PURPOSE: This course facilitates for vocal performers, voice teachers, and choir directors: (1) an understanding of those elements of contemporary voice science methodology, research, and clinical practice that have particular application for the voice studio, choir rehearsal, and/or individual careers in voice performance, (2) an appreciation of the scientific method in matters of vocal pedagogy, particularly in the diagnosis and correction of vocal inefficiencies, and (3) an ability to converse intelligently with voice scientists, otolaryngologists, and others, so that (4) dialogue between voice science and the vocal arts can be mutually informative.

To those ends, the course: (a) examines vocal anatomy and physiology as they pertain to respiration, phonation, resonance, articulation, and lifespan vocal development; (b) surveys the acoustic properties of sound as they relate to voice production and perception; (c) considers pedagogical strategies for working with voices of various age levels, abilities, and prior learning experiences, including diagnosing inefficient vocal phenomena and implementing learning experiences to modify them; (d) looks at the role of the voice teacher or choir director in fostering vocal health and voice care, so they may know when to refer students to a voice center or otolaryngologist (and, when invited, to serve as a contributing member of a voice therapy team); (e) explores the use of spectrogram software in teaching voice; (f) explores where to find and how to read scientific research related to the human voice and its employment as both a solo and choral musical instrument; and (g) addresses matters of interest to voice teachers, such as membership in professional organizations, professional ethics, opportunities for ongoing professional development, and the business dimensions of setting up and maintaining a private voice studio.

N.B. The work of this course is predicated upon the following value assumptions: (a) “scientific” and “artistic” approaches to voice pedagogy are not mutually exclusive; and (b) factual knowledge of human voice phenomena ultimately benefits our students, enabling us as voice pedagogy professionals to abide by that most basic of ethical principles: “First, do no harm.”

REQUIRED TEXTBOOKS:


RECOMMENDED TEXTS:


RECOMMENDED ADVANCED TEXTS:


SPECROGRAPHIC SOFTWARE:
All students enrolled in this course will receive a free copy of the Voice-Vista Pro software program. This software is useful for providing visual feedback in singing instruction and also for certain research purposes. It runs, however, only on PC compatible computers (133Mhz, 16 MB memory, Windows 95 and above), not Macs. Per licensing agreement with the developer of Voice Vista, Dr. Donald Miller of the Groenigen Voice Research Lab in The Netherlands, only those students and faculty affiliated with KU are eligible to receive Voice Vista in this manner. Please do not make it available to non-KU personnel. Others, of course, may purchase it via the vocevista.com web site.

COURSE CALENDAR
A Course Calendar with Assignments will be posted on the course web site. A calendar for the first two weeks accompanies this syllabus. Reading assignments must be completed prior to the class session for which they are listed. The instructor reserves the right to schedule unannounced pop quizzes on the readings.

ATTENDANCE POLICY
Miss no more than one class for any reason. Failure to complete this requirement will result in lowering of the final grade one +/- increment for each transgression.

TEACHING PRACTICUM
All students in this course will engage in teaching a series of N=6 voice lessons to a particular student. These lessons must be videotaped. Each lesson must be planned and evaluated. Signed permission must be received in order that lessons may be videotaped and shared with the class as a whole. Specific details for carrying out this practicum will be discussed in class.
COURSE REQUIREMENTS AND GRADING:

Undergraduate, Master’s and Doctoral Students:

1. Evidence of regular, on time completion of assigned readings, as indicated by (a) short reflection activities or pop quizzes at the beginning of each class, (b) contributions to class discussions, and (c) examination of lab notebooks.
2. A completed Lab Notebook. See handout for criteria.
3. Pass (with a score of 85 or above) N=3 Competency Tests: (a) vocal anatomy and physiology, (b) acoustics of vocal sound, (c) vocal pedagogy case studies. The first two tests will be given in class. The latter test will be take-home, open book, and open notes.
4. Complete the Teaching Voice Practicum.
5. Analysis of N=1 (for undergraduate students) and N=3 (for graduate students) voice research articles. For graduate students, this is a package deal. No credit awarded for less than 3 analyses, completed with competency.

Master’s and Doctoral Students only:

6. Serve as “senior learner” for a 20 minute class presentation, either on a topic from the assigned readings or another topic that particularly interests you. See handout for criteria.

Doctoral Students only:

7. Complete a 16-20 page scholarly or research paper on a topic of interest. See handout for criteria.

8. Assist with mentoring VOIC 408 students in the teaching practicum.

All assignments must be completed and turned in on, or before, the due dates in order to receive credit. No assignments will be accepted late. All assignments must be typed unless otherwise specified.

There will be no final examination in this course.

FINAL COURSE GRADE:

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<thead>
<tr>
<th></th>
<th>Undergrad</th>
<th>Master’s</th>
<th>Doctoral</th>
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<tbody>
<tr>
<td>Class attendance, reading, participation</td>
<td>20 points</td>
<td>15 points</td>
<td>10 points</td>
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<tr>
<td>Lab Notebook</td>
<td>20 points</td>
<td>20 points</td>
<td>10 points</td>
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<tr>
<td>Research Article(s) Analysis</td>
<td>4 points</td>
<td>9 points</td>
<td>6 points</td>
</tr>
<tr>
<td>Competency Test I</td>
<td>12 points</td>
<td>12 points</td>
<td>8 points</td>
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<tr>
<td>Competency Test II</td>
<td>12 points</td>
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<tr>
<td>Competency Test III</td>
<td>12 points</td>
<td>12 points</td>
<td>8 points</td>
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<tr>
<td>Teaching Practicum</td>
<td>20 points</td>
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<tr>
<td>In-Class Teaching</td>
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<td>12 points</td>
<td>10 points</td>
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<tr>
<td>Scholarly or Research Paper</td>
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<td>20 points</td>
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This is a competency-based course. Students will be awarded consistently the maximum points, as listed above, for each requirement completed “with competency,” as determined by the instructor. As long as a first, good-faith effort to demonstrate a particularly competency was made on time, students may, without penalty, re-do or re-take any of the above until competency is achieved (with the exception of attendance/reading/participation, of course). Students not demonstrating competency by the final class meeting, however, will have the full number of points listed above subtracted from their final course grade. N.B. For doctoral students, the paper will be graded traditionally, with 20 points awarded for a paper of “A” quality.

No grades of Incomplete will be given in this course.

Can every student potentially earn a final grade of A in this course? Sure. Why not?

CRITERIA FOR FINAL COURSE GRADE: A = 93 - 100 points, B = 85 – 92 points, C = 77 – 84 points, D = 70 - 77 points.

The staff of Services for Students with Disabilities (SSD), 135 Strong Hall, 785-864-2620 (v/tty), coordinates accommodations and services for KU courses. If you have a disability for which you may request accommodation in KU classes and have not contacted them, please do so as soon as possible. Please also see Dr. Daugherty privately in this regard.

The International Voice Care Network and the National Center for Voice & Speech Vocology Institute each offer intensive one to three week courses every summer. KU students may directly earn graduate credit for successful completion of such courses by enrolling either for further hours of MEMT/CHOR 828, or in Independent Study. See the respective web sites for more details on these courses.
# INITIAL COURSE CALENDAR

<table>
<thead>
<tr>
<th>DATE</th>
<th>TOPICS</th>
<th>READINGS DUE</th>
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<tbody>
<tr>
<td>August 21</td>
<td>Course Orientation</td>
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<td>Voice Autobiographies</td>
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<td></td>
<td>Intro to Voice Anatomy</td>
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<td>August 28</td>
<td>Vocal Anatomy/Physiology I</td>
<td>Sundberg/Welch chapter (xerox);</td>
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<td></td>
<td>Lab 1</td>
<td>McKinney Chapters 1-2, &amp; pp 65-76</td>
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<td></td>
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<td>Titze chapter (Xerox)</td>
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<td>Thurman/Welch, xi-xxii, 303-306.</td>
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<td></td>
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<td>&amp; 356-391</td>
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<td></td>
<td></td>
<td>Explore Resources page of course web site, particularly the first six links</td>
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<tr>
<td>Sept. 4</td>
<td>Labor Day.  No class.</td>
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<tr>
<td>Sept. 11</td>
<td>Vocal Anatomy/Physiology II</td>
<td>Thurman/Welch, 326-355</td>
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<td></td>
<td>Lab 2</td>
<td>Continue to explore Resources page on the course web site</td>
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<td></td>
<td></td>
<td>Review class handouts</td>
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<td></td>
<td></td>
<td>Begin review for Competency Test I</td>
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<tr>
<td>Sept. 18</td>
<td>Guest lecture: Otolaryngologist</td>
<td>Review for Competency Test I</td>
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<td></td>
<td>Lab 3</td>
<td>Re-reading those materials necessary</td>
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<tr>
<td>Sept. 25</td>
<td>Vocal Anatomy/Physiology Competency Test</td>
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<td>Lab 4</td>
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<tr>
<td>Oct. 2</td>
<td>Acoustics I</td>
<td>Thurman/Welch, 307-325, 382-468</td>
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<td></td>
<td></td>
<td>McKinney, 120-165</td>
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</table>
BASIC ANATOMICAL/PHYSIOLOGICAL TERMINOLOGY

Larynx
Pharynx
Nasopharynx
Oropharynx
Laryngopharynx
Glottis
Vocal folds/cords
Epithelium
Lamina Propria
Renke’s space
Vocal Ligament
Epiglottis
Aryepiglottic fold
Vestibular (false) fold
Hyoid Bone
Thyroid Cartilage
Cricoid Cartilage
Arytenoid Cartilages
Corniculate Cartilage
Cuneiform Cartilage
Tracheal Cartilage
Trachea
Esophagus
Priform sinuses
Sternum
Clavicle
Hard Palate
Velum/Soft Palate
Uvula
Mandible
Diaphragm
Rib Cage
True Ribs
Floating Ribs
Intercostal Muscles
Paranasal Sinuses
Internal Laryngeal Muscles
External Laryngeal Muscles (just know them as an overall group)
Thyroarytenoid Muscles (thyrovocalis portion and thyromuscularis portion)
Arytenoid Muscles
Cricothyroid Muscles (pars recta and pars obliqua)
Cricoarytenoid Muscles (posterior and lateral)
Interarytenoid Muscle (transverse and oblique)
Vocal fold abduction
Vocal fold adduction
Supralaryngeal Muscles (just know them as an overall group)
Infralaryngeal Muscles (just know them as an overall group)
Thorax Cavity
Abdominal Cavity
Respiration
Phonation
Resonation
Articulation
Subglottal
Supraglottal
Myoelastic-Aerodynamic Theory of voice production
Non-Linear Theory of voice production

Related Terms for Competency Test I:
Phonation Threshold Pressure
Transglottal airflow
Bernoulli Effect
Open Quotient (OQ)
Closed Quotient (CQ)
Electroglottography (EEG)

Common Terms for Viewing:
Frontal
Transverse
Sagittal
Anterior
Posterior
Superior
Inferior
Medial
Lateral

To Test Your Comprehension:
Can you accurately describe, in terms your student could understand, how the vocal folds open and close, and why they do so?
Can you accurately describe, in terms your student could understand, how the vocal folds lengthen and shorten, and why they do so?