SPLH 764 NEURAL BASES SPEECH & VOICE

Dr. Steven M. Barlow
Professor

Weekly Topic & Readings Schedule

Fall 2009

SPLH 764/464 #29333/#32349 11:20-1:00 PM TR 3048 DOLE October 20-December 10

DATE	Topic Content	*.PPT *.pdf	Neuroanatomy Atlas (2008) Haines	Clinical Neuroscience (2008) Young, Young, Tolbert
Oct 20	*Course overview, Introduction to nervous system organization, functional units*	SPLH764lec1 Read 'BRAIN FACTS' *.pdf	Pp 1-8	PART I
Oct 22	*Spinal cord topography and functional levels*	SPLH764lec2	Pp 10-12	PART I
Oct 27	*Brainstem Anatomy*	SPLH764lec3	Pp 24-27, 30-35, 214-221	PARTS I & VI
Oct 29	*Brainstem functional levels*	SPLH764lec3	Pp 100-139, 177	PARTS I & VI
Nov 03	*Forebrain - topography and functional levels*	SPLH764lec4	Pp 30-31, 77-79, 144-145, 166, 168, 171	PART I
Nov 05	*Brainstem motor centers: decerebrate and decorticate posturing*	SPLH764lec7	Pp 134-137, 206-211	PARTS I & VI
Nov 10	*NO CLASS – BRAIN NEUROBIOLOGY CONFERENCE*			
Nov 12	*Lower motor neurons: flaccid paralysis*	SPLH764lec5	Pp 214-221	PART II (pp 47-64)
Nov 17	*Pyramidal & Corticobulbar Systems: spastic paralysis*	SPLH764lec6	Pp 198-205	PART II (pp 65-78)

Nov 19	*Basal Ganglia: anatomy*	SPLH764lec8	Pp 163-169, 234-241	PART II (pp 87-102)
Nov 24	*Basal Ganglia: movement disorders, pathophysiology, STN & PVP PD*	SPLH764lec8 *Barlow & Hammer* (2009) *.pdf DBS.ppt	Pp 144-153, 200-205	PART II (pp 87-102)
Nov 26	*Cerebellum: Anatomy, Ataxia, pathophysiology*	SPLH764lec9	Pp 36-37, 222-233	PART II (pp 103-120)
Dec 01	*Cerebral cortex: organization, premotor inputs, subcortical inputs*	SPLH764lec10	Pp 13-23,	PART IV
Dec 03	*Cerebral cortex: physiology, apraxia, agnosia, aphasia*	SPLH764lec10	Pp 176-179, 13-21	PART IV
Dec 08	*Somatosensory Anatomy & Physiology*	SPLH764lec11	Pp 178-189, 190-195	PART III (pp 129-174)
Dec 10	*Neural Control of Vocalization*	SPLH764lec12	Pp 128-135	

Required Texts:

1. Young, P.A., Young, P.H., & Tolbert, D.L. (2008). **Basic Clinical Neuroscience**. 2nd Edition. Wolters Kluwer | Lippincott Williams & Wilkins, Baltimore, MD. ISBN 9780781753197

2. Haines, D.E. (2008). **Neuroanatomy. An Atlas of Structures, Sections, and Systems**. 7th Edition. Wolters Kluwer | Lippincott Williams & Wilkins, Baltimore, MD. ISBN 9780781763288

Recommended Texts:

1. Barlow, S.M. (1999). Handbook of Clinical Speech Physiology. 380 pages. CD-ROM. Singular Publishing Group, Inc. San Diego, California. ISBN 1-56593-267-6.

Course Objective: To gain a basic understanding of the organization (neuroanatomy) and function (neurophysiology) of the central and peripheral nervous system in relation to motor control, somatosensory physiology, vocalization, speech, and language production. Special consideration is directed towards the neurology of speech and language; classification of impairments (sensory, motor, integrative functions) according to the site of lesion(s).

Course Format: The course will include formal lecture, demonstration, some limited gross anatomical inspection and identification of human brain material. Learning materials will be made available on the WWW.

Assessment Schedule: Seven objective-format quizzes will be posted to the SPLH764 BlackBoard – Bb (http://courseware.ku.edu/) courseware site over the next 8 weeks. These assessments will be announced in

class and are timed on Bb (30 minutes on a single attempt). Each quiz will consist of 6 questions. Each question is worth 2 points. Therefore completion of the 42 quiz questions during the 8-week course will yield a maximum possible score of 84 points. A written essay or review of a neurologically-based communication disorder or topic of vocal tract neurophysiology, not to exceed 1500 words (MS Word format in electronic format, 12-point font, double space, w/references in APA style), is due December 15th @ NOON as an electronic file attachment sent directly to the instructor (smbarlow@ku.edu). Feel free to include tables and pictures to convey your message. Your final grade is based on the quiz scores, and final essay (TOTAL = 184 points).

"The staff of Services for Students with Disabilities (SSD), 135 Strong, 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 as soon as possible. Please also see me privately in regard to this course."

Health: KU Pandemic Response Plan (http://www.pandemic.ku.edu/) and the "Personal Guide to Protect Against Flu" (http://www.pandemic.ku.edu/pdf/tipSheet.pdf

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