### Instructor: Dr. Lesley Oakes, SLPD

### Technical support:
Longwood Univ. Help Desk
help@longwood.edu

### Primary e-mail: oakesla@longwood.edu
### Secondary e-mail: downeast80@gmail.com

To be used in emergencies ONLY!

### Mailing Address:
Longwood University
315 W. Third Street
Farmville, Virginia 23901

### Meeting Location:
Online

### Class Begin: August 22, 2016
### Class Ends: December 2, 2016

### Important Dates:
- Final Add/Drop Date: August 29 by 5:00 PM
- Final Withdrawal Date: October 14 by 5:00 PM

### Office Hours:
Meetings can be scheduled by appointment. Contact the instructor through E-mail.

### PLEASE NOTE: Successful completion of this course or these online courses will not guarantee admission to graduate school. Your performance in these courses will not affect your undergraduate GPA, unless you are enrolled in a bachelor’s program at Longwood University. If you are transferring this course to another university, you should contact that university to understand the impact of your grade(s) on your GPA at that university.

### COURSE DESCRIPTION: This course provides information related to the anatomical structures and neurology of the human communication system and the physiology of related movement. Prerequisite: Biology 101 or consent of the instructor. 3 credits.

Successful completion of the Communication Science and Disorders (CSDS) program prepares students for graduate education in Speech-Language Pathology, Audiology, Deaf Education, Special Education, Public/Community Health, and Medical Sales, as well as for careers in a variety of Human Service fields.

Students who are applying to graduate school in CSD should understand that most graduate programs expect strong performance in all CSD coursework. Therefore, students should work to achieve at least a grade of “B” in CSDS courses. Moreover, students should consider retaking any CSDS course for which they earn a grade lower than a B-.

### REQUIRED MATERIALS:

The textbook may be ordered from a number of online resources. One popular resource is www.amazon.com; note that this site may give options for renting and/or purchasing a new or used copy of this textbook. Please allow at least 10 business days to receive the text if you choose to order.

TECHNOLOGY REQUIREMENTS:

1) All students are required to maintain high speed Internet access. A high speed Internet connection will be necessary to view any video clips linked to course content.

2) Windows Media Player may be necessary in order to view some of the video clips. It is available as a free download from www.microsoft.com

3) Submit assignments and projects as Microsoft Word documents. The accepted formats are: .doc, .docx, .ppt, .pptx, and .pdf. The use of .rtf and .wps is unacceptable.

4) Presentations must be viewed using Microsoft PowerPoint (PPT).

5) All students are required to maintain their personal password(s) in order to access the Internet and/or any files associated with this course. Failure to update passwords and/or the inability to remember a password will not be regarded as “technical difficulties” and as such, will not be accepted as excuses for failure to submit and/or complete assignments by their due date.

6) All course content is available on the Canvas link at http://canvas.longwood.edu You will need to use your Longwood user ID and password in order to gain access to the Canvas website.

COURSE OBJECTIVES AND LEARNING ACTIVITIES (and corresponding Council of Academic Accreditation in Audiology and Speech-Language Pathology Standards.)

<table>
<thead>
<tr>
<th>COURSE OBJECTIVE</th>
<th>ACTIVITY</th>
<th>CAA STANDARD</th>
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<tbody>
<tr>
<td>1. The student will be able to identify and describe the structures and functions of the respiratory, circulatory, nervous, articulatory, laryngeal, swallowing, and hearing systems.</td>
<td>1. Exams, quizzes, laryngeal model, discussion postings, pronunciation task.</td>
<td>Standard III-B. Demonstrate knowledge of basic human communication and swallowing processes, including their biological, neurological, acoustic, psychological, developmental, and linguistic and cultural bases.</td>
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<tr>
<td>2. The student will be able to summarize the neurologic structures and pathways associated with speech production.</td>
<td>2. Exams, quizzes, discussion postings.</td>
<td>Standard III-C. Demonstrate knowledge of the nature of speech, language, hearing, and communication disorders and differences and swallowing disorders, including their etiologies, characteristics, anatomical/physical, acoustic, psychological, developmental,</td>
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</table>
the audiologist and/or speech-language pathologist.

4. The student will be able to describe and summarize the coordination of form and function in the respiratory, articulatory, laryngeal, auditory, and nervous systems for the production of speech.

5. The student will be able to describe the form and function of the oral, nasal, and pharyngeal mechanisms as they relate to the articulation of speech.

| 4. Exams, quizzes, discussion postings, laryngeal model, pronunciation task. |
| 5. Exams, quizzes, discussion postings. |

and linguistic and cultural correlates.

**Standard III-D.** Possess knowledge of the principles and methods of prevention, assessment, and intervention for people with communication and swallowing disorders, including consideration of anatomical/physiological, psychological, developmental, and linguistic and cultural correlates of the disorders.

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**CONTACTING THE INSTRUCTOR:** Email is the best and fastest way to reach me. Every effort will be made to respond to all communications within 48 business hours. Communications that are sent after 12 PM on Friday or on weekends or holidays will be addressed the next business day. Every effort will be made to review and grade assignments within 10 school days. I will be available through the Question and Answer Section in the Discussion area of Canvas. When possible, I will notify students in advance of days when I will not be available.

**CANVAS AND COURSE CONTENT:** Each student is responsible for verifying his/her access to Canvas. All course documents, including PowerPoint (PPT) slides, handouts, and the like, will be posted to Canvas. Announcements will be posted as needed. It is recommended that you use Google Chrome to access Canvas.

**MAKE-UP AND EXTRA CREDIT:** None.

**GRADE DISPUTE:** Grades are EARNED – they are not gifts! If you feel that an assignment or examination was graded in error, then you are required to dispute the grade within 48 hours of receiving the grade. You are to contact the instructor via email, telephone, or in person for grade disputes. The instructor will review and recalculate grades only when a computational error is suspected. You may only request a review of computation. **Beyond the 48 hour time period, no adjustment in grade will be made.**

**LATE WORK:** Students are expected to submit assignments by the designated date. All assignments must be submitted through Canvas. If the links are not functioning within Canvas and the due date/time has not yet expired, email the assignment to me. Work submitted late will be accepted, however **a penalty will be incurred. Ten percent of the total point value of the assignment will be lost for each calendar day beyond the required submission date. No work will be accepted more than 1 week late.**

**ASSIGNMENT DUE DATES:** See the timeline.

**RESPONSIBILITIES OF THE STUDENT:** All students are expected to abide by the Honor Code,
and respect the intellectual property and copyright of others. Students are expected to complete all assignments within the module timeline. Students agree to interact with others in the course in a courteous and professional manner, recognizing the value of others’ opinions, even when they differ from one’s own. Students will recognize that they are part of a larger community of students and that their diligent and regular participation in this course is to the benefit of all students. Failure to treat others with respect and courtesy will result in removal from a group assignment and a grade of “0” for that assignment.

ACCESSIBILITY: If you need to access the information for this course in a different format, please let me know by the end of the first week of class in writing.

HONOR CODE: Students enrolled in this course are expected to abide by the Longwood University Honor Code when completing assignments, quizzes, exams, and interacting with others. This code is an affirmation of personal integrity and an acceptance of personal responsibility. For more information about Longwood’s Honor Code, visit: http://www.longwood.edu/studentconduct/12011.htm

A copy of the academic pledge document may be found here: http://www.longwood.edu/studentconduct/12021.htm

Students will be expected to read and sign a statement of the academic pledge at the beginning of this course. It is understood that this code applies to all works submitted as a part of this course. A copy of the academic pledge document is attached in the Introduction Module. Enter the Introduction Module and click through the links as directed. Susicion of any honor-related violation will be investigated and university policy will be followed.

PLAGIARISM: Any ideas, phrases, sentences, illustrations (including graphs, charts, and the like) and arguments that you present must be your own creative work. All text passages that are taken from another author’s work must be properly cited using APA format. This includes any text that you paraphrase, as well as another’s opinions, data, examples, and illustrations. Work that is quoted verbatim must be cited in APA format, including quotations and page numbers. It is deemed plagiarism if you copy work from an article, textbook or website EVEN IF you change a few words in each sentence. You must cite your source(s) in preparing any written or presented information for this class. You will receive a grade of “0” on any assignment that contains evidence of cheating or plagiarism. Visit the following website to gain a better appreciation of how to quote, paraphrase, cite, and reference http://www.indiana.edu/~wts/pamphlets/plagiarism.shtml

DISABILITY STATEMENT: If you have a disability and require accommodations, please meet with me early in the semester to discuss your learning needs. If you wish to request reasonable accommodations (note taking support, extended time for tests, etc.), you will need to register with the Office of Disability Resources (Graham Hall, 395.2391). The office will require appropriate documentation of disability. All information is kept confidential. You are required to submit the necessary documentation by the end of the first week of class.

RELIGIOUS OBSERVATIONS: The instructor will accommodate adjustments to the schedule due to dates that conflict with a student’s religious observations, if informed in writing by the end of the first week of class.

HELPFUL LINKS:
Disability Resources: http://www.longwood.edu/disability/

Academic & Career Advising Center: http://www.longwood.edu/career/

Writing Center: http://www.longwood.edu/academicsuccess/15878.htm

Academic Success: http://www.longwood.edu/academicsuccess/index.html

IT Help Desk: www.longwood.edu/technology/

FREE (as of 02.24.15) ITUNES APPS: Search for the following:

Human Body Visualization Platform
Visual Anatomy

EVALUATION METHODS:

Four (4) Exams 400 points (100 points each)
One (1) Final Exam 120 points
Seven (7) Quizzes 210 points (30 points each)
Four (4) Discussion Postings / Responses 40 points (10 points each)
Model of the larynx 100 points
Model of the ear 100 points
Apply It: 3 30 points (10 points each)

TOTAL POINTS: 1000 POINTS

GRADING POLICY:

<table>
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<tr>
<th>Points</th>
<th>Grade</th>
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<tbody>
<tr>
<td>930-1000</td>
<td>A</td>
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<tr>
<td>900-929</td>
<td>A-</td>
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<tr>
<td>880-899</td>
<td>B+</td>
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<tr>
<td>830-879</td>
<td>B</td>
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<tr>
<td>800-829</td>
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<td>780-799</td>
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<td>D</td>
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<tr>
<td>600-629</td>
<td>D-</td>
</tr>
<tr>
<td>0-599</td>
<td>F</td>
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</tbody>
</table>

The actual points earned will be used to determine the letter grade equivalency. Point values will not be rounded up or down to assign a grade equivalent. Therefore, if you earn 899 points, your grade will be a B+. If you currently hold a baccalaureate degree, Longwood’s Registrar considers you a graduate student, even though you are taking this undergraduate level course. As a graduate student, you are not permitted to earn a grade of “D.” Therefore, a score of 699 or fewer points will earn a grade of “F.”

EVALUATION METHODS IN DETAIL:

EXAMS: There will be four (4) exams (100 points each) and a final exam (120 points). See the course schedule for exam dates.
**QUIZZES:** There will be seven (7) quizzes worth 30 points each. See the course schedule for quiz dates.

**TAKING QUIZZES & EXAMS ON CANVAS:**

All quizzes and exams will close at 11:00 PM EST on the date that they are due; see the tentative schedule in this syllabus for due dates. You may enter *each* quiz or exam *only once*. That is, once you have started a quiz or exam, you must complete it during that same session.

*There is one exception – the final exam will OPEN on Monday November 28, 2016, at 8:00 AM EST and will CLOSE on Friday December 2, 2016, at 11:00 PM EST.*

All quizzes and exams will become unavailable at 11:00 PM EST on the second date and the opportunity to take the quiz or exam will expire. It is each student’s responsibility to make note of timelines; re-taking of any quiz or exam will not be allowed.

In order to allow yourself the allotted time, you must enter the quiz or exam with enough time to complete it. For example, if you enter a quiz or exam at 10:30 PM EST on the due date, then you will have limited your time to complete it to 30 minutes. Please plan your time accordingly as quizzes and exams will not be reset due to neglect of time.

If difficulty should arise during a quiz or exam, take a screen shot of the difficulty and email me immediately to have the quiz or exam reset. Do not call Longwood IT as they are unable to reset an exam or quiz for you. Failure to comply will result in the quiz or exam not being reset.

**DISCUSSION POSTINGS / RESPONSES:**

You are expected to participate in discussion forums. Posts must be original contributions to the situation posited.

A scoring rubric has been posted on Canvas. This document explains how your grade for this portion of the course will be calculated.

**MODEL OF THE LARYNX: INSTRUCTIONS**

Refer to my PowerPoint within the module for full instructions and examples

You will create a **3D model** of the larynx that includes the following structures:

1. Thyroid cartilage
2. Hyoid bone
3. Cricoid cartilage
4. Arytenoid cartilages
5. Epiglottis
6. Comniculate cartilages
7. Posterior cricoarytenoid muscle
8. Lateral cricoarytenoid muscles
9. Interarytenoid muscles
10. Thyroarytenoid muscles
11. Cricothyroid muscle
12. Vocalis
13. Muscularis
14. Trachea

NARRATIVE: You will also prepare a narrative that will provide a description of the function of each muscle and their innervation. Be sure to include the structures that muscles act on when describing the function of each muscle. For example: When the ____ muscle contracts, it will cause the ______ (structure) to ______ (action) that results in ________ (action).

BUILDING THE MODEL: Be creative. Models can be made from any medium that you choose. Some examples of mediums include: modeling clay; arts and crafts supplies, food items, or any other materials that you can manipulate. If food items are used, they must be manipulated to look like the structures.

TAKE PICTURES: Once you have completed your model, you will need a digital camera to take pictures of your work. The pictures must be uploaded to a PowerPoint presentation. Please be sure to consider the angles of your pictures so that the intended structure can be viewed in its entirety.

This is not a weekend project! It will require time for planning and execution.

Grading: Total: 100 points and will be graded on the following criteria:

- The 3D model includes all structures that are accurately placed and clearly labeled, and that are a reasonable representation of proportion and orientation: **56 points**
  - 14 structures @ 4 points each
- 2) Accurate description of the function of each muscle (including the structures involved and innervation of each muscle): **25 points**
  - 5 muscles @ 5 points each
- The 5 narrative statements are clearly written and are free from grammatical, spelling, and punctuation errors: **5 points**
  - 5 statements @ 1 points each
- Overall presentation: Neatness of presentation & ease of deciphering the model: **14 points**
  - 2 criteria @ 7 points each)

MODEL OF THE EAR: INSTRUCTIONS

Create a **3D model** of the ear which includes the following structures:

- Outer Ear
  - Pinna
  - External Auditory Meatus
  - Tympanic Membrane
- Middle Ear
  - Incus
  - Malleus
  - Stapes
  - Eustachian Tube
- Inner Ear
  - Oval Window
  - Cochlea
  - Basilar Membrane
  - Semicircular Canals
  - Auditory Nerve

**NARRATIVE:** Write a narrative which describes the transmission of sound through the entire ear including the type of energy within each section (e.g. acoustic, mechanical, hydraulic and electrical energy).

**BUILDING THE MODEL:** Be creative. Models can be made from any medium that you choose. Some examples of mediums include: modeling clay; arts and crafts supplies, food items, or any other materials that you can manipulate. If food items are used, they must be manipulated to look like the structures.

**TAKE PICTURES:** Once you have completed your model, you will need a digital camera to take pictures of your work. The pictures must be uploaded to a PowerPoint presentation. Please be sure to consider the angles of your pictures so that the intended structure can be viewed in its entirety.

**Grading: Total: 100 points**
- Includes all structures which are accurately placed and clearly labeled. **60 pts**
  - 12 structures @ 5 points each
- Accurate description of the transmission of sound through the auditory system. **24 pts**
  - 4 modes @ 6 points each
- Overall presentation: Quality of work, neatness of presentation, and ease of deciphering model. **16 pts**
  - 2 factors @ 4 points each
  - Ease of deciphering @ 8 points
COURSE SCHEDULE

The course content will be organized into eight (8) modules:

**MODULE 1**: Introduction to Anatomy and Physiology: Anatomical terms, Surface markings, Tissues and joints, Muscles

**MODULE 2**: Respiration Anatomy and Physiology: Gas laws, respiratory volumes and capacities, Respiratory framework, Respiratory muscles, Respiration for speech

**MODULE 3**: Phonation Anatomy and Physiology: Laryngeal framework, Laryngeal membranes and cavities, Laryngeal muscles, Phonatory mechanisms

**MODULE 4**: Articulation and Resonance Anatomy and Physiology: Cavities of the vocal tract, Bones of the craniofacial skeleton, Articulatory muscles (Mastication only)

**MODULE 5**: Articulation and Resonance Anatomy and Physiology II: Articulatory muscles (Velopharyngeal mechanism, Facial expression, Tongue muscles)

**MODULE 6**: Hearing Anatomy and Physiology: Hearing anatomy, Hearing physiology

**MODULE 7**: Nervous System Anatomy and Physiology: Neuro Anatomy & Physiology, Cranial Nerves

**MODULE 8**: Embryology (Re: Development of speech and hearing systems)

**SPECIAL NOTE ABOUT MODULES**: Modules 7 and 8 are to be completed within the same time frame.
<table>
<thead>
<tr>
<th>MODULE</th>
<th>DATE</th>
<th>READING</th>
<th>ASSIGNMENTS</th>
<th>ASSESSMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Module 1: Introduction to A &amp; P</td>
<td>08-22-16 To 09-03-16</td>
<td>Ch. 1 – 3</td>
<td>Assurance Statement Discussion #1 Due 09-03-16</td>
<td>Quiz #1 DUE: 09-03-16 11:00 PM EST</td>
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<tr>
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<td>Quiz #1 Available 08-22-16 Due 09-03-16</td>
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<td>Apply It! #1 Due 09-03-16</td>
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<tr>
<td>Module 2: Respiration</td>
<td>09-05-16 To 09-17-16</td>
<td>Ch. 6 – 7</td>
<td>Quiz #2 Available 09-05-16 Due 09-17-16</td>
<td>Quiz #2 DUE: 09-17-16 11:00 PM EST</td>
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<td>Discussion #2: Due 09-17-16</td>
<td>Exam #1 DUE: 09-17-16 11:00 PM EST</td>
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<tr>
<td>Module 3: Phonation</td>
<td>09-19-16 To 09-30-16</td>
<td>Ch. 8 – 9</td>
<td>Quiz #3 Available:09-19-16 Due: 09-30-16</td>
<td>Quiz #3 DUE: 09-30-16 11:00 PM EST</td>
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<td>Apply It #2 Due: 09-30-16</td>
<td>Laryngeal Model DUE: 09-30-16</td>
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<td>Discussion #3: Due: 09-30-16</td>
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<tr>
<td>Module 4: Articulation &amp; Resonance</td>
<td>10-03-16 To 10-15-16</td>
<td>Ch. 10 – 11</td>
<td>Quiz #4 Available: 10-03-16 Due: 10-15-16</td>
<td>Quiz #4 DUE: 10-15-16 11:00 PM EST</td>
</tr>
</tbody>
</table>
| Module 5: Articulation Resonance (continued) | 10-17-16 To 10-29-16 | CH. 10 – 11 | Quiz #5
Available: 10-17-19 Due: 10-29-16
Exam #2
Available: 10-17-19 Due: 10-29-16 |
| Quiz #5 DUE: 10-29-16 11:00 PM EST |
| Module 6: Hearing | 10-31-16 To 11-12-16 | Ch. 12 – 13 | Quiz #6
Available: 10-31-16 Due: 11-12-16
Exam #3
Available: 10-31-16 Due: 11-12-16
Apply It #3
Available: 10-31-16 Due: 11-12-16 |
| Quiz #6 DUE: 11-12-16 11:00 PM EST Exam #3 DUE: 11-12-16 11:00 PM EST |
| Module 7: Nervous System | 11-14-16 To 11-26-16 | Ch. 4 – 5 & Supplemental materials (PPT) | Quiz #7
Available:11-14-16 Due: 11-26-16
Exam #4
Available:11-14-16 Due: 11-26-16
Discussion #4:
Available:11-14-16 Due: 11-26-16 |
| Quiz #7 DUE:11-26-16 11:00 PM EST Exam #4 DUE:11-26-16 11:00 PM EST |
| Module 8: Embryology | | | |
| | | | |
| | | | |
| | | | |
| Model of the Larynx | Due: 09-30-16 11:00 PM EST | Model of the Ear | Due:11-12-16 11:00 PM EST |

**Final Exam:** Available 11-28-16 and Due 12-02-16 by 11:00 p.m. EST.
TIPS FOR SUCCESS:

Students who are successful in this course:

- Devote a block of time each day to course work. Expect to spend approximately 15 hours + per week on this course.
- Enter Canvas frequently to work on course modules and to check announcements.
- Create a personal timetable or calendar for how / when to complete content and assignments.
- Complete all assigned readings.
- Make use of additional activities such as consulting additional anatomy resources, such as other textbooks.
- Complete assignments according to directions and submit by the due dates.
- Interact frequently with other members of the learning community via the discussion board.
- Email the instructor with problems and concerns sooner rather than later.

THIS COURSE IS CONTENT INTENSIVE: Plan to spend at least 20 hours per week on course work. Devote a block of time each day for review. This time may include reading class notes, reviewing anatomy books, and consulting online web resources. Given the volume and nature of material that we will cover in this course, many students have found daily review of notes taken during the course to be critical for success in this course.

ORGANIZATION: Organization is a necessity. Organize your notes and any items of interest related to anatomy and physiology in a binder. In addition, you should mark the due dates of your assignments and exams on a calendar or smartphone.