SLHS 321: Anatomy and Physiology of Speech
Fall 2016

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TA Office Hours: Tuesday and Thursday, 12:45pm-1:45pm
Office Hours: M 1-3pm and W 1-3pm. Please sign up for a 15 min. timeslot online at least 24 hours in advance of your appointment (use the QR code, or the link can be found under “Faculty” on Blackboard). If you cannot meet with me at these times, please email me to set up an appointment. You will need a Google account to sign up; please make sure your time zone is set to Pacific Time.

Prerequisites: SLHS 106 (credit or concurrent registration). Psychology 260 recommended.
Course Format: This course is a 4-unit course, comprised of 3 hours of lecture plus lab each week.
Lecture Location: HT 140
Lecture Times: Mondays and Wednesdays 3:30 – 4:45pm
Labs: Labs will be completed online.
Course Website: http://blackboard.sdsu.edu/

Course Description and Objectives:
This course will cover the basic anatomy and physiology of the speech mechanism for human communication. At the end of the course, students will be able to identify and describe the basic anatomical and physiological information concerning the respiratory, laryngeal, resonatory, and articulatory subsystems as they pertain to speech production.

At the end of the semester, given examinations and in-class and take-home assignments, the student will be able to demonstrate the following competencies:

Outcomes and Competencies
This course meets the following outcomes and standards:

SDSU Student Outcomes Assessment Program (SOAP) Outcomes:
Undergraduate Outcomes: 1A, 1B, 2A, 2B
At the end of the semester, given class discussions, projects, presentations and exams, the student will be able to

- demonstrate knowledge of the anatomy and physiology of the speech mechanism, and the principles of biological and physical sciences of the production of speech
- demonstrate knowledge of the nature of speech disorders including etiologies, characteristics, and anatomical and physiological correlates.

**Speech-Language Pathology Knowledge and Skills (KASA – ASHA/CAA) Standards:**

**III-A:** The applicant must have prerequisite knowledge of the biological sciences, physical sciences, mathematics, and the social/behavioral sciences.
The student will be able to demonstrate knowledge of the anatomy, physiology, and neurology of the speech mechanism, and the principles of biological and physical sciences of the production of speech and language.

**III-B:** The applicant must demonstrate knowledge of basic human communication and swallowing processes, including their biological, neurological, acoustic, psychological, developmental, and linguistic and cultural bases.
The student will be able to analyze, synthesize, and evaluate the neurological, psychological, and linguistic bases of communication; describe and differentiate the various types of aphasia related to etiology, characteristics, and anatomical, physiological, psychological and linguistic correlates of receptive and expressive language disorder. This includes phonology, morphology, syntax, semantics, and pragmatics in speaking, listening, reading, and writing modalities.

**III-C:** The applicant must demonstrate knowledge of the nature of speech, language, hearing, and communication disorders and differences and swallowing disorders, including the etiologies, characteristics, anatomical/physiological, acoustic, psychological, developmental, and linguistic and cultural correlates.
The student will be able to analyze and evaluate the anatomical and physiological bases of articulation, voice and resonance, including respiration and phonation, receptive and expressive language (phonology, morphology, syntax, semantics, and pragmatics) in speaking, listening, reading, writing, and manual modalities, swallowing (oral, pharyngeal, esophageal, and related functions).

**California Commission on Teaching Credentialing (CTC) Standards:**

**General Program Standards**
5: Assessment of Students
6: Using Educational and Assistive Technology

**Speech-Language Pathology Standards**
1: Speech, Language, Hearing, and Swallowing Mechanisms
3: Speech, Language, Hearing, and Swallowing Disorders
4: Assessment of Speech and Language Disorders
5: Management of Speech and Language Disorders SLHS 321
Students with Disabilities: Americans with Disabilities Act (ADA) Accommodation:
If you are a student with a disability and believe you will need accommodations for this class, it is your responsibility to contact Student Disability Services at (619) 594-6473. To avoid any delay in the receipt of your accommodations, you should contact Student Disability Services as soon as possible. Please note that accommodations are not retroactive, and that accommodations based upon disability cannot be provided until you have presented your instructor with an accommodation letter from Student Disability Services. Your cooperation is appreciated.

Religious Observances:
The University’s policy on absence for religious observances is as follows: “By the end of the second week of classes, students should notify the instructors of affected courses of planned absences for religious observances. Instructors shall reasonably accommodate students who notify them in advance of planned absences for religious observances.”

Commitment to Diversity and Inclusion:
The University is committed to cultivating “...a campus climate that promotes human dignity, civility, and mutual appreciation for the uniqueness of each member of our community...Freedom from discrimination, harassment, and violence against persons or property is a basic right and is requisite for learning. Freedom of speech shall be protected. By the same token, the campus community shall denounce and confront acts of intolerance, abusive behaviors, and the beliefs and past events that have separated us as a people.”

Academic Honesty:
Students are expected to maintain the highest standards of academic honesty and respect. According to SDSU’s Center for Student Rights and Responsibilities, students may be expelled, suspended, or put on probation for academic dishonesty.
Per SDSU’s STANDARDS FOR STUDENT CONDUCT, examples of academic dishonesty include cheating that is intended to gain unfair academic advantage; plagiarism that is intended to gain unfair academic advantage; furnishing false information to a University official, faculty member, or campus office; forgery, alteration, or misuse of a University document, key, or identification instrument; misrepresenting oneself to be an authorized agent of the University or one of its auxiliaries; encouraging, permitting, or assisting another to do any act that could subject him or her to discipline.
Examples of cheating include unauthorized sharing of answers during an exam, use of unauthorized notes or study materials during an exam, altering an exam and resubmitting it for re-grading, having another student take an exam for you or submit assignments in your name, participating in unauthorized collaboration on coursework to be graded, providing false data for a research paper, or creating/citing false or fictitious references for a term paper. Submitting the same paper for multiple classes may also be considered cheating if not authorized by the instructors involved.
Examples of plagiarism include any attempt to take credit for work that is not your own, such as using direct quotes from an author without using quotation marks or indentation in a paper, paraphrasing work that is not your own without giving credit to the original source of the idea, or failing to properly cite all sources in the body of your work.
Please be advised that even the mere appearance of these behaviors falls within the definition of dishonesty. California State University Executive Order 969 mandates faculty reporting of all incidents of academic misconduct.

**Required Materials:**


i>clicker2 OR REEF account

**General Policies:**

1. **Classroom Behavior:** Please show respect to your instructors and your classmates. Cell phones are a distraction to those around you, even on “vibrate”. Please **TURN OFF** or **SILENCE** your phone before class or labs start. Text-messaging is also distracting and students are asked **NOT** to text-message during class or labs. Students seen text-messaging will be asked to leave class.

2. **Online Behavior:** You will need access to the internet and web browser to be able to access the class Blackboard site and to complete the labs. Labs will be comprised of online lectures and assignments in Blackboard. In addition, students may make use of the Blackboard discussion forums to post and answer questions. Please make sure to complete your Personal Information in Blackboard. It is helpful to also upload a profile picture as part of your personal information so that your classmates and I can learn your name. When posting in Blackboard, please make sure to observe general “netiquette” conventions, including not using all caps and using respectful language.

3. **Tests:** Students will need to bring a ParScore form for each exam. Students will be asked to turn off cell phones and leave their bags at the front of the class for each test. **If you do not put your RedID on your exam and properly bubble it in on your ParScore form, your exam will not be graded and you will receive a zero.** Furthermore, if I cannot read your handwriting, the answer will be considered an “error”.

4. **Labs:** Labs are typically posted online via Blackboard on Wed. evenings and are **due the following Monday at noon.** Labs should be completed independently.

5. **Attendance and Class Participation:** Class meetings will be mixture of lecture, discussion, and lab work. Regular attendance and class participation will be expected from all students and will be an important factor in determining borderline grades for this course.

6. **Make-ups/Incompletes:** There will be NO opportunities available for make-ups or incompletes except in emergencies as determined by the instructor or in special circumstances, **with arrangements made in ADVANCE with the instructor. All approved make-ups will be written during the final exam week.**
7. Clickers: You are required to purchase an i>clicker2 remote or use REEF mobile (formerly i>clickerGo) for in-class participation. This semester in this class, you have the option of using either the i>clicker2 handheld remote or REEF mobile. REEF enables you to vote via a web-enabled device such as a laptop or app on your iOS device (Android currently not available). i>clicker2 is a handheld remote which you must purchase and bring to class every day. The SDSU Bookstore offers discounts for both REEF and i>clicker2. If you already have an i>clicker2 remote, you can use it in this class. Active i>clickerGO accounts have transitioned to REEF. i>clicker will be used every day in class. You are responsible for registering and bringing your device every day.

[Note: Not all faculty allow mobile use. Don’t buy REEF until you are sure you can use it. Get the two week FREE trial to make sure this works for you before buying an activation code.]

To receive participation credit in the course:

a. i>clicker2 remote: register your remote on any of your SDSU courses by going to Tools => i>clicker Registration => Enter your remoteID which is on the back of the remote => Submit. MAKE SURE YOU SEE A REGISTRATION DATE or your clicker might not be registered.

Once registered, your i>clicker2 remote can be used in all classes that require i>clicker and should not need to be re-registered.

b. REEF: Use the FREE two-week trial before purchasing to make sure REEF works in your classroom. You can purchase activation codes from the SDSU Bookstore. Go to https://www1.iclicker.com/ or download the iOS app from your app store. Create an account. Your REDID is your StudentID. Register your activation code on the Blackboard site the once you purchase it (Tools => i>clicker Registration => Enter your activation ID).

c. If you have more questions about i>clicker or REEF, check http://support.reef-education.com/ or http://support.iclicker.com/ first. If you do not find an answer there, contact the Student Computing Center at 619-594-3189 or scc@rohan.sdsu.edu

d. You will be graded on your in-class participation. In order to receive scores, you need to register your i>clicker2 remote on your SDSU Blackboard course NOT the i>clicker company site. i>clicker2 will be used every day in class. You are responsible for bringing your remote daily. It is recommended that you also have a spare set of batteries (i>clicker2) or an alternate power source for your mobile device (i<clicker GO).

e. There are 25 scheduled class meetings, not including in-class tests, starting on Aug. 29; only your top 22 scores will count. Therefore you can “miss” answering i>clicker questions (e.g., absences, equipment malfunction, dead battery) on up
to 3 class meetings without losing any points. I am not qualified to provide technical support on i>clickers and cannot change points after class has ended. If you cannot respond to i>clicker questions with your i>clicker during a class, this will count as a missed class. Clicking for other students who are not in class is considered academic dishonesty.

8. Please check with me first if you want to record lectures. If you record lectures, you agree that you will only use it for your own personal use and will not distribute (e.g., email, post on-line, etc.) the recordings in any way.

**Grading**

A = 93-100%; A- = 90-92.5%
B+ = 87-89.5%; B = 83-86.5%; B- = 80-82.5%
C+ = 77-79.5%; C = 73-76.5%; C- = 70-72.5%
D+ = 67-69.5%; D = 63-66.5%; D- = 60-62.5%
F = 0-59.5%

Grading will be evaluated on the following:

1. Labs (15% or 45 pts): Labs will be conducted primarily online, though some activities may take place during lectures. Labs will typically be comprised of an online lecture and an online assignment. Labs for a given week will be made available after class on Wednesdays and must be completed by 12 noon on the following Monday.

2. Class Participation (5% or 15 pts): Class participation will be calculated on Clicker participation on 20 days during the semester.

3. Tests (20% or 60 pts each; 60% total): Three non-cumulative tests will be administered at the beginning of class on the days indicated on the class schedule (see below). Questions may include true/false, multiple choice, matching, and/or short-answer.

4. Final Exam (20% or 60 pts): Questions may include true/false, multiple choice, matching, and short-answer.

**Course Schedule**

All readings from your required textbook unless otherwise. Recommended readings will be announced in class and/or posted on Blackboard.

<table>
<thead>
<tr>
<th>Week of:</th>
<th>Class Meeting 1 (Mon)</th>
<th>Class Meeting 2 (Wed)</th>
<th>Labs</th>
<th>Readings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aug. 29</td>
<td>Intro</td>
<td>Speech, Lang, Communication</td>
<td></td>
<td>Ch. 1</td>
</tr>
<tr>
<td>Sept. 5</td>
<td><strong>No Class (Labor Day)</strong></td>
<td>Respiration Anatomy</td>
<td>Terminology</td>
<td>Ch. 2</td>
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<tr>
<td>Sept. 12</td>
<td>Respiration Anatomy</td>
<td>Respiration Physiology</td>
<td>Respiratory</td>
<td>Ch. 2</td>
</tr>
<tr>
<td>Sept. 19</td>
<td>Respiration Physiology</td>
<td>Respiration Disorders/Review</td>
<td>Respiratory</td>
<td>Ch. 2</td>
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<td>Sept. 26</td>
<td><strong>Respiration Test</strong></td>
<td>Laryngeal Anatomy</td>
<td></td>
<td>Ch. 3</td>
</tr>
<tr>
<td>Date</td>
<td>Topic</td>
<td>Topic</td>
<td>Topic</td>
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<tr>
<td>Oct. 3</td>
<td>Laryngeal Anatomy</td>
<td>Laryngeal Physiology</td>
<td>Laryngeal</td>
<td>Ch. 3</td>
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<tr>
<td>Oct. 10</td>
<td>Laryngeal Physiology</td>
<td>Laryngeal Disorders</td>
<td>Laryngeal</td>
<td>Ch. 3</td>
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<td>Oct. 17</td>
<td>Laryngeal Review</td>
<td>Laryngeal Test</td>
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<td>Oct. 24</td>
<td>VP Anatomy</td>
<td>VP Physiology</td>
<td></td>
<td>Ch. 4</td>
</tr>
<tr>
<td>Oct. 31</td>
<td>VP Disorders / Oral Artic</td>
<td>Oral Artic Anatomy / Physiology</td>
<td>VP</td>
<td>Ch. 5</td>
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<td>Nov. 7</td>
<td>Oral Artic Phys / Disorders</td>
<td>OA/VP Review</td>
<td>VP/Oral Artic</td>
<td>Ch. 5</td>
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<td>Nov. 14</td>
<td>OA/VP Test</td>
<td>Speech Acoustics</td>
<td>Acoustics</td>
<td>Ch. 8, 9, 10 Ch. 7</td>
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<td>Nov. 21</td>
<td>Speech Acoustics</td>
<td>No Class (Thanksgiving Break)</td>
<td>Acoustics</td>
<td>Ch. 8, 9, 10 Ch. 7</td>
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<td>Nov. 28</td>
<td>Speech Acoustics</td>
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<td>Acoustics</td>
<td>Ch. 8, 9, 10 Ch. 7</td>
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<td>Dec. 5</td>
<td>Speech Acoustics</td>
<td>Swallowing</td>
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<td>Ch. 13</td>
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<td>Dec. 12</td>
<td>Swallowing</td>
<td>Review</td>
<td></td>
<td>Ch. 13</td>
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<td>Dec. 19</td>
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Dec. 21 1:00 pm

FINAL EXAM