MEMT408/VOIC 408: VOCAL PEDAGOGY

SYLLABUS FALL 2011
Mondays, 6:30 – 8:00 p.m.

SYLLABUS

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COURSE WEB SITE: http://people.ku.edu/~jdaugher
The course web site houses a variety of class-related material, including evaluation forms, links to web-based resources on vocal anatomy, physiology, and acoustics, electronic versions of the course syllabus and calendar, and some assigned readings.

PURPOSE: This course facilitates for vocal performers, voice teachers, choir directors, music therapists, and other professionals: (1) understandings of contemporary voice science methodology, research, and clinical practice that have particular application for the voice studio, choir rehearsal, music therapy clinic, 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, choir director, or music therapist 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 singing; (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, choir directors, and music therapists such as selection of vocal literature, 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) “artistic” and “scientific” approaches to voice pedagogy can be mutually informative; and (b) factual knowledge of human voice phenomena ultimately benefits our students and clients, enabling us as professionals to abide by that most basic of ethical principles: “First, do no harm.”

REQUIRED TEXTBOOKS:


The Course CD (distributed at first class meeting) contains other assigned readings.

REQUIRED MATERIALS: Media to video-record and playback voice lessons.

RECOMMENDED BOOKS:


RECOMMENDED ADVANCED TEXTBOOKS:


OTHER VERY USEFUL BOOKS:


SPECTROGRAPHIC SOFTWARE:
All students enrolled in this course will receive free a copy of the VoceVista 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 (133 Mhz, 16 MB memory, Windows 95 and above, excluding the Vista operating system). A Mac-compatible version is in development (you may check the VoceVista web site for an update on that process). Per licensing agreement with the developer of VoceVista, Dr. Donald Miller of the Groningen Voice Research Lab in The Netherlands, only those students and faculty affiliated with KU are eligible to receive VoceVista 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 the course web site. A tentative calendar 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 meeting for any reason. Failure to complete this requirement will result in lowering of the final grade one increment for each absence. For extremely extenuating circumstances, contact the instructor as soon as possible.

VOICE TEACHING PRACTICUM
All students in this course will engage in teaching a series of voice lessons (N=4) to a particular learner. Students in voice performance and music education will follow a private voice studio
approach to this practicum experience. Students in music therapy may undertake therapeutic voice pedagogy with an older adult, a Speech-Language Center client, or a person chosen in consultation with a music therapy faculty member. Students in other disciplines may negotiate with the instructor a practicum experience that best serves their needs and program goals.

Each practicum session must be videotaped. Each lesson must be planned beforehand and evaluated afterward by means of submitted online evaluation forms. 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:

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) submission of a HAT journal as specified, and (c) contributions to class discussions.

**HAT JOURNAL.** Keep an ongoing journal with entries for each class meeting of the course. For each entry, briefly address these three items: (a) H=Huh? “I’m not sure about......” What specific questions do you have from the readings for this week. What specific questions do you have from the previous class meeting? From the voice pedagogy practicum? What items/skills are you still fuzzy about?; (b) A=Aha! “I did not know that.” What light bulbs turned on for you? What did you learn that was new to you?; (c) T=Transfer. “I can use these particular concepts/techniques (name them) in my teaching, performance practices, or research (how?).” Also, What implications might particular ideas/techniques have for your professional life and for life in general?

How To Do It: Begin a word-processing document. Type as individual headings the date of each class meeting. Write your HAT reflections below each heading. Bulleted or enumerated writing is fine, as long as your meaning is clear and your writing evidences thoughtful engagement with the readings/discussions/activities of the class. **Keep this word-processed, master document to turn in at the end of the semester.**

Submission: Cut and paste into the body of an email your journal reflections for each week. Email these entries no later than Noon each Monday to jdaugher@ku.edu. The subject line of your email must read “Voice Ped HAT Journal.” Note: You will write journal entries prior to, not after, class meetings. Doing so will serve as a check that you are completing the readings and enable the instructors to address in class those items of particular interest or confusion to you.

2. Complete with competence all course lab experiences (N=9), as evidenced by a complete lab portfolio. N.B. For partnered labs, each partner should turn in each lab (in these cases, Xeroxing may be necessary).

3. Pass (with a score of 90 or above) N=2 Competency Tests: (a) vocal anatomy and physiology, and (b) acoustics of vocal sound. These tests will be given once in class.
Students not achieving a score of 90 or above may retake each test. Individual appointments must be scheduled for re-tests.

4. Complete with competence the **Voice Pedagogy Practicum** (N=4 lessons), including submission of the **Voice Lesson Evaluation Form** after viewing a video of each of your lessons. The evaluation form is online. *You will present selected portions of two of these videotaped lessons for the class.*

6. **Analysis of N=1 voice research article.** This is a team project, to be done jointly by you and another class member. There are two steps: (a) Gain instructor approval of chosen article by submitting via email the bibliographic reference data and abstract for a chosen research article by the date listed on the course calendar. This submission is the research article proposal. At that time, the instructor will tell you which analysis form is most appropriate for your chosen article. Some journal suggestions: *Journal of Voice, Journal of the Acoustical Society of America, International Journal of Research in Choral Singing, Journal of Research in Music Education, Journal of Music Therapy, Phoniatrics, Logopedics, Vocology.* Some electronic database search suggestions: PubMed, ProQuest, JSTOR, IIMP, SAGE. The Journal of Voice website allows you to perform a keyword search for particular articles in that journal and provides abstracts: [http://www.jvoice.org](http://www.jvoice.org). You will need to obtain the article itself via KU. (b) Complete and submit a Research Analysis Form (see course web site) on the chosen article.

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:**  
| Class attendance, reading, HAT journaling | Undergraduates | 15 points |
| Completed Lab Portfolio | 15 points |
| Research Article Analysis | 5 points |
| Competency Test I (90 or above) | 20 points |
| Competency Test II (90 or above) | 20 points |
| Teaching Practicum | 25 points |
| ___________ | **100 points** |

**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 particular competency was made and 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.

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. *No final grade will be awarded without the student turning in a final grade checklist.* This document is attached to this syllabus and also may be downloaded from the course web site.

OPTIONAL RESEARCH PROJECT PARTICIPATION: Students who elect to participate in a class related research project requiring time outside of class can earn 1-2 points added to the final course grade. Aside from participation, a brief written reflection on this experience is also required.

NOTE: The KU Office of Disability Resources (DR) coordinates accommodations and services for all eligible students with disabilities. If you have a disability and wish to request accommodations and have not contacted DR, please do so as soon as possible. Their office is located in 22 Strong Hall; their phone number is 785-864-2620 (V/TTY). Information about their services can be found at [http://www.disability.ku.edu](http://www.disability.ku.edu). Please also contact Dr. Daugherty privately in regard to your needs in this course.

OPPORTUNITIES FOR CONTINUING EDUCATION & FURTHER STUDY
The International Voice Care Network and the National Center for Voice & Speech Vocology Institute each offer intensive one to three week courses every summer.

The Voice Foundation offers a symposium each June that brings together medical doctors, voice scientists, voice performers, speech-language pathologists, and voice teachers for mutually informative sessions and discussions.

National and regional conferences of the National Association of Teachers of Singing (NATS) typically offer several vocology-oriented sessions. Conferences of the American Choral Directors Association (ACDA) and the National Association for Music Education (MENC) are beginning to do so.

KU offers graduate degree emphases (MME, PhD) in vocal pedagogy and choral pedagogy, in which students may select coursework and practica from the School of Music, Department of Speech-Language-Hearing, and the KU Med Center. Summers-only graduate study is possible for the MME degree. KU graduate courses in vocal pedagogy may also be applied, with approval, to MMus and DMA degree programs in voice performance.
MEMT/VOIC 408: DESCRIPTION OF TEACHING PRACTICUM

Each student will teach a series of voice lessons ($N=4$) to a selected person. Students in music therapy may undertake therapeutic voice pedagogy with an older adult, a Speech-Language Center client, or another person chosen in consultation with a music therapy faculty member.

Practicum Requirements:

1. Enlist a student to teach (or client with whom to work).

2. You must obtain written consent of the prospective student to participate in this teaching practicum and to have his or her voice lessons video-recorded. For any prospective voice student under the age of 18, you must gain written permission from the student’s parent or guardian as well. Use the Voice Teaching Practicum Permission Form included at the end of this syllabus. If you wish to enlist a student under the age of 18, you must consult first with the instructor.

3. Schedule with your student a series of four, weekly voice lessons. Videotape each lesson.

4. At the conclusion of each voice lesson, view and reflect upon the videotape of that lesson. Then complete and submit the online Voice Lesson Evaluation Form (Course Web Site).

   It is a good idea to use your word processing software to write and save your responses/comments. You can then paste those saved comments onto the electronic form. This practice insures that, should something unforeseen happen as you submit the online form, you will not have to start over again with the writing of your responses.

   You should receive an immediate electronic acknowledgment if the form was successfully submitted. If you do not receive this electronic acknowledgment, then for whatever reason there was a glitch in its submission. You will need to submit the form again.

5. As you engage in the practicum, consistently reflect upon these questions: (1) Am I demonstrably helping my student/client achieve efficient, comfortable vocal production habits in accord with his or her own singing goals? (2) What are my current strengths as a voice teacher? (3) What improvements to my teaching do I need to implement? (4) Am I conducting myself ethically and as a professional? The “Evaluating Your Voice Lessons” handout (to be distributed in class) suggests criteria to assist you in these ongoing reflections.

6. At stated times, bring a selected portion of a videotaped lesson either to class or to individual conferences. You must (a) have the tape cued and ready to go beforehand, and (b) have ascertained beforehand its playback compatibility with the classroom’s audio-visual equipment.
LISTS OF TERMS AND BRIEF DISCUSSION QUESTIONS

The competency tests in Vocal Anatomy/Physiology and Voice Acoustics will be drawn from these terms and questions. *It is a good strategy to write down definitions and/or responses to each item on these lists as you engage in your weekly reading and web site explorations.*

These lists are also available on the course web site in .doc form, so that you may download and reformat them according to your needs.

COMPETENCY TEST I:  
BASIC ANATOMICAL/PHYSIOLOGICAL TERMINOLGY  
VOICE HEALTH/VOICE CARE

Please define ALL the terms on this list, even headings. Be prepared to discuss how an anatomical component functions physiologically. Explain briefly the role each term takes in voice production.

<table>
<thead>
<tr>
<th>Anatomy</th>
<th>Physiology</th>
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<tr>
<td>Respiration:</td>
<td>Physiology</td>
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<tr>
<td>rib cage</td>
<td>subglottal</td>
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<tr>
<td>12 rib pairs</td>
<td>supraglottal</td>
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<tr>
<td>7 pairs true ribs</td>
<td>phonation threshold pressure</td>
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<tr>
<td>3 pairs false ribs</td>
<td>transglottal airflow</td>
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<tr>
<td>2 pairs floating ribs</td>
<td><em>appoggio</em></td>
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<tr>
<td>intercostal muscles</td>
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<tr>
<td>diaphragm</td>
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<td>sternum</td>
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<td>clavicle</td>
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<td>epigastrum</td>
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<td>thoracic cavity</td>
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<td>trachea</td>
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<td>abdominal cavity</td>
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<td>lungs</td>
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<td>bronchi</td>
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<td>S/Z Ratio</td>
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Phonation:

<table>
<thead>
<tr>
<th>Anatomy</th>
<th>Physiology</th>
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<tbody>
<tr>
<td>larynx</td>
<td>transducer</td>
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</table>

Cartilages of larynx

- epiglottis (elastic cartilage)
- thyroid cartilage (hyaline)
- cricoid cartilage (hyaline)
- arytenoid cartilages (hyaline)
- corniculate cartilages (hyaline)
- cuneiform cartilages (hyaline)

- hyoid bone
Folds/Spaces
false vocal folds
ventricular folds
ventricles
vestibule
aryepiglottic fold
true vocal folds
epithelium
lamina propria & layers
Reinke’s Space
vocal ligament
thyroarytenoid muscles
vocalis, muscularis
glottis
vocal fold adduction
vocal fold abduction
vibration
gentle onset
glottal onset
aspirate onset
Open Quotient (OQ)
Closed Quotient (CQ)
Electroglottography (EEG)
vibrato
vibrato rate
vibrato extent

Intrinsic laryngeal muscles
cricothyroid muscle (pars recta and pars oblique)
cricoarytenoid muscles (posterior and lateral)
thyroarytenoid muscles
interarytenoid muscles (transverse and oblique)

Extrinsic laryngeal muscles
suprahypoid muscle group
infrahyoid muscle group
strap muscles

Resonance: pharynx
nasopharynx
oropharynx
laryngopharynx
hard palate
velum/soft palate
uvula

piriform sinuses

chiaroscuro
zygomatic muscles
fascia

Articulation: tongue
lips
velum/soft palate
hard palate (alveolar ridge)
mouth, cheeks
jaw

Nervous System: innervation
vagus nerve
superior branch vagus nerve
superior branch external route vagus nerve
recurrent branch vagus nerve

Theories of Voice Production: Source-Filter theory
Myoelastic-Aerodynamic Theory of voice production
Bernoulli Effect
Non-Linear Theory of voice production

Voice Health/Care: phonotrauma
benign vocal fold lesions

Can you accurately describe, in terms your students can understand, how the vocal folds open and close, with specific reference to the opener/closer muscles involved?

Can you accurately describe, in terms your students can understand, how the vocal folds lengthen and shorten, with specific reference to the lengthener/shortener muscles involved?

Can you list three major things all persons can/should do to care proactively for their voices, and give a succinct anatomical, physiological, or acoustic reason for each?

Can you list three major things singing voice performers can/should do to care proactively for their voices, giving a succinct rationale for each?

Can you list and briefly discuss at least four readily audible and/or observable signs/symptoms of inefficient voice production?

What particular symptoms would prompt you to suggest a student or client seek evaluation by an otolaryngologist or other medical professional?
COMPETENCY TEST II: BASIC TERMS: VOICE/VOICE-RELATED ACOUSTICS & PHYSIOLOGY

Acoustics
Psychoacoustics

Vibration
Sound wave
Waveform
Compression
Rarefaction

Simple harmonic motion
Complex harmonic motion

Cycle
Period
Periodic cycle
Aperiodic cycle
Noise

Frequency
Pitch
Fundamental Frequency (Fo)
Hertz (Hz)

Amplitude
Intensity (Io)
Loudness
Decibel (dB)
Sound Pressure Level (SPL)/Sound Intensity Level (SIL)

Lombard Effect
Self-to-Other Ratio (SOR)

Chorusing Effect
Reverberation

Timbre

Resonance frequency

Harmonics
Overtones
Partials

Formants
Singer’s Formant
Formant tuning

Acoustic loading of vocal folds
Register theories
“Register break”
Passaggio

Sound spectrum
Can you explain succinctly, in terms your students can understand, why the Lombard Effect matters with respect to both solo and choral singing?

In a way your students can understand, can you explain vocal resonance succinctly, using such terms as fundamental frequency (Fo), partials/overtones/harmonics, and formants? Please include how these acoustic terms relate to the vocal tract.

In a way your students can understand, can you explain the differences between solo singing voice acoustics and choral singing voice acoustics?

If presented with a spectrogram or spectrum of a moment in time of singing voice production, can you interpret and succinctly explain some major pieces of data or information of interest contained therein?
**FINAL GRADE CHECKLIST: MEMT/VOIC 408 FALL 2011**

NAME ___________________________________________

GRADE CRITERIA:  
A=All course requirements completed on time with competence and accuracy.  
B=All course requirements completed with competence, though some turned in late; or the student has one unexcused absence.  
C=All course requirements completed adequately, but some requirements completed late, and the student has unexcused absences.  
D=Any course requirements not completed; unexcused absences.  
I is not given.  
Plus or minus grades may be given at the instructor's discretion.  
No grade will be given without the final checklist.

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<thead>
<tr>
<th>Requirement</th>
<th>Date Completed or Submitted</th>
<th>Not Completed</th>
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<tbody>
<tr>
<td>1. HAT Journal Entries <em>Prior to Class</em></td>
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<td>Aug 29</td>
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<td>Oct 31</td>
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<td>2. HAT Journal Master Document</td>
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<td>(All your HAT Journal submissions, printed, dated, and stapled together)</td>
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<td>3. Lab Experiences</td>
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<td>Lab 1</td>
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<td>Lab 9</td>
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<td>4. Submitted Lab Portfolio</td>
<td>_______________</td>
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<td>(You may staple all your labs together, or you may organize them in a folder.)</td>
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5. Research Article
   Proposal
   Analysis

6. Competency Test I (90 or above)  Yes  No

7. Competency Test II (90 or above) Yes  No

8. Voice Pedagogy Practicum
   Lesson/Session 1
   Eval Form Submitted
   Lesson/Session 2
   Eval Form Submitted
   Lesson/Session 3
   Eval Form Submitted
   Lesson/Session 4
   Eval Form Submitted

9. Presented video of two lessons in class  Yes  No

10. (Optional)
    Participated in Class Research Project:  Yes  No
    Submitted Written Reflection:  ________________ (Date)

Keep this document. Record when you complete assignments during the semester. Turn it in on the last day of class. No grade will be assigned without this completed Final Grade Checklist.
VOICE TEACHING PRACTICUM PERMISSION FORM

University of Kansas students who are enrolled in the VOIC/MEMT 408 course in Vocal Pedagogy complete a Voice Teaching Practicum Experience with volunteers who wish to receive a series of four weekly voice lessons. There is no charge for these voice lessons. Volunteers who agree to participate receive no remuneration for their participation.

Practicum voice lessons are video-recorded to assist KU students in evaluating their skills.

By my signature below, I hereby volunteer to participate in a series of four, weekly voice lessons with ________________________, a music major at the University of Kansas, who is currently enrolled in a course in Vocal Pedagogy. I understand there is no charge for these voice lessons. I understand that I will receive no payment for participating in these voice lessons. I understand that I may withdraw my consent to participate in these voice lessons at any time.

Date: ________  Signature: ________________________________

Volunteers under the age of 18 years must also present signatures of a parent or guardian granting permission to participate.

Date: ________  Signature of Parent/Guardian: ________________________________

By my signature below, I hereby grant permission for these practicum voice lessons to be video-recorded. I understand that portions of these videotapes may be shown in the vocal pedagogy class and/or in individual conferences with the course instructor. I understand that I may withdraw my consent for videotaping of lessons at any time. I further understand that these videotapes will be destroyed at the conclusion of the 2011 Fall Semester.

Date: ________  Signature: ________________________________

Volunteers under the age of 18 years must also present signatures of a parent or guardian granting permission for voice lessons to be videotaped.

Date: ________  Signature of Parent/Guardian: ________________________________