LASSO offers free peer tutoring for many courses. Sign up at Tutor.okstate.edu
- A CDIS senior is a tutor for this course (and others). She can help with concepts, studying tips, practice, and going over homework/exams.

Schedule (subject to adjustment during the semester)

W	(#	Day	Date	Topic & Prep for class
1	1	Т	Aug 20	Intro • Get book (print or e-text)
	2	Th	Aug 22	Ch 1: Nature of Sound • Review ch 1 p. 1-15 (Physics) • Read ch 1 p. 16-31 (waves)
2	3	Т	Aug 27	Read ch 1 p. 31-53 (Attributes, Resonance)
	4	Th	Aug 29	 Due: Quiz Ch 1 Due: Worksheet Ch 1 Ch 2: Respiratory System Review ch 2 p. 55-68 (anatomy) Read ch 2 p. 68-86 (Volume, Capacity, Speech Breathing) Lab: Praat Intro Bring/share laptop with Praat installed
3	5	Т	Sep 3	 • Due: Quiz Ch 2 Ch 3: Respiratory Disorders • Read ch 3 p. 88-99 (Measures, Classification) • Lab con't: Bring/share laptop with Praat installed
	6	Th	Sep 5	 Read ch 3 p. 99-115 (Neurological) Due: Worksheet Ch 2-3 (end of class) Due: Intro Lab (end of class)
4	7	Т	Sep 10	Due: Quiz Ch 3 Review Exam Ch 1-3
	8	Th	Sep 12	Ch 4: Phonatory/Laryngeal System Review ch 4 p. 118-137 (anatomy, esp. valves) Read ch 4 p. 137-147 (Vibration, Life Span) Lab: Voice Bring/share laptop with Praat installed
5	9	Т	Sep 17	Read ch 4 p. 147-154 (Quality, Register)Lab con't: Bring/share laptop with Praat installed
	10	Th	Sep 19	 Due: Quiz Ch 4 Due: Voice Lab Ch 5: Phonatory Disorders Read ch 5 p. 155-170 (Measurements, EGG) Lab: EGG Bring/share laptop with Praat installed
6	11	Т	Sep 24	 Read ch 5 p. 170-191 (Visualization, Treatment) Lab con't: Bring/share laptop with Praat installed
	12	Th	Sep 26	• Due: EGG Lab • Due: Quiz Ch 5 Review Exam Ch 4-5
7	13	Т	Oct 1	Ch 6: Articulatory/Resonance System Read ch 6 p. 195-215 (Tract, Pharynx) Read ch 6 p. 215-223 (Classification)
	14	Th	Oct 3	• Read ch 6 p. 223-234 (Resonance)

Wk	#	Day	Date	Topic & Prep for class
8	15		Oct 8	Read ch 6 p. 234-240 (Spectrograms: Sonorants) Lab: Vowels Bring/share laptop with Praat installed
	16	Th	Oct 10	Read ch 6 p. 240-246 (Spectrograms: Obstruents)Lab con't: Bring/share laptop with Praat installed
9	17	Т	Oct 15	 Read ch 6 p. 246-252 (Context) Lab con't: Bring/share laptop with Praat installed Due: Worksheet Ch 6 (end of class)
	18	Th	Oct 17	 Due: Vowel Lab Due: Spectrogram HW Due: Quiz Ch 6 Ch 7: Articulatory/Resonance Disorders Read ch 7 p. 255-260 (Visualization)
10	19	Т	Oct 22	Read ch 7 p. 260-278 (Disorders) Review
	20	Th	Oct 24	• Due: Quiz Ch 7 Review Exam Ch 6-7
11	21	Т	Oct 29	Ch 8: Auditory System (& Speech Perception) • Review ch 8 p. 282-293 (Ear anatomy) • Read ch 8 p. 293-304 (Perception)
	22	Th	Oct 31	<u>Lab: Speech Perception</u> • Bring/share laptop with Praat installed
12	23	Т	Nov 5	 Due: Quiz Ch 8 Bring: Lab "friend" responses Lab con't: Bring/share laptop with Praat installed Ch 9: Hearing Loss (& Speech Perception) Review ch 9 p. 305-314 (Hearing Loss) Read ch 9 p. 314-326 (Perception, Cls)
	24	Th	Nov 7	 Due: Perception Lab Ch 10: Nervous System (& Aphasia & Motor Learning) Review ch 10 p. 328-369 (Neural anatomy)
13	25	Т	Nov 12	• Due: Quiz Ch 9 • Read ch 10 p. 369-380 (Motor Control)
	26	Th	Nov 14	Due: Quiz Ch 10 Ch 11: Brain Imaging Read ch 11
14	27	Т	Nov 19	Due: Quiz Ch 11 Ch 12: Models & Theories Read ch 12
	28	Th	Nov 21	Due: Quiz Ch 12 Due: Bonus Neural Anatomy Quiz (Ch 10) TBD
15	29	Т	Nov 26	TBD
		Th		THANKSGIVING (no class)
16		Th _	Dec 3	TBD/Review
	31		Dec 5	TBD/Review
17	32	T	Dec 10	Final Exam (cumulative) 10:0011:50