**CALIFORNIA STATE UNIVERSITY, SAN MARCOS**

**SCHOOL OF EDUCATION, Spring 2013**

**EDUC 496-2: Hearing Disorders and Measurement**

**University Hall 442**

### Instructor: Cathy Constantine, Au.D. Office Hours: by appointment

### E-Mail: cconstan@csusm.edu Class Times: Thursdays, 2:30 pm to 5:15pm

### SCHOOL OF EDUCATION MISSION STATEMENT:

The mission of the School of Education Community is to collaboratively transform public education by preparing thoughtful educators and advancing professional practices. We are committed to diversity, educational equity, and social justice, exemplified through reflective teaching, life-long learning, innovative research and on-going service. Our practices demonstrate a commitment to student-centered education, diversity, collaboration, professionalism, and shared governance. *(Adopted by COE Governance Community, October, 1997).*

## COURSE DESCRIPTION:

## In this course, students will review the anatomy of the auditory and vestibular systems and explore peripheral and central disorders which can affect hearing and balance. Students will classify disorders of hearing by etiology, location within the auditory systems, and effect on communication. Students will investigate the current assessments available to evaluate hearing and balance and the results provided by the assessments. Upon completion of the course, students should be able to:

1. Identify and describe normal anatomy and disorders of the auditory/vestibular systems and

classify them by etiology;

2. Describe the evaluations available to assess hearing and balance disorders and the results

obtained;

3. Describe the effects of specific disorders on communication.

#### GENERAL CONSIDERATIONS:

#### Writing

#### In keeping with the All-University Writing Requirement, all 3 unit courses must have a writing component of at least 2,500 words (approximately 10 pages) which can be administered in a variety of ways.

**Appeals**

Every student has the right to appeal grades or appeal for redress of grievances incurred in the context of any course. Disputes may be resolved informally with the professor or through the formal appeal process.

**Ability**

Every student has the right to equitable educational consideration and appropriate accommodation. Students having differing ability (mobility, sight, hearing, documented learning challenges, first language/English as a second language) are requested to contact the professor at the earliest opportunity. Every effort will be made to accommodate special needs. Students are reminded of the availability of Disabled Student Services, the Writing Center, technology assistance in the computer labs, and other student support services available as part of reasonable accommodation for special needs students.

**Students with Disabilities Requiring Reasonable Accommodations:**

Students are approved for services through the Disabled Student Services Office (DSS). This office is located in Craven Hall 4300, and can be contacted by phone at (760) 750-4905 or TTY (760) 750-4909. Students authorized by DSS to receive reasonable accommodations should meet with their instructor during office hours or in order to ensure confidentiality in a more private setting.

**School of Education Attendance Policy**

Due to the dynamic and interactive nature of courses in the School of Education, all students are expected to attend all classes and participate actively. At a minimum, students must attend more than 80% of class time, or s/he may not receive a passing grade for the course at the discretion of the instructor. Individual instructors may adopt more stringent attendance requirements. Should the student have extenuating circumstances, s/he should contact the instructor as soon as possible. *(Adopted by the COE Governance Community, December, 1997).*

*Additional Attendance Information:*Attendance will not be taken; however, students are expected to attend every class. There will be unannounced quizzes. For this reason, it is in your best interest to attend every class. The following exceptions are the ONLY EXCUSABLE ABSENCES THAT WILL PROVIDE YOU WITH THE OPPORTUNITY FOR A MAKE-UP:. 1) Death in the family; 2) Hospitalization or illness that is accompanied by a doctor’s note; 3) holidays or special events observed by organized religions for those students who show affiliation with that particular religion. **Please consider this policy carefully.**

**CSUSM Academic Honesty Policy**

“Students will be expected to adhere to standards of academic honesty and integrity, as outlined in the Student Academic Honesty Policy. All written work and oral presentation assignments must be original work. All ideas/materials that are borrowed from other sources must have appropriate references to the original sources. Any quoted material should give credit to the source and be punctuated with quotation marks.

Students are responsible for honest completion of their work including examinations. There will be no tolerance for infractions. If you believe there has been an infraction by someone in the class, please bring it to the instructor’s attention. The instructor reserves the right to discipline any student for academic dishonesty in accordance with the general rules and regulations of the university. Disciplinary action may include the lowering of grades and/or the assignment of a failing grade for an exam, assignment, or the class as a whole.”

Incidents of Academic Dishonesty will be reported to the Dean of Students. Sanctions at the University level may include suspension or expulsion from the University.

**Plagiarism**

As an educator, I expect that each student will do his/her own work and contribute equally to group projects and processes. Plagiarism or cheating is unacceptable under any circumstances. If you are in doubt about whether your work is paraphrased or plagiarized see the Plagiarism Prevention for Students website <http://library.csusm.edu/plagiarism/index.html>. If there are questions about academic honesty, please consult the University catalog.

## REQUIRED TEXT:

Peterson, M. and Bell, T. (2008). *Foundations of Audiology: A practical approach.* Upper Saddle, NJ: Pearson Education.

## GRADING STANDARDS:

*Assignments and Exams:*

2 Tests (SLO 1, SLO 2) 15 points each, total: 30

1 Cumulative Exam (SLO 1, 2, 3) 20 points total: 20

5 Quizzes (4 highest grades will be recorded) 5 points each total: 20

(SLO 1, 2, 3)

1 Hearing loss simulation report (SLO 3) 10 points total: 10

1 Observation and report (SLO 2) 20 points total: 20

 **TOTAL: 100**

## *Grading Scale in percentage of final points:*

A = 93 and above A- = 90.00-92.99

B+ = 88.00-89.99 B = 83-87.99 B- = 80-82.99

C+ = 78.00-79.99 C = 73-77.99 C- = 70-72.99

D+ = 68.00-69.99 D = 63-67.99 D- = 60-62.99

F = 59.99 and below

*Grading Emphasis*: Each written assignment will be graded approximately 80% on content (detail, logic, synthesis of information, depth of analysis, etc.) and 20% on mechanics (grammar, syntax, spelling, format, uniformity of citation, etc.).

*Late Work:* Assignments received after the specified time and date deadline will not be accepted.

## COURSE REQUIREMENTS:

*Quizzes:* You will take 5 unannounced, in-class quizzes that will be based on the textbook, power-points, lectures, and in-class discussions. The 4 highest grades will be recorded.

*Tests and Exams:* You will have 2 equally weighted tests and 1 final exam which is comprehensive in nature requiring you to integrate all information covered during the semester.

*Hearing Loss Experience:* You will be required to purchase a pair of earplugs (less than $5 at any major pharmacy), wear them in a social setting (not sitting alone in your living room) for a minimum of 1 hour as a hearing loss simulation, and write a 2-3 page paper reporting your observations and reactions about communicating in a social setting with hearing loss. You may choose to tell the people around you what you are doing if you prefer. Please take precautions to be safe and use common sense in choosing your location.

*Observation in an Audiology Clinic:* You will also be required to complete a 2 hour observation of audiological testing at a community facility and prepare a 3-4 page written report about your observation. Your instructor will provide guidelines for you to follow at the audiology clinic. The audiologist at the clinic ***must*** stamp the attached form with their clinic stamp ***and*** sign the paper with his/her name and credentials. This will be turned in to your instructor, along with your written report, no later than class time on May 2, 2013.

**COURSE SCHEDULE:** *ASSIGNMENTS ARE TO BE COMPLETED FOR THE DATE SPECIFIED*

*(This schedule is tentative and may change in response to class demands)*

### Week One, January 24:

 **Topics:** Introduction to Course

 Audiology as a Profession

**Read:** Chapter One, *Foundations of Audiology* (SLO 1, 2, 3)

 **Week Two, January 31:**

**Topic:** Measurement of Sound

**Read:** Chapter Two, *Foundations of Audiology* (SLO 1, 2)

**Week Three, February 7:**

**Topic:** Anatomy and Physiology of Hearing & Balance

**Read:** Chapter Three, *Foundations of Audiology* (SLO 1, 2)

###  Week Four, February 14:

**Topic:**  Disorders of the Ear

**Read:** Chapter Four, *Foundations of Audiology* (SLO 1)

 **Week Five, February 21:**

**Topics:** Central Disorders

Balance Testing & Disorders

**Read:** Study for Test (SLO 1)

[www.vestibular.org](http://www.vestibular.org)

 [www.thedizzylounge.com](http://www.thedizzylounge.com)

 Balance Testing from *Audiology Diagnosis* pdf posted online

**Week Six, February 28** *– FIRST TEST, CLASS WILL CONTINUE AFTER THE TEST*

 **Topics:** Characteristics of Hearing Loss

**Read:** Chapter Five, *Foundations of Audiology* (SLO 2, 3)

**Week Seven, March 7**

**Topics:** Audiometric Screening

 Pure Tone Testing

 Speech Testing

**Read:** Chapter Six, *Foundations of Audiology* (SLO 2)

###  Week Eight, March 14

 **Topic:** Electrophysiological Assessment

 Interpretation of Results

**Read:** Chapter Seven, *Foundations of Audiology* (SLO 2)

 **Week Nine, March 21 – Bring earplugs to class**

**Topic:** Interpretation of Results (continued)

 **Hands-On practice with audiometers**

**Read:** Review materials before test next week (SLO 1)

**Week Ten, March 28 -** *SECOND TEST, CLASS WILL CONTINUE AFTER TEST*

**Topic:** Pediatric Assessment

**Read:** Chapter Eight, *Foundations of Audiology* (SLO 3)

 **Week Eleven, April 4** NO CLASS – SPRING BREAK!

**Week Twelve, April 11: Hearing Loss Simulation Report Due**

**Topic:** Pediatric Assessment (continued)

 Assessment of Special Populations

 Psychological Impact of Hearing Loss

**Read:** Chapter Nine, *Foundations of Audiology* (SLO 3)

 Welcome to Holland Poem: <http://www.our-kids.org/Archives/Holland.html>

###  Week Thirteen, April 18

 **Topic:** Management of Hearing Loss

Amplification

 Noise Conservation

**Read:** Chapter Ten, *Foundations of Audiology* (SLO 3)

Websites:

1. <http://www.consumerreports.org/health/healthy-living/home-medical-supplies/hearing/hearing-aids/overview/hearing-aids-ov.htm>
2. <http://www.consumerreports.org/health/healthy-living/home-medical-supplies/hearing/hearing-aids/which-type-is-best-for-you/hearing-aids-which-type.htm>
3. <http://www.consumerreports.org/health/healthy-living/home-medical-supplies/hearing/hearing-aids/be-a-smart-buyer/hearing-aids-be-a-smart-buyer.htm>
4. <http://www.consumerreports.org/health/healthy-living/home-medical-supplies/hearing/hearing-aids/a-shopping-summary/hearing-aids-shopping-summary.htm>
5. <http://www.consumerreports.org/health/healthy-living/home-medical-supplies/hearing/hearing-aids/paying-for-your-hearing-aids/hearing-aids-how-to-buy.htm>

Visit at least two manufacturer websites and review the hearing aids:

[www.hearing.siemens.com](http://www.hearing.siemens.com)

 [www.oticonusa.com](http://www.oticonusa.com)

 [www.phonak.com](http://www.phonak.com)

 [www.starkey.com](http://www.starkey.com)

 [www.unitron.com](http://www.unitron.com)

 [www.widex.com](http://www.widex.com)

 **Week Fourteen, April 25: Guest Lecturer, Joan Hewitt, Au.D.**

**Topic:** Cochlear Implants

**Read:** Websites (SLO 3)

1. <http://www.nidcd.nih.gov/health/hearing/pages/coch.aspx>
2. <http://www.fda.gov/MedicalDevices/ProductsandMedicalProcedures/ImplantsandProsthetics/CochlearImplants/default.htm>
3. [www.advancedbionics.com](http://www.advancedbionics.com)
4. [www.cochlear.com](http://www.cochlear.com)
5. [www.medel.com](http://www.medel.com)
6. <http://audismfreeamerica.blogspot.com/2009/06/nads-1991-position-statement-on.html>
7. <http://www.nad.org/issues/technology/assistive-listening/cochlear-implants>
8. <http://www.cochlearamericas.com/PDFs/bilateral_white_paper.pdf>

### Week Fifteen, May 2: Observation report due

###  Topic: (Central) Auditory Processing Disorders

**Read:** CAPD Testing in Children from *Audiology Diagnosis* pdf online (SLO 3)

CAPD Testing in Adults from *Audiology Diagnosis* pdf online

Websites:

1. <http://www.asha.org/public/hearing/disorders/understand-apd-child.htm>
2. <http://www.tsbvi.edu/seehear/spring00/centralauditory.htm>
3. <http://www.ncld.org/ld-basics/related-issues/information-processing/auditory-processing-disorders-in-detail> (read posts, too)
4. <http://www.bsnpta.org/geeklog/public_html/filemgmt/filemgmt_data/files/Auditory_Processing_Disorders_in_Children.pdf>
5. <http://www.ncapd.org/Home_Page.html> (All topics/tabs)

**Week Sixteen, May 9:**

**Topic:** Aural (Re)Habilitation

Management of Special Populations

 **Read:** Websites (SLO 3)

1. <http://nc.agbell.org/page.aspx?pid=360> (read links ***below*** article)
2. <http://www.lsl.usu.edu/files/Eriks-outcomes-therapy.pdf>
3. <http://cochlearimplantonline.com/site/parent-participation-in-auditory-verbal-therapy/>
4. <http://www.asha.org/public/speech/disorders/AAC/> (read all ***blue*** links)
5. <http://www.asha.org/publications/leader/2010/101102/about-baby-signing.htm>

**Week Seventeen, May 16:** *FINAL EXAM*