



CSD 6120 - Neurology of Speech-Language and Hearing

Harding University
College of Allied Health
3 Credit Hours

Class Meetings Times –Fridays 12:00 – 4:00 – some exceptions noted on syllabus
Swaid 215

Semester/Term: Fall 2023

Anita Killins, PT, Ph.D., NCS, C/NDT

Office Hours: by appointment - please email

AK's Phone (office): (501) 279-4633

Email: akillins@harding.edu

Instructors:

Melanie Meeker, Ph.D., CCC-SLP

Office Hours: by appointment - please email

MM's Phone (office): (501) 279-4633

mmeeker@harding.edu or

Course Information

Catalog Description: Neuroanatomy and neurophysiology with a concentration on neurological mechanisms related to speech, language and hearing.

Prerequisites: none

Course Rationale

This course is designed to provide the graduate student in communication sciences and disorders with a functional knowledge of the neurological anatomy and physiology underlying speech, swallowing, cognition and language. Special attention is given to critical thinking and concept synthesis. Utilizing material presented in this course, the successful student will be able to determine most likely sites of lesion, diagnoses, clinical presentations and evidence-based treatment approaches. Oral and written communication skills will be assessed via presentations and case studies.

Course Materials

Seikel, J.A., Konstantopoulos K., Drumright D.G. (2020) Neuroanatomy & Neurophysiology for Speech and Hearing Sciences. Plural Publishing. ISBN: 9781635500714

McFarland, D. (2023). Netter's Atlas of Anatomy for Speech, Swallowing and Hearing. (4th Ed). Mosby/Elsevier Press. ISBN 978-0323830348

Textbook Rationale

We know that textbooks represent a significant cost for the college student. In this course, you will utilize the required text heavily and it is an excellent resource for you as you enter professional practice. Subsequent coursework will build on concepts mastered in this course and these materials will continue to be beneficial in your studies.

Your book is available without cost from the Brackett Library. A link to the online version of your text is available on the Canvas course. The bookstore will not have physical copies of the text but can order for you. You can purchase the book directly from the publisher (they usually send me a coupon code to distribute to you) or from Amazon.

Course Communication Protocols

I am here to help you. I will communicate with you via in-class announcements, Canvas announcements, and your HU e-mail (for small groups, individual messages). Students are responsible for the disbursement of information (including attachments) through these sources. Please contact us via email instead of using text messages or the comment box within an assignment. I will respond to emails within 24 hours during the typical work day (8am-5pm) Monday-Friday. Students are expected to check emails daily and a timely response from you is appreciated. We encourage in-person meetings for office hours and are happy to schedule times to meet with you individually or in small groups to discuss any course concept, assignment, quiz or review an exam.

Classroom etiquette

As servants of Christ, we must know how to address each other via all methods of communication - whether online or on-ground. When it comes to our communication, let's remember the following: Harding University is a Christian university and expectations are that the relationship and communication style between one another should reflect Harding's Christian mission.

When communicating with teachers or classmates, please remain professional and courteous. Generally, we use person-first language (child with Down syndrome) rather than disability-first language (Down syndrome child); however some individuals prefer disability-first language (Deaf person, autistic child).

Please abide by the following rules to allow for the best learning environment for you and your fellow classmates. These rules contribute to an impression of professionalism, something that should be very important to you as you prepare for a professional career.

1. Cell phone policy: Turn off your cell phones (any exceptions must be discussed with the instructor). No text messaging allowed, no matter how quiet yours may be. No cell phones or electronic devices during quizzes and exams or you will earn a "0" on your quiz or exam. Do not use cell phone as a watch. **Turn it off and put it away.**
2. No lap-top usage for surfing the web. No instant-messaging in class time.
3. Come to class on time to minimize distractions and be considerate of the rest of the class. Remain until the class is dismissed.
4. Attend **ALL** classes. If you need to miss a class period, please inform us via email prior to the class period. Any work due remains due on that day so, if you are absent, submit assignments early or send them with a classmate.

University Mission Statement

With Christ as Lord, Harding University transforms learners for global impact by empowering faith and engaging minds within a deeply connected community.

Department Mission Statement

Our program excels in developing highly-skilled and professional graduates who are ready to impact their local and global communities by improving the lives of those they serve. Christian faculty and staff are invested in providing an unparalleled experience utilizing a comprehensive curriculum, contemporary technology, and state-of-the-art facilities to engage students in reaching their full potential, both educationally and spiritually. As a result, our students exemplify ethical leadership, critical thinking, and interprofessional collaboration to support top of the license practice.

Integration of Faith and Learning Statement

As your instructors, we hope that you see your practice as rehabilitation professionals as a vehicle of service to God's children. In this course, we aim to equip you well to serve His creation in the pursuit of wellness.

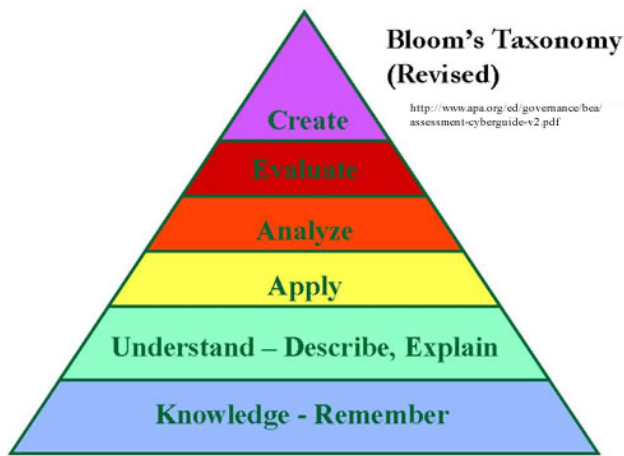
Learning Objectives

Relationship to ASHA standards:

ASHA upholds eight [standards](#) related to academic and clinical training as well as continuing education, acquisition and maintenance of your CCCs. New standards became effective on January 1, 2020. The revised Standards are available in your departmental handbook and students are encouraged to review them. This course primarily contributes to evidence of knowledge and skills described in Standards IV-B, IV-C, IV-D, IV-F, V-A, and V-B

Development of critical thinking skills is a primary objective of this course. Critical thinking (Bhatnagar, 2013) includes:

- The ability to discriminate essential from trivial information
- Successful consolidation of information in memory and the ability to easily retrieve it
- The ability to apply knowledge
- The ability to present facts from different angles
- The skill to seek information for a full understanding of a case, to explore alternatives and seek explanations



Based on an APA adaptation of Anderson, L.W. & Krathwohl, D.R. (Eds.) (2001)

This graduate course is designed primarily to build a foundation of knowledge upon which you will build in subsequent courses. We will focus our efforts in the bottom three tiers of the Bloom's Taxonomy framework. We will learn many facts and build a robust library of knowledge. We strive to fully understand the material presented, able to describe neuroanatomy and explain the effects of neurogenic diseases/disorders on the functions of speech, language, cognition and swallowing. We will apply what we have learned to understand dysfunction and the relationships between neuroanatomy, neurophysiology and observable functions. A strong foundation in this course will prepare you for success in future semesters and in your career as a speech-language pathologist. Investments made here will be rewarded down the road, we promise.

Course Learning Objectives (CLOs)

Upon the completion of this course, students will be able to:

1. Describe the organization and development of the human nervous system, including location and function of the major structures of the CNS, PNS, spinal cord, brainstem, and cerebellum
2. Understand concepts of Brodmann mapping, localization of function, homunculus and how these apply to the human nervous system
3. Discuss the structure and functional role of the neuron (including different types) as well as support cells such as glial cells, ependymal cells, astrocytes, etc.
4. Explain neural firing (action potential), the role of neurotransmitters, and the structure/function of the synapse
5. Discuss the components of the reflex arc, including various types of sensors and the process of muscle activation
6. Describe dermatomes, myotomes, nerve plexus, special/general senses and major elements of visual, gustatory, auditory and vestibular systems
7. Describe tracts, hemispheres, lobes, gyri, and sulci associated with a variety of speech, language, and cognitive functions
8. Identify major cortical and subcortical landmarks of the cerebral cortex (meninges, ventricles, specific gyri/sulci, thalamus, basal ganglia, etc.) understand their role in the nervous system, and describe expected clinical outcomes when these structures are lesioned
9. Visually identify and explain the importance of the three levels of the brainstem, their prominent landmarks (superficial and deep) and the functional significance of each.

10. Understand and describe functional classifications of the nervous system in terms of afferent/efferent, pyramidal/extrapyramidal, sympathetic/autonomic, UMN/LMN and describe disorders/deficits associated with each classification.
11. Visually identify and explain the function of each of the cranial nerves. Discuss expected outcomes when each CN is lesioned.
12. Discuss each of the cranial nerves in terms of classification (motor/sensory/mixed, general/special, somatic/visceral, etc.)
13. Discuss the primary role of the cerebellum, major structures, and associated peduncles. Explain the tracts in each peduncle and the types of information being carried within each.
14. Describe the cellular structure of the cerebellum and basic roles of each cell type within this structure
15. Describe and discuss the functional significance of the descending and ascending motor and sensory pathways within the brain/cerebellum, spinal cord and brainstem
16. Discuss important structures visible in longitudinal and transverse anatomy of the spinal cord. Identify and discuss the roles of key tracts (ascending and descending)
17. Differentiate between and describe the route of the corticobulbar and corticospinal tracts. Explain the types of information carried on each and expected clinical signs resulting from various sites of lesion along these pathways.
18. Differentiate between and discuss the relative importance of the pyramidal and extrapyramidal systems and the expected clinical signs resulting from various sites of lesion within these systems.
19. Broadly describe clinical signs resulting from spinal cord damage at varying levels
20. Explain and discuss the importance of central pattern generators to the SLP. Differentiate CPGs and reflexes and discuss how they are related.
21. Describe the blood flow to and from the brain, including the Circle of Willis and the cerebral arteries. Identify the two major vascular distributions. Discuss the potential causes and effects of loss of supply to any of the major branches of the vertebrobasilar or carotid supplies.
22. Discuss feedback and feed-forward processes and their role in learning and execution of speech
23. Describe each stage of the swallow, including the neurophysiological foundations of each stage and the role of sensory input to the swallowing process.
24. Describe oral, pharyngeal and respiratory reflexes and their relevance to the SLP
25. Explain some of the most common neuropathologies (i.e. stroke, traumatic brain injury, dementia, Parkinson disease etc.) including etiology, neuroanatomical impact, pathology and/or pathophysiology, typical presentation, common test findings, progression, prognosis, SLP role in patient care and associated interprofessional team involvement in patient care
26. Use all forms of expressive communication with all stakeholders to assure highest quality care
27. Critically evaluate information related to diagnoses and case studies, use valid evidence in decision-making, apply current knowledge and sound judgment and access sources of information to support clinical decisions.
28. When presented with a case scenario, students will anticipate likely location of lesion or provide expected clinical signs and symptoms associated with that lesion
29. Understand role of interprofessional assessment and intervention for individuals with neurogenic disorders and be able to coordinate care with other disciplines and community resources

30. Understand and correctly use basic vocabulary of the profession (aphasia, dysmetria, agnosia, dysarthria, dementia, etc.). Correctly use directional terms (medial, lateral, distal, proximal, superficial, etc.), planes of reference (sagittal, frontal, transverse), and surfaces (ventral, lateral, anterior, etc.).

Grading and Assignment Details

Grading Information

You will be given feedback during the duration of this course. Feedback will primarily be in the form of grades on quizzes, exams and projects. The intent of this feedback is to inform you of how well you met the expectations for these components and help you identify strategies for mastering the course material.

Final grades will be determined as follows:

- A - 90 – 100%
- B- 80 – 89%
- C - 70 – 79%
- D - 60 - 69%
- F - below 60%

**** Must average 70% on all exams (including the final) to earn course credit**

Assessment of the knowledge, skills, and proficiency of each student for the purpose of assigning a letter grade at the completion of this course will be based on the following course components, weighted as follows:

Case Studies – 7%

Presentations – 5%

Quizzes – 8%

Exams – 80% (Each of 3 exams and a final are worth 20% of your grade)

Students are strongly encouraged to attend scheduled Exam Review sessions to review test performance, identify needed adjustments in test-preparation strategy, and clarify any gaps in knowledge. Appointments may also be made (and are encouraged) to answer any questions the student may have regarding course content or difficult concepts. Students are expected to take ownership of and responsibility for their course grades and are strongly encouraged to use the abundant resources available with the course text and make use of the instructors' office hours to ask any questions that remain unanswered. **If a student does not earn an average of 70% across all major course exams (without rounding), a grade of D will be recorded for the course, regardless of the average on other class assignments.**

If a student is not achieving course learning objectives, not demonstrating essential skills, professional practice competencies, or meeting CFCC standards as determined by the course instructor the student will be notified. The student, instructor, clinical educator, and/or clinical director (as appropriate) will meet to develop a written individualized remediation plan that supports student progress toward achieving the needed outcomes. The remediation plan will include identified weaknesses supported by evidence (ie, exam results, presentation, clinical performance, quiz grades, etc.). In addition, the remediation plan will include specific tasks, outcomes, and a timeline for completion.

The written plan will be shared with the student's graduate advisor and department chair. A copy of the plan will be placed in the student's Calipso account and the course will be marked as "in remediation" on their KASA. Upon successful completion of the remediation plan the instructor, student, and advisor will sign the form acknowledging the completion of the remediation plan and then digitally file the form in the student's KASA in Calipso. The course and associated learning objectives can then be marked as completed. If the remediation of skills is not completed successfully, the student will repeat the course. If the remediation is ongoing at the end of the semester, the student will receive a grade of Incomplete for the course.

Grades are not gifts; they are earned. The instructor does not *GIVE* grades; rather the student *EARN*S the grade through organization, diligence, planning, and execution. Students are expected to assume individual responsibility for the quality, presentation and timeliness of their own work.

Late work is not accepted and earns a grade of zero. Harding University is located in Searcy, AR, in the Central Standard time zone; therefore, the due dates and times will be based on Central Standard Time.

Course Requirements:

1. This course includes laboratory activities associated with the cadaver lab, plastic models and basic screening techniques. These course requirements are associated with CFCC standards V-B, IV-B and IV-D
2. Four examinations will be administered. The format of each exam will be largely multiple choice, including identification of key structures. After the first unit examination, all additional examinations will contain comprehensive material from previous units to ensure a full foundational understanding of material. Each new unit examination after the first examination will contain ~10% review material. The final will be comprehensive in nature. Examinations are measuring knowledge associated with Standards IV-B, IV-C, IV-D, V-B
3. Student presentations will be completed throughout the semester covering common pathologies associated primarily with central nervous system pathology. Requirements of this project will be posted online along with a rubric that will be followed for assessment. Presentations assess knowledge and skills related to V-B and IV-F
4. Quizzes will be administered at the beginning of each class period. Targeted learning objectives will be posted for these quizzes each week. An absence for a quiz will be worth a grade of "0." At the end of the semester, the lowest quiz grade will be dropped. Quizzing assesses knowledge related to IV-B and IV-C.
5. Each student will participate in the learning/teaching and practical quiz in the donor lab. The instructors reserve the right to modify these activities as needed. Activities may include observation, dissection, identification, and teaching students from one or more other healthcare disciplines. Dissection labs are associated with standards IV-B and IV-C.
6. Each group will be assigned two Case Study/Journal Club questions from two book chapter to be completed over the course of the semester. These clinical cases help

students apply the material learned in class and relevant research literature to clinically-relevant scenarios and. Project guidelines are posted to Canvas. This assignment measures knowledge and skills associated with V-A, IV-C and IV-F.

Participation/Attendance

Consistent and punctual attendance is expected at the graduate level. Two absences are allowed. Absences may occur for illness, appointments, interviews, and travel; however, missed work will receive a score of zero and opportunities for alternative assignments will not be given. Students are responsible for all class content. Every absence beyond two will result in the final course grade being lowered by a letter. Exceptions to this policy will be rare, and considered on a case by case basis. For asynchronous lectures, the course instructor will take attendance via course analytics in Echo360.

Material in this course often involves complex concepts and large amounts of material that is probably new to you. We truly want you to be successful in mastering this course material but cannot answer questions that you don't ask. In our classroom, there are no "dumb" questions. We will always respect your willingness to seek a greater depth of knowledge and promise to never knowingly make a student feel "silly" for asking a question in class – it's a safe place to pursue knowledge. Please make sure that you maintain that sense of safety by honoring your classmates' pursuit of knowledge.

If you need to miss a class period, please inform the course coordinator (Dr. Meeker) via email prior to the class period.

Submitting Assignments

Please use Canvas for submitting assignments; each assignment has a correlating spot for submission.

Technology Details

Technology Requirements

Each student is expected to have access to a laptop computer for taking quizzes and exams.

Technical Support

For technical assistance from 8:00 a.m. - 5:00 p.m., M-F, please contact the e-Learning Help Desk at

Phone: 501-279-5201

Email: elearning@harding.edu

Web: [E-Learning Web Address](#)

For Canvas assistance, search [Canvas Guides](#)

For ExamSoft/Examplify assistance: search [ExamTaker Support](#), call 1-866-429-8889 ext 1, or email at support@examsoft.com.

Technical Skills

The following foundational skills are expected of all students who access Canvas. This list represents a minimum expectation of your ability to function effectively in a technical Environment.

1. Access Harding's Canvas and navigate course content

2. Written communication skills, email, attachments, uploading, and downloading Capabilities
3. Online etiquette (netiquette), including privacy and security awareness
4. How to change browser / refresh a page / other basic computer tasks
5. Navigate the Internet for scholarly research
6. Utilize basic software / app programs needed for word processing, data analysis, and presentations

Learning Management System

Canvas is the Learning Management System (LMS) used in this course. Canvas sends an email confirmation to your Harding University email once an assignment is graded or an announcement is posted. Canvas can be accessed using [Harding's Canvas Login](#). For additional information relating to Canvas, including tutorials, and supported web browsers, please visit [Harding's IST Canvas page](#) or [Instructure Canvas Help Center](#).

Policies and Procedures

Drop and Add Dates

The official start date is August 19 and the last day to add this class is August 23. The course will end on December 13 and the last day to drop is November 20. Please refer to the University's policy regarding drop/add if you have specific questions.

University Assessment

Harding University, since its charter in 1924, has been strongly committed to providing the best resources and environment for the teaching-learning process. The board, administration, faculty, and staff are wholeheartedly committed to full compliance with all Criteria of Accreditation of the Higher Learning Commission as well as standards of many discipline-specific specialty accrediting agencies. The university values continuous, rigorous assessment at every level for its potential to improve student learning and achievement and for its centrality in fulfilling the stated mission of Harding. Thus, a comprehensive assessment program has been developed that includes both the academic units and the administrative and educational support units. Course-specific student learning outcomes contribute to student achievement of program-specific learning outcomes that support student achievement of holistic university learning outcomes. All academic units design annual assessment plans centered on measuring student achievement of program learning outcomes used to sequentially improve teaching and learning processes. Additionally, a holistic assessment of student achievement of university learning outcomes is coordinated by the university Director of Assessment used to spur continuous improvement of teaching and learning.

Students with Disabilities Accommodations

It is the policy for Harding University to accommodate students with disabilities, pursuant to federal and state law. Therefore, any student with a *documented disability* condition (e.g. physical, learning, or psychological) who needs to arrange reasonable accommodations, must contact the instructor and the Office of Disability Services and Educational Access at the *beginning* of each semester. If the diagnosis of the disability occurs during the academic year, the student must self-identify with the Director of Disability Services and Educational Access *as soon as possible* in order to put academic accommodations in place for the remainder of the semester.

The Office of Disability Services and Educational Access is located in Room 239 in the Student Center on the Harding University Searcy campus. Since some graduate courses are taught at different sites and students will not have access to the Office of Disability Services and Educational Access located on the Searcy campus, the student must self-identify with the instructor of the course and submit documentation by fax (501-279-5702) or mail (915 E. Market Ave., Box 12268, Searcy, AR 72149-5615) to the Office of Disability Services and Educational Access on the Searcy campus. The necessary forms are available at <https://www.harding.edu/student-life/disabilityservices>. Upon receiving the appropriate documentation approved by ADA guidelines, academic accommodations may be set up by the instructor via a telephone conference with the Director of Disability Services and Educational Access. If you have questions, please contact the Office of Disability Services and Educational Access at DisabilityServices@harding.edu or (501) 279-4019.

Code of Academic Conduct

Students of Harding University are expected to be honorable and to observe standards of academic conduct appropriate to a community of Christian scholars. Harding University expects from its students a higher standard of conduct than the minimum required to avoid discipline. Harding expects its students to conduct themselves as responsible citizens in a Christian community. Enrollment at the University is viewed as a privilege that brings the attendant responsibilities and accountability. In order to encourage Christian living and growth, the University administers a student Code of Conduct. This code is provided to every student upon enrollment. Upon registration to the University, students acknowledge and agree to abide by this code. Harding University reserves the right to refuse admission or dismiss students whose lifestyle is not consistent with the Christian principles for which Harding stands; and when the general welfare of the institution requires such action. Students suspended for disciplinary reasons during a semester may receive a grade of “F” in all courses for that semester. Please visit the graduate/professional Harding University Student Handbook for further details.

Academic Integrity Policy

Honesty and integrity are characteristics that should describe each one of us as servants of Jesus Christ. As your instructor, I pledge that I will strive for honesty and integrity in how I handle the content of this course and in how I interact with each of you. I ask that you join me in pledging to do the same.

Academic dishonesty will result in penalties up to and including dismissal from the class with a failing grade and will be reported to the Director of Academic Affairs. All instances of dishonesty will be handled according to the procedures delineated in the Harding University catalog.

Some elements of this course are designed to be completed with a peer (case studies and presentations). Refrain from discussing exam content with any classmates, including students who have taken this course previously.

The use of generative AI tools is not permitted for any assigned work in this class and constitutes a violation of Harding’s Academic Integrity Policy.

Course Academic Conduct

All acts of dishonesty in any academic work constitute academic misconduct. As a student of Harding University, you should avoid all cases that will be construed as academic misconduct. This includes, but is not necessarily limited to, the following:

1. *Cheating*: Use or attempted use of unauthorized materials, information, or study aids in any academic exercise.
2. *Plagiarism*: Representing the words, ideas, or data of another as your own in any academic exercise.
3. *Fabrication*: Falsification or unauthorized invention of any information or citation in an academic exercise.
4. *Aiding and Abetting Academic Dishonesty*: Intentionally helping or attempting to help another student commit an act of academic dishonesty.
5. *Conduct unbecoming a professional while participating in a practicum, internship, field experience, or any similar academic experience*: Conduct unbecoming a professional includes, but is not limited to, standards of conduct stated in any Harding University student handbooks as well as standards and codes of conduct associated with professional organizations related to the student's academic discipline.
6. *Respect*: Students are expected to respect other classmates' opinions and ideas at all times. Since online students cannot see body language and other nonverbal cues, it is essential to word comments carefully and to refrain from such things as sarcasm, which can be taken negatively in the online world. Read posts for content and then read posts for context. If the message can be taken negatively in any way, the suggestion is to re-word the post until you are sure that it will not be taken defensively. Another key issue is to refrain from certain discussions that evoke strong reaction. This may include such things as:
 - Stereotypes of any nature, whether it be profession or class of people
 - Politics, no matter your personal leanings, respect should be shown in differences of opinions and ideas

Course Recordings

Canvas content and class recordings (e.g., Echo360) are protected by copyright. Without written permission from the instructor, content (written, audio, video) may not be downloaded or shared with anyone. Most content and recordings will indicate copyright by the symbol ©. However, a symbol is not required to protect copyrights, so unless you have permission to download or share recordings or content, you should not do so. Doing so violates Academic Integrity Policies and may result in disciplinary actions.

Referencing Information

As the accepted writing style of business, psychology, education, and social science programs across the globe, the American Psychological Association publication format (otherwise known as APA Style) is the required writing style for this course. Learning to conduct scholarly research is a natural part of academic work, and will help you succeed at Harding University. Conducting scholarly, professional and industry research is required for this course.

If a source is questionable, e.g., Wikipedia, other wikis, ask.com, answers.yahoo.com, etc., please contact your professor for clarity and permission before using a source that falls outside the scope of traditional academic standards. It is also important that you show how these references assisted your academic work; make sure you reference your sources in every assignment you submit, no matter how mundane the assignment may be. Failure to properly and

completely cite your sources may constitute plagiarism or cheating, as delineated in the Academic Code of Conduct. Bottom line, remember these two simple rules: 1) give credit where credit is due, and 2) if it isn't your words, ideas or thoughts, it is someone else's and needs to be cited.

- [APA Resources](#)
- [Purdue Online Writing Lab](#)

The Harding University Writing Center is also available to provide help with planning, writing, organizing, or revising an essay as well as with using MLA, Chicago, or APA formats. You can schedule an appointment with the Writing Center at harding.mywconline.com or ask questions via email at HardingUniversityWritingCenter@gmail.com.

Student Declaration

Submitting an electronic document at Harding University constitutes an agreement with the following declaration:

- I affirm that the work submitted is of my own accord, is original, and contains the necessary and appropriate citations, where the work is of another source.
- I affirm that this assignment has not previously been submitted in any form.
- When submitting assignments to Turnitin, I acknowledge and adhere to its disclaimer statements.
- To uphold Harding University's [Academic Integrity Covenant](#)

Academic Grievance Policy

If a student believes that he or she has reason to question the decision of a faculty member with regard to the final grade received in a course or the denial of academic progression, a procedure has been established to resolve the grievance.

The student must initiate the written Academic Grievance Appeal within five business days after notification of the final grade in Pipeline or notification of denial of academic progression. In cases of both course grade and academic progression appeals, students are encouraged to first engage the involved faculty member in a good faith discussion (in person or via telephone or email) as the first step in resolving any concerns. If resolution is not achieved, a student may submit a written academic grievance by following the policy set forth in the Harding University catalog. All students should be familiar with this policy.

Time Management Expectations

For every course credit hour, the typical student should expect to spend at least forty-five clock hours of concentrated attention on course-related work, including but not limited to time attending class, as well as out-of-class time spent reading, reviewing, organizing notes, preparing for upcoming quizzes/exams, problem solving, developing and completing projects, and other activities that enhance learning. Thus, for this three-hour course, a typical student should expect to spend at least **135 hours of focused time** dedicated to the course.

Dress Code

All members of the Harding community must dress with modesty and decency appropriate to the Christian lifestyle and consistent with professional employment standards. For these

reasons, students are expected to adhere to a dress code described in the Student Handbook, which faculty, staff, and administration will enforce.

Distance Education

For any element of a course conducted via teleconference (Zoom, GoogleMeet, etc) the student must turn on their camera. Student faces must be visible but the backgrounds can be blurred.

Course Policies

All acts of dishonesty in any academic work constitute academic misconduct. As a student of Harding University, you should avoid all cases that will be construed as academic misconduct. Please see the University Catalog with any question about what constitutes academic misconduct.

Canvas or Internet Outage Policy

As a (potential online) learner, you must be able to manage technical difficulties such as power outages, connection problems, and other technical issues. Technology will sometimes fail. For this reason, it is advisable to complete your assigned work prior to the due date.

Instructor

If your instructor experiences a power outage, Internet service outage, LMS (Canvas), or other technical issues that significantly affect the timing of distributing online assignments, grading assignments, or significantly interfere with communicating with students, adjustments to due dates will be made.

Student

If you experience a power outage, Internet service outage, LMS (Canvas) or other technical issues, nonetheless you are held responsible for completing your assigned work in a timely manner. Harding University is not responsible for the student's access to a working computer or reliable Internet service. Internet outages or having computer issues is not an excuse for late work. A backup plan for reliable Internet service and working computers is prudent.

Testing Issues

All examinations in this class will be taken using the ExamSoft platform. Please see the department's policies and helpful hints for smooth test-taking. If you experience issues with an Internet connection, power outage, computer, or LMS (Canvas) and are unable to complete or submit a test, do not panic. Your first step is to contact me as your instructor and I will provide you with instructions on how to proceed. You may also report a problem to the E-learning help desk (501-279-5201). Response time is dependent on the time of day. The E-learning help desk is manned Monday through Friday from 8:00 am – 5:00 pm.

Inclement Weather If inclement weather prohibits your participation in any element of this course, prompt communication with me is expected. Your personal safety is our primary concern. We will handle any instances that arise on a case by case basis.

Academic Support Services

Harding offers a wide variety of academic support services. While this list is not all-inclusive, the following links may be useful to students (some services may not be applicable for graduate or professional students):

- [Library](#)
- [Testing](#)
- [Tutoring](#)
- [Writing Center](#)

Student Support Services

Harding offers a wide variety of student support services. While this list is not all-inclusive, the following links may be useful to students (some services may not be applicable for graduate or professional students):

- [Advising](#)
- [Registration](#)
- [Financial Aid](#)
- [Student Life](#)
- [Counseling](#)
- [Career Services](#)

Additional Information

This course is additive in nature meaning that your understanding of future concepts is built upon understanding of earlier concepts. If you fall behind, catch up! If you're lost, ask yourself if you are dedicating enough focused time to the material. If you are reading your textbook, spending adequate time with the material (according to the time expectations), have ensured that your study time is focused and not distracted, and are still lost, see me (earlier rather than later). We want to help you be successful in this class.

In this course, spelling counts. Take the time to learn the correct spelling of each term – if it's spelled wrong, it will be counted wrong. Basic anatomical terms and names of structures do not require capitalization (e.g. esophagus, neurons, larynx, palatoglossus). Structures/diseases named for people (e.g. Broca's area, Parkinson disease, Alzheimer's disease, circle of Willis) are capitalized.

We are firm believers that excellent treatment is built on a solid diagnostic foundation which is built on a clear understanding of what's "normal." You can't reasonably expect to improve your patient's function if you can't identify the problem. Please view this course as foundational (not optional) for your skills as a diagnostician and clinician.

Changes to Syllabus Notice

The instructors reserve the right to modify and update any part of the syllabus where necessary. You can expect that these changes will be for your perceived benefit and will be communicated in Canvas. It is your responsibility to stay up to date with any changes communicated by the professor.

Week	Date	Content	Activity/Primary lecturer	Stds assessed	Chp.
1	Aug 23	Introduction to Neurology of Speech-Language and Hearing Course and Expectations Neurons and Glial Cells	Killins & Meeker Group 1 – Case study or you can wait and do Chapter 11 (can turn in next week)	IV-B, IV-C, IV-D	1, 2
2	Aug 30	Basic Reflex and Sensory Function	Killins Group 2 and 3 – Case Study – Std IV-F	IV-B, IV-C, IV-D	3

			Presentations: myasthenia gravis & cerebral palsy – Std V-A		
3	Sept 6	Anatomy of the Subcortex	Killins Group 4 – Case Study – Std IV-F 4-3 is an “exemplar” – See Canvas Presentations: Parkinson disease and Huntington disease Std V-A Note: this is out of order from your textbook	IV-B, IV-C, IV-D	5
Week 4 – September 13 Exam #1 Chapters 1-3 – Standards IV-B, IV-C, IV-D					
5	Sept 20	Cerebral Cortex	Meeker Group 5 – Case Study Std IV-F	IV-B, IV-C, IV-D	4
6	Sept 27	Anatomy of the Brainstem	Meeker Group 1 – Case Study Std IV-F Presentations: Chiari malformation and glioblastoma Std V-A	IV-B, IV-C, IV-D	6
9	Oct 11	The Cranial Nerves	Killins & Meeker Group 2 – Case Study Std IV-F Presentations: Bell’s palsy and Guillian-Barre Std V-A Cranial Nerve Testing Lab – Std V-B	IV-B, IV-C, IV-D	7
Exam #2 Chapters 4-7; October 18 – Standards IV-B, IV-C, IV-D					
10	Oct 25	Cerebellar Anatomy and Physiology	Killins – Class meets in the morning on this day Group 3 – Case Study Std IV-F Presentations: MS and ALS Std V-A		8
11	Nov 1	Spinal Cord	Killins Group 4 – Case Study Std IV-F In-class lab over structures to be seen in Donor lab - Std IV-B and IV-C		9

			Presentations: cervical spine injury/surgery and muscular dystrophy - Std V-A Neurological Screening Lab - Std V-B		
12	Nov 8	Cerebrovascular Supply	Killins & Meeker Group 5 – Case Study Std IV-F Possible lab day (brain dissection) Presentation: cerebral aneurysm Std V-A November 15 10:30 – 12:30 – LAB Standards IV-B and IV-C		10
Nov 15 - Exam #3 Chapters 8-10 – Standards IV-B, IV-C, IV-D					
14	Nov 22	Neural Control of Speech and Swallowing This material will be tested on the comprehensive final exam	Meeker Group 1 – Case Study (optional) Std IV-F		11
Thanksgiving Break					
15	Dec 1 and possible additional date TBA	Lab Days See above - lab day November 15 (with PA students)	Killins & Meeker		
	Dec 9	Traditional (written) final exam	Classroom 215 – 1-3pm Standards IV-B, IV-C, IV-D		

We will have a traditional final exam and a practical exam during finals week