Dental Neuroanatomy 2013

Instructors (Department of Neurobiology and Anatomy)

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Core resources

- **Course Website.** http://library.med.utah.edu/diganat/SOM/dental.neuro/index.html; Notes posted ~ 48 hrs before class.
- **Hyper-Brain**. http://library.med.utah.edu/kw/HyperBrain /index.html; one of the most helpful references for course.
- **Course textbook.** *Clinical Neuroanatomy*, 26th Edition. Waxman, Stephen B. (Lange series, McGraw Hill) 2009. New is about ~$45 and used ~$30. The book is available online for free. You must be on campus at any library or HSEB computer or if using your laptop on campus or from home you must login with the vpn web access (https://vpnaccess.utah.edu/+CSCOE+/logon.html) as the book access is only for UofU faculty/students. Then go to http://lib.med.utah.edu and click on **ebooks** on the home page and then the tab at top on text-books and scroll down to bottom to see the Lange books. Only 3 concurrent users may be on at the same time. You may print a PDF of each chapter. Direct link is **http://www.accessmedicine.com/resourceTOC.aspx?resourceID=22**

Additional resources

- *AnatomyOne.* https://app.anatomyone.com/; great place to see images, practice questions.
- *Basic Clinical Neuroscience*, 2nd Edition. Young, Young and Tolbert. (LWW) 2008. The paperback book new is about $45. Nice clinical correlates. Copies are on reserve at Eccles Health Sciences Library. This is the book the medical students used.
- *Neuroanatomy: An atlas of structures, sections, and systems* / Duane E. Haines Philadelphia: Lippincott Williams & Wilkins, 2004. 2 copies on closed reserve. Note there are about 6 copies of previous editions in the stacks which you can Check out and share.
- *Fundamental Neuroscience* edited by Duane E. Haines. 2006. One copy closed reserve and one on open reserve; an excellent reference if you want a more complete explanation of something.
- *NeuroLogicExam website*. http://library.med.utah.edu/neurologicexam/html/home_exam.html (Also on DVD to check out from Eccles Health Sciences Library. You may copy to your own computer if you like)
- *CN tutorial*. http://library.med.utah.edu/diganat/SOM/unit_3/lec/CN%20tutorial/CN_Tutorial.html
- *DIGANAT*. http://library.med.utah.edu/diganat/index_2.html
- *Digital Anatomist Projec.* http://www9.biostr.washington.edu/da.html
- *Embryo Images for use with embryology lecture*. http://www.med.unc.edu/embryo_images/

Grading

- 90-100 (A); 85-89 (B+); 80-84 (B), 75-79 (C+); 70-74 (C), 65-69 (D+), 60-64 (D), below 59.5 fail.
- Weekly quizzes (8 quizzes, 8-10 questions each) (40% or 5% per quiz)
- Final exam (approximately 60 questions) (60%).
- Questions for quizzes/final exam could consist of multiple choice and/or short answer and/or practicum specimens.

Objectives:

Objectives will accompany each lecture outline. An overriding principle of the course is for students to master neurological localization and when given signs and symptoms to know what pathway or region is involved. Students will then correlate their impressions by looking for involvement of adjacent structures to determine if their original localization is correct. This is accomplished through a careful neurological exam together with the patient's history and time course. Essential to localization is understanding the vasculature and the territories supplied by the different vessels, thereby clusters of signs or symptoms becomes important. This is best achieved through solving the cases in your assigned Chapters, which are then discussed in Chapter 25 of Waxman.

Lecture Outlines (Chapter references are for Waxman)

2013	Hour	Topic	Lecturer	Room	Assignments
01/10	10-1	**Course Logistics and Resources.** **Orientation to Brainstem and Cranial nerve nuclei of the Midbrain and Pons –Ch 7**	Morton	HSEB 5900C	HyperBrain Ch 1&2 (section I) - Vessels, CN's, lobes
01/17	10-1	**2. Brainstem: Medulla Cranial nerves, reflexes and Autonomics -Ch 7**	Morton	HSEB 5900C	HyperBrain Ch 2 (section II), Ch 4
01/24	10-1	**3. Cerebral Cortex (Ch 21) and Thalamus (Ch 9)**	Vetter	HSEB 5900C	HyperBrain Ch 2
01/31	10-1	**4. Long sensory pathways** Sensory pathways from spinal cord to cerebral cortex (Spinothalamic system & Dorsal Col system **Ch 5, 14)**	Morton	HSEB 5900C	HyperBrain Ch 5 & NLE Intro
02/07	10-1	**5. Trigeminal nerve (CN V)**	Morton	HSEB 5900C	HyperBrain Ch 6 HyperBrain Ch 2
02/14	10-1	**6. Globe and Visual Pathway:** Pupillary light reflex and accommodation response **(Ch 15)**	Morton	HSEB 5900C	HyperBrain Ch 7
02/21	10-1	**7. Balance and Eye Movements (Ch 17) and Hearing (Ch 16)**	Rogers	HSEB 5900C	Skip HyperBrain
02/28	10-1	**8. Motor Pathway: Upper and Lower Motor Neurons** Motor pathways from cerebral cortex to spinal cord o Corticospinal tract (UMN, LMN) o Corticobulbar tract o Internal Capsule **Ch 5, 13**	Morton	HSEB 5900C	HyperBrain Ch 10 HyperBrain Ch 3
03/05 Tues	*1-4PM	**9. Other Motor Systems** • Basal ganglia **Ch 10**, Cerebellum **Ch 7** **Clinical Correlation Motor Systems using video clips.** • Contrast lesions of UMN and LMN, basal ganglia and cerebellum (Parkinson's disease, Huntington's disease, resting tremor, intention tremor, involuntary movements, ataxia, hemiplegia, spasticity)	Taha(?)	HSEB 5900C	HyperBrain Ch 11 and 12
03/08 Fri	10-1	**FINAL EXAMINATION** will include all of the cases in the chapters, which are discussed in Ch 25 except 1, 21, 24. Images will be included.		HSEB 4300	

Note: The syllabus is not a binding legal contract. Faculty may modify the syllabus when the student is given reasonable notice of the modification.