

SLHS 519A: Aging and Communication
Purdue University
Department of Speech, Language, and Hearing Sciences

Monday and Wednesday 4:30-6:20 (2nd 8-weeks)

Professor: Jessica Huber, Ph.D.
Office: 202D Heavilon Hall
Email: jhuber@purdue.edu

Phone: 494-3796
Office Hours: T 12-1, W 12:30-1:20, and by appointment

In this course, we will examine normal age-related changes to the systems of communication. This includes anatomic and physiologic changes to the respiratory, laryngeal, and supralaryngeal systems, changes to the way speech is perceived, and changes to language, cognition, and memory.

WebVista:

Class material will be presented through class discussion. Class material, including pdf copies of readings and additional handouts, will be made available on WebVista. WebVista will also be used for email communication.

WebVista is at <http://ics.purdue.edu/ecourses/>. Once you are there, sign in using your Purdue career login name and password and click on SLHS 519A. Then you can click on the links available, including mail, handouts, and articles. From the WebVista site, it is possible to forward your WebVista email to any other email account.

If you prefer not to download the articles from WebVista, you can give me a blank CD (in a case, with your name on it). I will burn the pdfs of the articles to your disk.

Evaluation:

Students will take turns leading class discussions and will write one-page responses on each week's readings (due at the start of class on Monday of each week). Active participation will be the most important requirement. What I'd like most is for you to spend a lot of time thinking deeply about the material, come to class intellectually engaged, contribute as much as possible to the discussions.

Leading class discussion	30%
Participating in class discussion	30%
One-page responses to readings	40%

Cheating and Plagiarism

You are expected to work individually on all assignments. Please only turn in your own work. It is plagiarism to copy from articles, textbooks, websites, or any other sources and present that work as your own. You must give proper acknowledgement to



the authors, including using quotation marks and proper APA citation (author, year, page number). In particular, when completing your take-home exam be sure that you do not copy from the textbook. It is plagiarism to copy from the textbook, even if you change a few of the words in each sentence.

You will receive a 0 on any paper that contains evidence of cheating or plagiarism. All suspected instances of cheating and plagiarism will be reported to the Chair of the Audiology and Speech Sciences department and may be referred to the Office of the Dean of Students.

Tentative Class Schedule:

The schedule below is a projected schedule, which is subject to change. Topics to be discussed are listed across from the date on which they will be addressed. Readings listed for each date are to be read by that date. Changes in readings and topics will be announced by email through WebCT.

Attendance in class is very important to your understanding of the material in the course. Please let me know in advance if you will be missing any of the class periods. Please be respectful of your classmates and I at all times. This means that you should read the assigned readings and be prepared for discussion in class, be on-time for class, not talk during class, turn off cell phones and pagers during class, and notify me if extenuating circumstances or an emergency require you to leave class early.

10/18: Introduction to the Course, Background in Communication

Respiratory System

10/23

- Tolep, K., & Kelsen, S.G. (1993). Effect of aging on respiratory skeletal muscles. *Clinics in Chest Medicine, 14*, 363-378.
- Huber, J.E., & Spruill, J.S. (submitted). Age-related changes to speech breathing at comfortable and increased vocal loudness.

Laryngeal System

10/25

- Ximenes Filho, J. A., Tsuji, D. H., do Nascimento, P. H., & Sennes, L. U. (2003). Histologic changes in human vocal folds correlated with aging: A histomorphometric study. *Annals of Otolaryngology, Rhinology, and Laryngology, 112*, 894-898.
- Biever, D. M., & Bless, D. M. (1989). Vibratory characteristics of the vocal folds in young adult and geriatric women. *Journal of Voice, 3*, 120-131.

Supralaryngeal System

10/30

- Newton, J.P., Abel, R.W., Robertson, E.M., & Yemm, R. (1987). Changes in human masseter and medial pterygoid muscles with age: A study by computed tomography. *Gerodontology*, 3, 151-154.
- Xue, S.A., & Hao, G.J. (2003). Changes in the human vocal tract due to aging and the acoustic correlates of speech production: A pilot study. *Journal of Speech, Language, and Hearing Research*, 46, 689-701.
- Wohlert, A.B., and Smith, A. (1998). Spatiotemporal stability of lip movements in older adult speakers. *Journal of Speech, Language, and Hearing Research*, 41, 41-50.

Functional Effects of Anatomic and Physiologic Changes to Respiration, Phonation, and Articulation

11/1

- Ptacek, P.H., & Sanders, E.K. (1966). Age recognition from voice. *Journal of Speech and Hearing Research*, 9, 273-277.
- Ramig, L.O., & Ringel, R.L. (1983). Effects of physiologic aging on selected acoustic characteristics of voice. *Journal of Speech and Hearing Research*, 26, 22-30.

11/6

- Benjamin, B.J. (1997). Speech production of normally aging adults. *Seminars in Speech and Language*, 18, 135-141.
- Liss, J.M., Weismer, G., & Rosenbek, J.C. (1990). Selected acoustic characteristics of speech production in very old males. *Journal of Gerontology*, 45, P35-P45.

Speech Perception

11/8

- Harkrider, A.W., Plyler, P.N., & Hedrick, M.S. (2005). Effects of age and spectral shaping on perception and neural representation of stop consonant stimuli. *Clinical Neurophysiology*, 116, 2153-2164.
- Gordon-Salant, S., Yeni-Kornshian, G.H., Fitzgibbons, P.J., & Barrett, J. (2006). Age-related differences in identification and discrimination of temporal cues in speech segments. *Journal of the Acoustical Society of America*, 119, 2455-2466.

11/13

- Ohde, R.N., & Abou-Khalil, R. (2001). Age differences for stop-consonant and vowel perception in adults. *Journal of the Acoustical Society of America*, 110, 2156-2166
- Tun, P.A., O'Kane, G., & Wingfeld, A. (2002). Distraction by competing speech in young and older adult listeners. *Psychology and Aging*, 17, 453-467.

11/15

- Alain, C., McDonald, K.L., Ostroff, J.M., & Schneider, B. (2004). Aging: A switch from automatic to controlled processing of sounds. *Psychology and Aging*, 19, 125-133.
- Cienkowski, K.M., and Carney, A.E. (2002). Auditory-visual speech perception and aging. *Ear & Hearing*, 23, 439-449.

Elderspeak

11/20

- Kemper, S., & Harden, T. (1999). Experimentally disentangling what's beneficial about Elderspeak from what's not. *Psychology and Aging, 14*, 656-670.
- Gould O.N., Saum, C., & Belter, J. (2002). Recall and subjective reactions to speaking styles: Does age matter? *Experimental Aging Research, 28*, 199-213.

Cognition and Memory

11/27

- Yonan, C.A., & Sommers, M.S. (2000). The effects of talker familiarity on spoken word identification in younger and older listeners. *Psychology and Aging, 15*, 88-99.
- Wu Nordahl, C., Ranganath, C., Yonelinas, A.P., DeCarli, C., Fletcher, E., & Jagust, W.J. (2006). White matter changes compromise prefrontal cortex function in healthy elderly individuals. *Journal of Cognitive Neuroscience, 18*, 418-429.

Language

11/29

- Jerger, J., & Martin, J. (2005). Some effects of aging on event-related potentials during a linguistic monitoring task. *International Journal of Audiology, 44*, 321-330.
- Newman, R.S., & German, D.J. (2005). Life span effects of lexical factors on oral naming. *Language and Speech, 48*, 123-156.

12/4

- Murphy, D.R., Daneman, M., & Schneider, B.A. (2006). Why do older adults have difficulty following conversations? *Psychology and Aging, 21*, 49-61.
- Reading TBA

12/6

- Kemper, S., Thompson, M., and Marquis, J. (2001). Longitudinal change in language production: Effects of aging and dementia on grammatical complexity and propositional content. *Psychology and Aging, 16*, 600-614.
- Juncos-Rabadan, O., Pereiro, A.X., Rodriguez, M.S. (2005). Narrative speech in aging: Quantity, information content, and cohesion. *Brain and Language, 995*, 423-434.

Students with disabilities must be registered with Adaptive Programs in the Office of the Dean of Students before classroom accommodations can be provided. If you have a disability that requires academic adjustments, please make an appointment with me to discuss your needs as soon as possible.