

SPLH 620 The Communicating Brain: The Ultimate Personal Computer

Spring 2017 Dole 2092 1:00 – 2:15 PM (TR)

University of Kansas

Instructor Information

Instructor	Email	Office Location & Hours
Panying Rong, Ph.D.	prong@ku.edu	3046 Dole, TR 2:30-3:30 pm or by appt.

Contact

Email is the most efficient way to reach me. To facilitate our communication, please include “SPLH 620” in the subject and your name and a brief description of the questions/topics/issues you want to discuss with me in the email.

General Information

Description

This course introduces the study of human neuroscience with a particular focus on human communication. The course provides an overview of the relevant anatomical structures and function along with an introduction to the basic methods used to investigate central nervous system function. Students are introduced to the study of perceptual, motor, and language function in the nervous system.

Objectives

This course is designed to meet the requirement of ASHA Knowledge Standards (2014) IV-B Normal Processes and IV-C Communication Disorders. After completing this course, students will obtain a basic understanding in:

- To provide an overview of the topography and structural organization of the neuroanatomical structures of the central and peripheral nervous system.
- Have a basic understanding of neuroanatomical structures in health and disease, especially relating to communication.
- To obtain a basic understanding of the techniques used in investigating neuroanatomical function.

Textbook (Optional)

Ward, J. (2015) The student’s guide to cognitive neuroscience. 3rd ed. Taylor & Francis: New York. ISBN: 978-1-84872-272-9

Requirements

Participation

This class will include interactive activities. By actively participating in these activities, you will engage in additional opportunities to learn and to demonstrate your knowledge. These activities are also the perfect time to ask questions about topics that are unclear or difficult. Regular, active participation will be considered toward your final grade.

Assessments

This course will be based on four quizzes, three topic exams and a final project.

- **Quizzes** will assess student knowledge of key concepts using a mixture of objective (multiple-choice, matching, true/false) and short-answer questions. All quizzes will be posted on Blackboard during the week as specified in the course schedule and will be closed 5 days after the post date.
- **Exams** will be administered in class and will be completed in a single class period. There will be three topic exams for each of the main areas: Gross anatomy & physiology, Sensory processes in communication & additional sensation, motor control & speech/language disorders. Each exam will consist of both questions in objective format (multiple-choice, true/false, matching) and short answers.
- **Final project** will be announced about three weeks before the final class to allow students sufficient time to work on it. It will be completed individually and reported in a 10 min presentation format in the final class (specific requirements and grading criteria will be provided).
- **All assessments above** need to be completed within the time frame specified. There will be **NO makeup** in this course.

Grading

In-class participation – 5%

Quizzes – 20%

Exams – 60%

Final project – 15%

Plus/minus grading will be used according to the following:

Letter Grade Percentage Range

A	92.5-100%
A-	90.0-92.5%
B+	87.5-90.0%
B	82.5-87.5%
B-	80.0-82.5%
C+	77.5-80.0%
C	72.5-77.5%
C-	70.0-72.5%
D+	67.5-70.0%
D	62.5-67.5%
D-	60.0-62.5%
F	below 60.0

Additional Information and Resources

Academic Misconduct

Students are expected to observe all University guidelines pertaining to academic misconduct. As stated in the University Senate Rules and Regulations (2.6.1):

“Academic misconduct by a student shall include, but not be limited to, disruption of classes; threatening an instructor or fellow student in an academic setting; giving or receiving of unauthorized aid on examinations or in the preparation of notebooks, themes, reports or other assignments; knowingly misrepresenting the source of any academic work; unauthorized changing of grades; unauthorized use of University approvals or forging of signatures; falsification of research results; plagiarizing of another’s work; violation of regulations or ethical codes for treatment of human and animal subjects; or otherwise acting dishonestly in research.”

Academic misconduct will not be tolerated and will be dealt with in accordance with all University rules and regulations.

Accommodations

The Academic Achievement and Access Center (AAAC) coordinates academic accommodations and services for all eligible KU students with disabilities. If you have a disability for which you wish to request accommodations and have not contacted the AAAC, please do so as soon as possible. They are located in 22 Strong Hall and can be reached at 785-864-4064 (V/TTY). Information about their services can be found at <http://www.disability.ku.edu>. Please contact me privately in regard to your needs in this course within one week of receiving this syllabus so that appropriate accommodations for this course can be discussed.

If a scheduled requirement is in conflict with a mandated religious observance, you must notify the instructor in writing (e-mail is acceptable) within one week of receiving this syllabus so that an alternative arrangement can be made in advance of the scheduled requirement.

Blackboard

Blackboard will be used extensively in this course for announcements, lecture note archives and assignment administration. Students should check the course site frequently for any announcements, additional course documents and lecture notes. In addition, all email from instructor to students will be sent through Blackboard. Please be sure to check the email account associated with your Blackboard account. See the instructor if you have any questions.

Course Schedule (Subject to change)

Date	Topic	Assessment
T 1/17	Syllabus and course introduction	
R 1/19	Neurons and glia	
T 1/24	Neuron signaling	
R 1/26	Sensory receptors	Quiz 1
T 1/31	Somatosensation	
R 2/2	Cranial nerves (sensory)	

T 2/7	Central processing	
R 2/9	Review of Part 1: Gross anatomy, physiology, and overview of sensory system	
T 2/14	Exam 1	
R 2/16	Auditory system	
T 2/21	Hearing loss, speech perception, and balance	
R 2/23	Vision, olfaction & taste	
T 2/28	Multisensory integration	
R 3/2	Review of Part 2: Sensory processes in communication & additional sensation	
T 3/7	Exam 2	
R 3/9	Movement overview	
T 3/14	Cranial nerves (motor)	
R 3/16	Motor control: basal ganglia and cerebellum	
	Spring break	
T 3/28	Speech motor control	Quiz 2
R 3/30	Motor speech disorders	
T 4/4	Blood supply	
R 4/6	Language and brain	
T 4/11	Aphasia	
R 4/13	Review of Part 3: Speech motor control & language	Final project announcement
T 4/18	Exam 3	
R 4/20	Childhood disorders	Quiz 3
T 4/25	Memory	
R 4/27	Experimental methods	Quiz 4
T 5/2	Project presentations	
R 5/4	Project presentations	