

**DEPARTMENT:** The Center for Communication Disorders

**COURSE PREFIX:** CDI **COURSE NUMBER:** 310-01 **CREDIT HOURS:** 3

**I. TITLE:** Anatomy and Physiology

**II. COURSE DESCRIPTION AND PREREQUISITE(S):** Lecture course dealing with the structure and functions involved in speech and the peripheral hearing mechanism.

**Prerequisite(s):** CDI 205

**III. COURSE OBJECTIVES:** This course has been designed to ensure that students demonstrate required knowledge and skills as outlined in the Standards and Implementation Guidelines for the 2014 Certificate of Clinical Competence in Speech-Language Pathology, the standards follow the objective.

The student will be able to:

- A. Describe the structural and functional organization of the phonatory system, respiratory system, the articulatory system, the auditory system and the neurological systems (ASHA STD IV-A, IV-B);
- B. Explain how the four systems contribute to the processes of speaking and hearing (ASHA STD IV-A, IV-B, IV-C);
- C. Demonstrate ability to explain the nervous system function and structures (ASHA STD IV-A, IV-B, IV-C); and
- D. Demonstrate how the nervous system coordinates the operation of the speech and hearing mechanisms (ASHA STD IV-A, IV-B).

**IV. CONTENT OUTLINE:**

**A. Basic Elements of Anatomy\*\* (Chapter 1)**

- Introduction/Syllabus
- Terminology
- Basic Elements of Anatomy
- Examination (#1)

**B. Anatomy and Physiology of Respiration\*\* (Chapter 2)**

- Introduction
- Support Structure for Respiration
- Ribs and Rib Cage
- Anatomy of Respiration
- Physiology of Respiration

**C. Anatomy and Physiology of Phonation\*\* (Chapter 3)**

- Introduction
- Phonatory Mechanism
- Physiology of Phonation
- Examination (#2)

**D. Anatomy of Articulation, Resonation, Auditory System\*\* (Chapter 4)**

- Anatomy of Articulation and Resonance
- Physiology of Articulation, Resonation, and Deglutition
- Examination (#3)

**E. The Anatomy and Physiology of Hearing\*\* (Chapter 5)**

- Anatomy of Hearing

Auditory Physiology  
Examination

**F. Neuroanatomy and Neurophysiology\*\* (Chapter 6)**

Anatomy of the Central and Peripheral Nervous System

Neurophysiology

**Final Examination (Exam #4)**

(\*\*Please Note: Order and content of these sections are subject to change at the discretion of the instructor.)

**V. INSTRUCTIONAL ACTIVITIES:** The class format will be lecture/discussion oriented to students' integration of anatomic/physiologic principles into the knowledge base necessary for professional practice in communication disorders. Use will be made of audiovisual materials, anatomic models and laboratory instrumentation to enhance learning.

**VI. FIELD, CLINICAL EXPERIENCES:** Each student must undergo an auditory screening in the MSU Diagnostic and Remediation Center. This evaluation must be completed prior to the last week of classes, with the results reported to the instructor by the Clinic Coordinator. Students who fail to complete this requirement will receive a grade of "I" for the course.

**VII. TEXT(S) and RESOURCES:**

Seikel, J.A., Drumright, D.G., & Seikel, P. (2013). Essentials of Anatomy and Physiology for Communication Disorders, Second Edition. New York: Delmar

Assigned readings, facilities of the MSU Speech and Hearing Clinic and Language Laboratory, audio, video and textual resources in the Communication Disorders Materials Room, and the MSU Waterfield Library, facilities of the MSU Canvas System, Internet-based demonstrations, tutorials and tools.

**VIII. EVALUATION AND GRADING PROCEDURES:** Student learning will be evaluated through a series of **scheduled** and **unscheduled** PERFORMANCE EVENTS:

Scheduled assessments will include three approximately 50 minute examinations (~100 points) and one final examination. All scheduled assessment events will be objective examinations (Multiple choice, T/F, Fill-in-the-blank, brief essay, etc.). The 50 minute examinations will emphasize recent lecture information, but may also include materials from earlier assessments when deemed appropriate by the instructor. Scores on scheduled examinations will constitute 75% of the student's course grade. A number of announced quizzes and homework assignments will also be given during the term, and scores on these tasks will constitute 25% of the overall course grade. **Credit for missed quizzes will not be allowed for any reason.**

<b>4 Exams (Including Final)</b>	<b>75% of grade</b>
<b>Quizzes/Homework Assignments</b>	<b>25% of grade</b>
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<b>Total Percentage</b>	<b>100%</b>

**Supplemental Credit:** There will **not** be any supplemental credit given for this course unless otherwise pre-approved by the instructor. Factors involved in being able to complete supplemental credit include, but are not limited to, sickness that limits ability to complete any assignments that contribute to dramatic decline in grade (with physician's excuse during the period of time missed only), family crisis that limits ability to complete any assignments that contribute to dramatic decline in the grade\* (\*family crisis to be determined by the instructor). These examples are only available to students who have shown **exceptional** work prior to the occurrence happening.

**Points earned in course assessments will be transformed to percentage (%) values and the departmental grading scale will be used to determine the student's final grade.**

**A=100%-90%, B=89%-80%, C=79%-70%, D=69%-60%, E=59%-0%**

**IX. ATTENDANCE POLICY:**

Students are expected to adhere to the MSU Attendance Policy outlined in the current MSU Bulletins. Please be aware that attendance may be a reflection of your grade.

**X. ACADEMIC HONESTY POLICY:**

Murray State University takes seriously its moral and educational obligation to maintain high standards of academic honesty and ethical behavior. Instructors are expected to evaluate students' academic achievements accurately, as well as ascertain that work submitted by students is authentic and the result of their own efforts, and consistent with established academic standards. Students are obligated to respect and abide by the basic standards of personal and professional integrity.

Violations of Academic Honesty include:

Cheating - Intentionally using or attempting to use unauthorized information such as books, notes, study aids, or other electronic, online, or digital devices in any academic exercise; as well as unauthorized communication of information by any means to or from others during any academic exercise.

Fabrication and Falsification - Intentional alteration or invention of any information or citation in an academic exercise. Falsification involves changing information whereas fabrication involves inventing or counterfeiting information.

Multiple Submission - The submission of substantial portions of the same academic work, including oral reports, for credit more than once without authorization from the instructor.

Plagiarism - Intentionally or knowingly representing the words, ideas, creative work, or data of someone else as one's own in any academic exercise, without due and proper acknowledgement.

Instructors should outline their expectations that may go beyond the scope of this policy at the beginning of each course and identify such expectations and restrictions in the course syllabus. When an instructor receives evidence, either directly or indirectly, of academic dishonesty, he or she should investigate the instance. The faculty member should then take appropriate disciplinary action.

Disciplinary action may include, but is not limited to the following:

- 1) Requiring the student(s) to repeat the exercise or do additional related exercise(s).
- 2) Lowering the grade or failing the student(s) on the particular exercise(s) involved.
- 3) Lowering the grade or failing the student(s) in the course.

If the disciplinary action results in the awarding of a grade of E in the course, the student(s) may not drop the course.

Faculty reserve the right to invalidate any exercise or other evaluative measures if substantial evidence exists that the integrity of the exercise has been compromised. Faculty also reserve the right to document in the course syllabi further academic honesty policy elements related to the individual disciplines.

A student may appeal the decision of the faculty member with the department chair in writing within five working days. Note: If, at any point in this process, the student alleges that actions have taken place that may be in violation of the Murray State University Non-Discrimination Statement, this process must be suspended and the matter be directed to the Office of Equal Opportunity. Any appeal will be forwarded to the appropriate university committee as determined by the Provost.

**XI. NON-DISCRIMINATION POLICY STATEMENT:**

Murray State University endorses the intent of all federal and state laws created to prohibit discrimination. Murray State University does not discriminate on the basis of race, color, national origin, gender, sexual orientation, religion, age, veteran status, or disability in employment, admissions, or the provision of services and provides, upon request, reasonable accommodation including auxiliary aids and services necessary to afford individuals with disabilities equal access to participate in all programs and activities.

In addition, Murray State University does not discriminate on the basis of sex in its educational programs and activities and is required by Title IX and 34 CFR part 106 not to discriminate in such a manner. The prohibition against sex discrimination specifically includes a prohibition of sexual harassment and sexual violence. This non-discrimination in education programs and activities extends to employment and admissions and to recruitment, financial aid, academic programs, student services, athletics, and housing.

**XII. TECHNOLOGY POLICY:** The use of any unapproved technology in the classroom is strictly prohibited during class. This includes: cell phones, cell phone cameras, recording devices of any kind (audio or video), music players, wearable technology, or any other electronic devices unless being utilized for class activity purposes as directed by the instructor. Computers may be used for note-taking only—if you use the computer for any other purpose you will lose this privilege for the rest of the semester and will not be allowed to bring it to class any longer. If you need to be on the phone or listen to music before class, please remain **OUTSIDE THE CLASSROOM**, until you are finished, and **TURN OFF AND PUT AWAY** the device when you enter.

**NOTE:** The ringing of **cell phones** during class and texting is a problem, and is just as disruptive to your fellow students as coming in late. **PLEASE TURN OFF CELL PHONES WHEN YOU ENTER THE CLASSROOM.** Therefore taking calls or checking texts/Facebook during class is prohibited. If you are expecting an emergency call, please let me know in advance, and you may leave your phone on vibrate without penalty. If it should ring, please take the call outside of the classroom. In addition, if your cell phone rings during class, it will be considered “negative participation” and could affect your participation grade at the end of the semester, especially if it happens more than once.

**Permission to record the lecture must be requested and approved on an individual basis. Prior approval must be obtained. Recordings may be used only for personal study, and may not be shared with anyone. Violation of this policy may result in failure of the course.**

**XIII.** *These course objectives are consistent with the 2014 ASHA Standards for the Certificate of Clinical Competence in Speech-Language Pathology. Student learning outcomes for this course address the following standards related to academic and clinical training for individuals who wish to obtain certification:*

IV-A: The applicant must have demonstrated knowledge of the biological sciences, physical sciences, statistics, and the social/behavioral sciences.

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.

IV-C: The applicant must have demonstrated knowledge of communication and swallowing disorders and differences, including the appropriate etiologies, characteristics, anatomical/physiological, acoustic, psychological, developmental, and linguistic and cultural

correlates in the following areas: articulation, fluency, voice and resonance, including respiration and phonation, receptive and expressive language (phonology, morphology, syntax, semantics, pragmatics, prelinguistic communication and paralinguistic communication) in speaking, listening, reading, writing, hearing, including the impact on speech and language, swallowing (oral, pharyngeal, esophageal, and related functions, including oral function for feeding, orofacial myology), cognitive aspects of communication (attention, memory, sequencing, problem-solving, executive functioning), social aspects of communication (including challenging behavior, ineffective social skills, and lack of communication opportunities), augmentative and alternative communication modalities.

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