

State University of New York, College at Cortland
Department of Communication Disorders and Sciences

SHH 281-501: Speech Science

COURSE SYLLABUS

Course information

Prerequisites: none
Credit hours: 3
Semester/year: Spring 2011
Location: PSB 1176
Time: TR 2:50-4:05 p.m.

Professor information

Name: Irena Vincent, Ph.D., CCC-SLP
Office: 2203 Professional Studies Building
E-mail: irena.vincent@cortland.edu
Phone: (607) 753-2536
Office hours: Tue 8:30-9:45 a.m., Wed 9:00-10:30 a.m.
(and by appointment)

COURSE DESCRIPTION

Anatomy and physiology of the speech mechanism and nervous system; an overview of the acoustics and the acoustic nature of speech. (3 cr. hr.)

COURSE OBJECTIVES

1. Be familiar with the anatomy and physiology of the central and peripheral nervous systems (CF: Knowledge Base; NCATE: Standards 1, 2)
2. Be familiar with the structure and mechanics of the respiratory system as well as conditions that affect speech breathing (CF: Knowledge Base; NCATE: Standards 1, 2)
3. be familiar with the anatomy and physiology of the speech mechanism including the phonatory system and articulatory system (CF: Knowledge Base; NCATE: Standards 1, 2)
4. Be able to describe dimensions of sound (i.e., frequency, period, intensity, amplitude, simple and complex sound) and appreciate the concept of resonance (CF: Knowledge Base; NCATE: Standards 1,2)
5. Develop a basic understanding as to the acoustic properties of speech (CF: Knowledge Base; NCATE: Standards 1, 2)

This knowledge should help you understand how various anatomical systems operate together in the production of speech, which is essential for the later study of speech and voice disorders in various clinical populations. (CF: Knowledge Base, Assessment, Diversity; NCATE: Standards 1, 2, 11, 12)

Legend: CF – SUNY Cortland NCATE Conceptual Framework; NCATE – National Council for Accreditation of Teacher Education

REQUIRED TEXT

Kent, R. D. (1997). *The Speech Sciences*. San Diego, CA: Singular Publishing Group, Inc..

Additional texts used for this course

Perkins, W. H., & Kent, R. D. (1986). *Functional Anatomy of Speech, Language, and Hearing: A Primer*. Boston: Allyn and Bacon.

Zemlin, W. R. (1997). *Speech and Hearing Science: Anatomy and Physiology (4th Ed.)*. Boston: Allyn & Bacon.

STUDY UNITS

(Each study unit has an accompanying PowerPoint handout available for downloading and printing on MyRedDragon.)

1. Introduction
2. Anatomical orientation
3. Nervous system
4. Muscular system
5. Respiratory system
6. Phonatory system
7. Articulatory system (7a. Physiological phonetics)
8. Speech acoustics

EVALUATION OF STUDENT PERFORMANCE

Exam 1	20%
Exam 2	20%
Final (cumulative)	35%
In-class activities	5%
Notebook	20%

• Exams

There will be three exams: Exam 1 (20%), Exam 2 (20%), Final (35%). The final exam is cumulative in content.

Make-up exam

If a student is unable to take an exam at the scheduled time, a make-up examination will be allowed, but only with written verification of a legitimate excuse (**a medical certificate signed by a certified medical doctor or a documented family emergency are acceptable excuses for missing an examination**). The instructor should be notified in advance of the absence in order for the student to be eligible for a make-up exam and he/she must be able to provide verification of the legitimacy of the absence. When the student has permission to reschedule, the instructor will schedule it at a time agreeable to both individuals.

• In-class activities

There will be five in-class activities (each worth 1%, therefore contributing to 5% of the total grade). These are unannounced and they are completed randomly throughout the semester. **Please note that there are no make-ups for in-class activities.**

• Anatomy and Physiology Notebook (due 4/21/11, 2:50 p.m.)

The anatomy and physiology notebook should contain four separate sections: the nervous system, the respiratory system, the phonatory system, and the articulatory system. Each section needs to include a clear illustration of the anatomical structures discussed in class and a short description of each structure's anatomy and physiology. Please use the provided grading sheet as a guide when working on your notebook. Grading will be based on the following: content (e.g., are all systems and their structures included, and is the way you organized them clear and easy to follow) and accuracy (e.g., are your illustrations and descriptions clear and accurate). **Notebooks will be accepted at any point in time up to, but not after the due date. Handwritten notebooks will receive a 20-point deduction.**

The final grade will be based on the combined exam, in-class activity, and notebook scores; office-hour meetings are encouraged, but they do not count towards your final grade.

Grade range

A+ = 97.0 and above	B = 83.0 to 86.9	C- = 70.0 to 72.9	E = 59.9 and below
A = 93.0 to 96.9	B- = 80.0 to 82.9	D+ = 67.0 to 69.9	
A- = 90.0 to 92.9	C+ = 77.0 to 79.9	D = 63.0 to 66.9	
B+ = 87.0 to 89.9	C = 73.0 to 76.9	D- = 60.0 to 62.9	

SPEECH SCIENCE WORKBOOK

Please use the *Speech Science Workbook* to test your knowledge and monitor your learning progress. Your instructor has created the *Workbook* by compiling quizzes and exams given during previously taught Speech Science classes; by using the it you will become familiar with the types of questions you will be asked on your exams. The *Workbook* is available for downloading and printing on myRedDragon.

CLASS ATTENDANCE POLICY

The instructor will not take attendance. However, examinations are based on lecture notes and class exercises, so students are strongly encouraged to attend all class sessions. It is the student's responsibility to obtain notes in the event of an absence. Students are also responsible for learning about any announcements made by the instructor during class. Please note that office hours are designed to address specific questions any student may have about the material presented.

CELL PHONE POLICY

There is a zero tolerance policy for texting in class. Cell phones may be left on vibrate for emergency notification purposes. If you expect an important phone call, please inform me before class and quietly excuse yourself when you receive it. For every instance of texting that the instructor observes during lecture, 3% will be deducted from the final grade.

OFFICE HOURS POLICY

Please prepare for a meeting with your instructor by bringing the following:

- Slide printouts with your notes
- Your textbook
- List of questions for which you were unable to find answers in your textbook/slides/notes

DISABILITY STATEMENT

SUNY Cortland is committed to upholding and maintaining all aspects of the federal Americans with Disabilities Act of 1990 (ADA) and Section 504 of the Rehabilitation Act of 1973. If you are a student with a disability and wish to request accommodations, please contact the Student Disability Services Office located in B-1 Van Hoesen Hall or call (607) 753-2066 for an appointment. Any information regarding your disability will remain confidential and will only be divulged with your written verification. Because many accommodations require early planning, requests for accommodations should be made as early as possible.

ACADEMIC INTEGRITY STATEMENT

Students in this course are expected to abide by the guidelines on academic dishonesty that are found in chapter 340 of the SUNY Cortland College Handbook (<http://www.cortland.edu/president/handbook.pdf>). As stated in these guidelines, any instance of plagiarism, cheating on examinations or other forms of academic dishonesty will be punished by the receipt of a failing grade for this course and possible dismissal from the College.

MY GRADE

	Date/time	Score	% out of total grade
EXAM 1	2/24/11 2:50-4:05 p.m.		/ 20%
EXAM 2	3/31/11 2:50-4:05 p.m.		/ 20%
FINAL	5/18/11 1:00-3:10 p.m.		/ 35%
NOTEBOOK	4/21/11 2:50 p.m.		/ 20%
IN-CLASS ACTIVITY			
1			/ 1%
2			/ 1%
3			/ 1%
4			/ 1%
5			/ 1%
TOTAL SCORE			/ 100%
Text messaging deduction			
GRADE			

TENTATIVE WEEKLY SCHEDULE

<p>January 24 – January 28</p> <ol style="list-style-type: none"> 1. Introduction to the course 2. Anatomical orientation 3. Nervous system <p>January 31 – February 4 February 7 – February 11</p> <ol style="list-style-type: none"> 3. Nervous system <p>February 14 – February 18</p> <ol style="list-style-type: none"> 4. Muscular system 5. Respiratory system 	<p>Chapter 3 (pp. 47-50) Chapter 7 (pp. 233-240)</p> <p>Chapter 7 (pp. 241-268, 271-276, 279-293)</p> <p>Chapter 3 (pp. 53-58)</p>
<p>February 24: EXAM 1 (covers: 1. Introduction, 2. Anatomical orientation, 3. Nervous system, 4. Muscular system)</p>	
<p>February 21 – February 25 February 28 – March 4</p> <ol style="list-style-type: none"> 5. Respiratory system <p>March 7 – March 11 March 21 – March 25</p> <ol style="list-style-type: none"> 6. Phonatory system <p>March 28 – April 1</p> <ol style="list-style-type: none"> 7. Articulatory system 	<p>Chapter 4 (pp. 71-100)</p> <p>Chapter 4 (pp. 100-134)</p> <p>Chapter 5 (pp. 141-145)</p>
<p>March 31: EXAM 2 (covers: 5. Respiratory system, 6. Phonatory system)</p>	
<p>April 4 – April 8</p> <ol style="list-style-type: none"> 7. Articulatory system <p>April 11 – April 15 April 18 – April 22</p> <ol style="list-style-type: none"> 7a. Physiological phonetics <p>April 25 – April 29 May 2 – May 6 May 9 – May 13</p> <ol style="list-style-type: none"> 8. Speech acoustics 	<p>Chapter 5 (pp. 168-195)</p> <p>Chapter 3 (pp. 60-68)</p> <p>Chapter 2 (pp. 26-35) Chapter 9 (pp. 329-360)</p>
<p>Wednesday, May 18 (1:00 – 3:00 p.m.): FINAL EXAM (scheduled by Registrar)</p>	

March 14 - March 18:
Spring break (no classes)

Tuesday, April 21:
Notebook due