## **University of Nebraska at Kearney**

## CDIS 252-01: Anatomy & Physiology of the Speech Mechanism

3 Credit Hours

Summer 2023

Prerequisite: None



### **Instructor Information**

Mrs. Professor

Email address: professor@email.com

Phone Number: (123) 456-6789

Office Number: 1237

Office Hours:

Please contact me to set up a meeting via Zoom

## **Required Text/Materials**

Applied Anatomy and Physiology for Speech-Language Pathology and Audiology by Fuller, Pimentel, and Peregoy (January 17, 2011). eText: ISBN: 978-0-7817-8837-3 The code inside the front cover is needed to access additional resources from the Point.

<u>Visible Body application</u> via UNK Calvin T. Library

# Course Description

Study of the anatomy and physiology of the speech mechanism.

#### What will you really learn?

- The structures of the brain and spinal cord and the structures and muscles we use to breathe, speak, talk, hear, and see.
- What disorders result when our brain or structures and muscles of breathing, speaking, hearing, talking, and seeing are not working correctly.



Did you know... there are 28 bones in the human skull

### **CDIS Department Mission Statement:**

Consistent with the Mission of the University of Nebraska Kearney, the primary purpose of the Department of Communication Disorders is to provide a high-quality instructional program in speech-language pathology. The Department engages students in research and professional activities that promote lifelong learning. The goal of the Department is to educate and prepare students to be responsive, reflective, and collaborative decision makers who have the requisite knowledge, skills, and technological expertise to earn appropriate credentials, licenses, and/or certifications to practice ethically and successfully.

# **COURSE REQUIREMENTS**

### **CANVAS**

Announcements, assignments, course documents, assigned and recommended readings, lecture notes, Internet links, and grades are made available using Canvas, https://canvas.unk.edu. Please refer to Canvas throughout the semester for updates on class schedule, readings, and assignments. This is the main venue for distribution of course materials. Students should check this site regularly. Please also make sure to check the "announcement" section frequently for updates.

#### **EXAMS**

There will be two exams throughout the course of the semester, which include the midterm exam and a comprehensive final exam. Mid-term and final exams are open-book, open-note and will be timed. Exams should be taken independently and collaboration with another person will result in a failing grade. The midterm will account for 20% of your total grade and your final exam will account for 20% of your total grade.



### **QUIZZES**

There will be quizzes associated with each chapter of the textbook. Students will be prepared for the quizzes by reading the assigned textbook readings and listening to the recorded lectures for each chapter. Quizzes will be based on both lecture and text content. All quizzes will be timed. Quizzes should be taken independently and collaboration with another person will result in a failing grade. Quizzes will account for 35% of your total grade.



## ASSIGNMENTS/LABS

Assignment includes: Introductory assignment
Labs include: Ventricles of the brain, brain and brainstem structures, brain cortexes and sulci, neuron anatomy, respiratory system, build a larynx, laryngoscopy, muscles of facial expression, and anatomy of the ear.
Assignments and labs will account for 25% of your total grade.

## **DISCUSSION ACTIVITIES**

You will be encouraged to participate in discussion activities throughout the semester. I will read all discussion posts and make comments on occasion, but this is a time for you to interact with your peers about the course content.

# ~ COMMUNICATION IS THE KEY TO SUCCESS ~

#### **HOW ARE YOU EVALUATED?**







QUIZZES 35%



MIDTERM EXAM 20%



FINAL EXAM 20%

#### **GRADING SCALE**

Α	93-100	B+	87-89	C+	77-79	D+	67-69
A-	90-92	В	83-86	С	73-76	D	63-66
		B-	80-82	C-	70-72	D-	60-62
						F	59 and
							lower

As speech-language pathologists and audiologists, we are communication specialists.

#### LATE WORK POLICY

Please submit all assignments, labs, quizzes, and exams by each due date noted on the syllabus. Please contact me before the assignment is due if you are not able to meet the deadline. If prior arrangements have not been made, I will deduct 50% on a late assignment, lab, or quiz submitted up to one week after the due date. There will be no late acceptance of midterm or final exams and no paperwork will be accepted after the final day of class (July 28, 2023).

## ATTENDANCE, PARTICIPATION & PROFESSIONALISM

As a web-based class, your preparation and study are imperative to your success. You are responsible for all material presented and assigned. Please check your email and Canvas each day. Accurate grammar, spelling and overall university-level submissions are contributing factors to success in this course.

#### **INSTRUCTOR COMMUNICATION & RESPONSE TIME**

Please post any general questions regarding class material in the discussion board entitled "Questions for Your Instructor" so that they are viewable to all students. If you have a question, most likely someone else has the same question so please ask! Also, if you know the answer to someone else's question, please feel free to answer it if you get to it before I do. If you have any questions regarding personal issues or grades, please email me at professor@email.com and put your name and course number (CDIS 252) in the subject line. I will strive to respond to all emails within 24 hours Monday-Friday. I will check my email and Canvas occasionally on the weekends as well; however, I will not guarantee a response before Monday. I will aim to have your grades for all assignments, labs, quizzes, and exams posted within 48 hours after their due date.

# **COURSE SCHEDULE**

Week Of:	Topics/Readings	Assignments	Due Dates			
June 4th	Terminology, Nomenclature, Basic Concepts Read Chapter 1, 2, & 3	Introduction Assignment Chapter 1 & 2 and Chapter 3 Quiz	11:59 CST on 6/6 11:59 CST on Sunday, June 11th			
June 11th	Anatomy, Physiology and Pathology of the Nervous System Read Chapter 4 & Chapter 5	Chapter 4 & 5 Quizzes Lab #1, 2, 3, & 4	11:59 CST on Sunday, June 18th			
June 18th	Anatomy, Physiology and Pathology of the Respiratory System Read Chapter 6 and Chapter 7	Chapter 6 & 7 Quizzes Lab #5	11:59 PM CST on Sunday, June 25th			
June 25th	Midterm Comprehensive Exam on Chapters 1-7  Exam will open at 12:00 AM CST on Sunday, June 25th and close at 11:59 PM CST on Sunday, July 2nd. You will have 90 minutes to complete the exam in one sitting. No late submissions will be accepted.					

# **COURSE SCHEDULE**

Week Of:	Topics/Readings	Assignments	Due Dates			
July 2nd	Anatomy, Physiology and Pathology of the Phonatory System Read Chapter 8 and Chapter 9	Chapter 8 & 9 Quizzes Lab #6 and Lab #7	11:59 PM CST on Sunday, July 9th			
July 9th	Anatomy, Physiology, and Pathology of the Articulatory/Resonance System Read Chapter 10 and Chapter 11	Chapter 10 & 11 Quizzes Lab #8	11:59 CST on Sunday, July 16th			
July 16th	Anatomy, Physiology, and Pathology of the Auditory/Vestibular System Read Chapter 12 and Chapter 13	Chapter 12 & 13 Quizzes Lab #9	11:59 PM CST on Sunday, July 23rd			
July 23rd	Final Comprehensive Exam on Chapters 1-13  Exam will open at 12:00 AM CST on Sunday, July 23rd and close at 11:59 PM CST on Wednesday, July 26th. You will have 90 minutes to complete the exam in one sitting. No late submissions will be accepted.					



The course schedule is subject to change at the instructor's discretion.

## **IMPORTANT INFORMATION FOR STUDENTS**

### ATTENDANCE POLICY

Your instructor may have indicated on their syllabus an attendance policy specific to their class. If so, that is the policy with which you must comply. If no other policy is stated, the University-wide attendance policy will apply. You can find the <u>Student Attendance Policy Statement online</u>.

## **ACADEMIC HONESTY POLICY**

Academic honesty is essential to the existence and integrity of an institution of higher education. The responsibility for maintaining that integrity is shared by all members of the academic community. To further serve this end, the University of Nebraska at Kearney has a policy relating to academic integrity. To ensure all students understand the expectations, UNK has adopted <a href="https://exademic.ntegrity.nde/">Academic Integrity Policy</a>.

### CDIS UNDERGRADUATE ACADEMIC DISHONESTY POLICY

The faculty member shall request a meeting with each student involved. At the meeting, the faculty member shall:

- a. Attempt to ascertain the facts pertinent to the incident.
- b. Explain to the student the basis for the suspicion of academic dishonesty; and
- c. Give the student an opportunity to explain the matter satisfactorily.
- d. If the student admits responsibility for the act of dishonesty and the faculty determines that imposition of an academic sanction is appropriate, the faculty member may impose an academic sanction, such as retaking a test or rewriting a paper, or failure for the work involved or failure for the course. The CDIS Undergraduate Program Committee will review the incidence of academic dishonesty and determine if dismissal from the major/minor is warranted.
- e. The instructor will complete, file an Academic Dishonesty Incident Report \*A copy of this form must be turned into the Department, the Dean, and the Office of the Senior Vice Chancellor for Academic and Student Affairs





## REPRTING STUDENT SEXUAL HARASSMENT, SEXUAL VIOLENCE OR SEXUAL ASSULT

Reporting allegations of rape, domestic violence, dating violence, sexual assault, sexual harassment, and stalking enables the University to promptly provide support to the impacted student(s), and to take appropriate action to prevent a recurrence of such sexual misconduct and protect the campus community. Confidentiality will be respected to the greatest degree possible. Any student who believes she or he may be the victim of sexual misconduct is encouraged to report to one or more of the following resources:

Local Domestic
Violence, Sexual Assault
Advocacy Agency
308-237-2599

Campus Police (or Security) 308-865-8911

Title IX Coordinator 308-865-8655

Retaliation against the student making the report, whether by students or University employees, will not be tolerated.

### **Students with Disabilities**



It is the policy of the University of Nebraska at Kearney to provide flexible and individualized reasonable accommodation to students with documented disabilities. To receive accommodation services for a disability, students must be registered with the UNK Disabilities Services for Students (DSS) office, 175 Memorial Student Affairs Building, 308-865-8214 or by email unkdso@unk.edu

## Students Who are Pregnant

It is the policy of the University of Nebraska at Kearney to provide flexible and individualized reasonable accommodation to students who are pregnant. To receive accommodation services due to pregnancy, students must contact the Student Health office at 308.865.8218. The following links provide information for students and faculty regarding pregnancy rights. <a href="https://thepregnantscholar.org/title-ix-basics/">https://thepregnantscholar.org/title-ix-basics/</a>

https://nwlc.org/resource/faq-pregnant-and-parentingcollege-graduate-students-rights/

# UNK Statement of Diversity & Inclusion

IUNK stands in solidarity and unity with our students of color, our Latinx and international students, our LGBTQIA+ students and students from other marginalized groups in opposition to racism and prejudice in any form, wherever it may exist. It is the job of institutions of higher education, indeed their duty, to provide a haven for the safe and meaningful exchange of ideas and to support peaceful disagreement and discussion. In our classes, we strive to maintain a positive learning environment based upon open communication and mutual respect. UNK does not discriminate on the basis of race, color, national origin, age, religion, sex, gender, sexual orientation, disability or political affiliation. Respect for the diversity of our backgrounds and varied life experiences is essential to learning from our similarities as well as our differences. The following link provides resources and other information regarding D&I: https://www.unk.edu/about/equity-accessdiversity.php

# COURSE OBJECTIVES, ASHA STANDARDS, & COMPETENCIES

### **COURSE OJBECITVES/GOALS:**

In addition to the College of Education Desired Learning Outcomes, this course also addresses the ASHA specified standards for academic coursework, clinical training, and continuing education. At the completion of this course, each student will be able to demonstrate the knowledge and skills outlined by the Council for Academic Accreditation (CAA) and the Council for Clinical Certification (CFCC) as they relate to individuals. This content of this course will include the following CAA and CFCC standards:

### COUNCIL FOR ACADMIC ACCREDITATION (CAA) STANDARDS

- 3.1.1B Professional Practice Competencies: The program must provide content and opportunities for students to learn and demonstrate attributes and abilities in: Accountability, Integrity, Effective Communication Skills, Clinical Reasoning, Evidence-Based Practice, Concern for Individuals Served, Cultural Competence, Professional Duty, and Collaborative Practice
- 3.1.4B Evaluation of Speech, Language, and Swallowing Disorders and Differences. The program must include content and opportunities to learn so that each student can demonstrate knowledge and skills in assessment across the lifespan for disorders and differences associated with articulation, fluency, voice/resonance, receptive/expressive language, hearing, swallowing, cognition, social aspects of communication and augmentative and alternative communication needs.
- 3.1.5B Intervention to Minimize the Effects of Changes in the Speech, Language, and Swallowing Mechanisms. The program must include content and opportunities to learn so that each student can demonstrate knowledge and skills in intervention for communication and swallowing differences with individuals across the lifespan to minimize the effect of those disorders and differences on the ability to participate as fully as possible in the environment.

## COUNCIL FOR CLINICAL CERTIFICATION (CFCC) STANDARDS

- Standard IV-B: Demonstrate the knowledge of basic human communication and swallowing processes, including the appropriate biological, neurological, acoustic, psychological, developmental, and linguistic and cultural bases. The applicant must have demonstrated the ability to integrate information pertaining to normal and abnormal human development across the life span.
- Standard IV-C: Demonstrate the ability to analyze, synthesize and evaluate knowledge of communication disorders and differences, including the appropriate etiologies, characteristics, anatomical/physiological, acoustic, psychological, developmental, linguistic, and cultural correlates in the areas of speech sound production, voice and resonance, receptive and expressive language, literacy, hearing, cognition, and social aspects of communication.
- Standard IV-D: Demonstrate the ability to analyze, synthesize and evaluate knowledge of the principles and methods of prevention, assessment, and intervention for communication disorders
- Standard IV-E: Demonstrate knowledge of standards of ethical conduct.
- Standard IV-F: Demonstrate the ability to analyze, synthesize and evaluate knowledge of the integration of research principles into evidence-based clinical practice
- Standard V-A: Demonstrate oral and written communication skills sufficient for entry into professional practice

#### **GENERAL COURSE OBJECTIVES**

- a. Students will develop an understanding of anatomical nomenclature and systems.
- b. Students will learn the major components of the nervous system responsible for speech and language.
- c. Students will learn the muscles and structures, and describe the functions for each of these systems integral to the process of speech production: a) Respiration; b) Phonation; c) Articulation
- d. Students will learn the physiological processes involved in each stage of speech production.
- e. Students will learn to recognize structures critical for mastication and swallowing and the stages involved in the normal physiology of swallowing.



# Communication Disorders



The University of Nebraska at Kearney Communication Disorders department is accredited by the Council on Academic Accreditation in Audiology & Speech-Language Pathology. Graduates of the program will meet the following knowledge outcomes for ASHA Certification:

- Swallowing/feeding, including (a) structure and function of orofacial myology and (b) oral, pharyngeal, laryngeal, pulmonary, esophageal, gastrointestinal, and related functions across the life span
- Cognitive aspects of communication, including attention, memory, sequencing, problem solving, and executive functioning
- Social aspects of communication, including challenging behavior, ineffective social skills, and lack of communication opportunities
- Augmentative and alternative communication modalities

2020 Standards and Implementation Procedures for the Certificate of Clinical Competence in Speech-Language Pathology

### **Standard IV: Knowledge Outcomes**

#### Standard IV-A

The applicant must have demonstrated knowledge of statistics as well as the biological, physical, and social/behavioral sciences.

Implementation: Standalone coursework in (a) biological sciences, (b) chemistry or physics, (c) social/behavioral sciences, and (d) statistics that fulfill non-communication-sciences-anddisorders-specific university requirements.

#### Standard IV-B

The applicant must have demonstrated knowledge of basic human communication and swallowing processes, including the appropriate biological, neurological, acoustic, psychological, developmental, and linguistic and cultural bases. The applicant must have demonstrated the ability to integrate information pertaining to normal and abnormal human development across the life span.

#### Standard IV-C

The applicant must have demonstrated knowledge of communication and swallowing disorders and differences, including the appropriate etiologies, characteristics, and anatomical/physiological, acoustic, psychological, developmental, and linguistic and cultural correlates in the following areas:

- Speech sound production, to encompass articulation, motor planning and execution, phonology, and accent modification
- Fluency and fluency disorders
- Voice and resonance, including respiration and phonation
- Receptive and expressive language, including phonology, morphology, syntax, semantics, pragmatics (language use and social aspects of communication), prelinguistic communication, paralinguistic communication (e.g., gestures, signs, body language), and literacy in speaking, listening, reading, and writing
- · Hearing, including the impact on speech and language

Implementation: It is expected that coursework addressing the professional knowledge specified in this standard will occur primarily at the graduate level.

#### Standard IV-D

For each of the areas specified in Standard IV-C, the applicant must have demonstrated current knowledge of the principles and methods of prevention, assessment, and intervention for persons with communication and swallowing disorders, including consideration of anatomical/physiological, psychological, developmental, and linguistic and cultural correlates.

#### Standard IV-E

The applicant must have demonstrated knowledge of standards of ethical conduct.

Implementation: The applicant must have demonstrated knowledge of the principles and rules of the current ASHA Code of Ethics.

#### Standard IV-F

The applicant must have demonstrated knowledge of processes used in research and of the integration of research principles into evidence-based clinical practice.

Implementation: The applicant must have demonstrated knowledge of the principles of basic and applied research and research design. In addition, the applicant must have demonstrated knowledge of how to access sources of research information and must have demonstrated the ability to relate research to clinical practice.

#### Standard IV-G

The applicant must have demonstrated knowledge of contemporary professional issues.

Implementation: The applicant must have demonstrated knowledge of professional issues that affect speech-language pathology. Issues may include but are not limited to trends in professional practice; academic program accreditation standards; ASHA practice policies and guidelines; cultural competency and diversity, equity, and inclusion (DEI); educational legal requirements or policies; and reimbursement procedures.

#### Standard IV-H

The applicant must have demonstrated knowledge of entry level and advanced certifications, licensure, and other relevant professional credentials, as well as local, state, and national regulations and policies relevant to professional practice.