University of Florida College of Public Health & Health Professions Syllabus SPA 6311 Medical Audiology (3 hours) Section 1G65 Spring Semester 2023 Delivery Format: On-Campus

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PURPOSE AND OUTCOME

Course Overview

This course explores the role of audiologist in medical contexts and the most common disorders encountered there. Practical information about etiology, audiometric findings of these disorders, as well as appropriate referral and management will be discussed. The class also explores the collaboration between audiologists and medical professionals.

Relation to Program Outcomes

The content of this course is designed to help you meet the following CCC-A Standard IV: Knowledge and Skills Outcomes and will be assessed through the assignments and exams.

A1. Genetics, embryology and development of the auditory and vestibular systems, anatomy and physiology, neuroanatomy and neurophysiology, and pathophysiology of hearing and balance over the life span

A2. Effects of pathogens, and pharmacologic and teratogenic agents, on the auditory and vestibular systems

A3. Language and speech characteristics and their development for individuals with normal and impaired hearing across the life span

A4. Principles, methods, and applications of acoustics, psychoacoustics, and speech perception, with a focus on how each is impacted by hearing impairment throughout the life span

A6. Standard safety precautions and cleaning/disinfection of equipment in accordance with facility-specific policies and manufacturers 'instructions to control for infectious/contagious diseases

A7. Applications and limitations of specific audiologic assessments and interventions in the context of overall client/patient management

A18. The role, scope of practice, and responsibilities of audiologists and other related professionals

B2. Establishing relationships with professionals and community groups to promote hearing wellness for all individuals across the life span

C1. Gathering, reviewing, and evaluating information from referral sources to facilitate assessment, planning, and identification of potential etiologic factors

C2. Obtaining a case history and client/patient narrative

C3. Obtaining client/patient-reported and/or caregiver-reported measures to assess function

C4. Identifying, describing, and differentiating among disorders of the peripheral and central auditory systems and the vestibular system

C5. Providing assessments of tinnitus severity and its impact of patient's activities of daily living and quality of life

C6. Providing assessment of tolerance problems to determine the presence of hyperacusis

C7. Selecting, performing, and interpreting a complete immittance test battery based on patient need and other findings; tests to be considered include single probe tone tympanometry or multifrequency and multicomponent protocols, ipsilateral and contralateral acoustic reflex threshold measurements, acoustic reflex decay measurements, and Eustachian tube function C8. Selecting, performing, and interpreting developmentally appropriate behavioral pure-tone air and bone tests, including extended frequency range when indicated

C9. Selecting, performing, and interpreting developmentally appropriate behavioral speech audiometry procedures to determine speech awareness threshold (SAT), speech recognition threshold (SRT), and word recognition scores (WRSs); obtaining a performance intensity function with standardized speech materials, when indicated

C10. Evaluating basic audiologic findings and client/patient needs to determine differential diagnosis and additional procedures to be used

C11. Selecting, performing, and interpreting physiologic and electrophysiologic test procedures, including electrocochleography, auditory brainstem response with frequency- specific air and bone conduction threshold testing, and click stimuli for neural diagnostic purposes

C12. Selecting, performing, and interpreting otoacoustic emissions testing

C13. Selecting, performing, and interpreting tests for nonorganic hearing loss

C14. Selecting, performing, and interpreting vestibular testing, including electronystagmography (ENG)/videonystagmography (VNG), ocular vestibular-evoked myogenic potential (oVEMP), and cervical vestibular evoked myogenic potential (cVEMP)

Instructional Methods

This is an on-campus, in person course. Students will be exposed to, and learn from, various methods including lectures, readings, course assignments, quizzes, student presentations and exams. Students will need internet access and will find resources for this course via Canvas.

Course Materials and Technology Required Textbook

Musiek, F. Disorders of the Auditory System. San Diego: CA. Plural Publishing, 2012.

Other required readings will be articles listed for the class and will be accessible online via Canvas.

For technical support for this class, please contact the UF Help Desk at:

- <u>learning-support@ufl.edu</u>
- (352) 392-HELP select option 2
- <u>https://lss.at.ufl.edu/help.shtml</u>

Course Objectives

Students completing this course will:

1) conduct a focused case history with the goal of correctly identifying and/or clarifying the patient's otologic problem and/or identify from a provided case history relevant details and missing information.

2) identify the areas of audiologic practice most subject to error, the audiologic errors of gravest importance, and practices which should be undertaken to prevent these errors.

3) compare the prevalence of hearing disorders in children versus adults and detail the complications of hearing disorders for each population.

4) identify the potential signs and symptoms that a person would experience based on a stated lesion or disorder of the hearing mechanism.

5) differentially diagnose disease-related causes of hearing impairment based on signs and symptoms reported in a case history.

6) demonstrate how an audiologist can assess genetic factors that may play a role in hearing loss, while taking a case history.

7) differentially diagnose drug-related causes of hearing impairment based on signs and symptoms reported in a case history.

Quiz and Exam Taking Policy

Exams will be given on the indicated date outlined in the schedule. Exams are closed book and will be administered and proctored by the course instructor. The final exam will be cumulative. Unless prior arrangements are made, make-up exams will not be permitted. Only students with excused absences (see <u>UF Handbook</u>) or who have made prior arrangements will be allowed to make-up the exam.

Quizzes will be completed via Canvas PRIOR to class for the assigned date (see schedule). As quizzes are designed to facilitate student understanding of key topics, students are to complete the readings and quiz prior to the start of class. Quizzes can be completed open book but must be completed **independently**. Students will have one (1) week to complete the exam (i.e., end of class until the next start of class one week later). As students have sufficient time to complete the open-book quiz, a missed quiz will not be made-up and will earn a grade of "0" unless students meet the excused absence policy as outlined in the UF Handbook. Course instructor needs to be notified of the missed quiz PRIOR to the start of class.

Course Schedule

Date	Торіс	Instructor	Assigned Readings (due date)	Assignments and Assessments (due date)	
01/11 (week 1)	Course Overview: Syllabus and Course Assignments			-register for G Paul Moore Symposium - select topic	
01/18 (week 2)	Hereditary and Congenital Hearing Loss	HR	Review Anatomy Chapter 2 (Musiek) Chapter 9 (Musiek)	QUIZ 1: Hereditary and Congenital Hearing Loss	
01/25 (week 3)	Medical Terminology Audiologic, Vestibular, and Radiologic Procedures	HR	-see canvas page - Chapter 3 (Musiek)		
02/01 (week 4)	Attend G-Paul Moore Symposium in lieu of class	(No class – attend symposium)		-Synopsis of Symposium (#3 & 4) -first project draft submission	
02/08 (week 5)	Outer Ear Disorders	HR	Chapter 4 (Musiek) Pages 115-122	QUIZ 2: Outer Ear Disorders	
02/15 (week 6)	Ear Canal Examination and Cerumen Management Case Analysis	HR	Readings in Canvas Module		
02/22 (week 7)	Middle Ear Disorders	HR	Chapter 4 (Musiek) Pages 122-179	QUIZ 3: Middle Ear Disorders	
02/29 Happy Leap Day! (week 8)	- Inner Ear Disorders - Review for Exam	HR	Chapter 5 (Musiek)	QUIZ 4: Inner Ear Disorders -2 nd draft submission	

Date	Торіс	Instructor	Assigned Readings (due date)	Assignments and Assessments (due date)
03/07 (week 9)	MIDTERM EXAM	(HR @ BSIGC) EG to Proctor		MIDTERM EXAM
03/14 (week 10)	SPRING BREAK [3/9-16/2024]			
03/21 (week 11)	-Review Exam -Auditory Nerve, Ototoxicity, TMJ -5 Student Presentations	HR	Chapter 6 (Musiek)	ALL PP slides due (regardless of presentation date)
03/28 (week 12)	-Adult and Pediatric Vestibular Disorders -5 Student Presentations	Emily Gaines		
04/04 (week 13)	-NO in person meeting; Class period allotted for finalizing binders	(CAPCSD 4/3-6)		BINDERS DUE by 11:59 pm
04/11 (week 14)	-Central Vestibular Disorders Auditory Hallucinations -Review for final exam		Chapters 7 and 8 (Musiek)	
04/18 (week 15)	FINAL EXAM (includes student presentations)	(AAA 4/17-20)		FINAL EXAM

* Instructors reserve the right to modify the schedule to best facilitate student learning and for unforeseen circumstances. Additional reading may be added to Canvas at any time to supplement learning.

COURSE ASSIGNMENTS

Students are expected to complete assigned activities via Canvas (unless indicated otherwise) by the due date (see schedule and/or Canvas). Late assignments will be accepted with a penalty of 10% grade reduction each day, up to three days post-due date. Any submission after three days will not be accepted, and the grade will convert to "0". In general, no make-up work is allowed; however, individual circumstances will be considered if a UF policy for an excused absence is met.

Hearing Disorders Project. At the beginning of the semester, each student will select one hearing disorder on which to complete a research/literature review. The student will research the disorder and present the information in a presentation format (see course calendar for dates). All

PP presentations will be submitted on the same day (see Schedule/Canvas for details) via Canvas. Students will also create a 1-page study guide for classmates on the selected topic. See Canvas Assignments for more details.

Medical Audiology Resource Binder. As a culminating project, students will a create a resource guide specific to the topics of this class. Originally submitted in a 3-ring binder, students will now submit the cumulation of details in PowerPoint via Canvas. This guide will serve as a resource in future clinical practice, studying for your praxis exam, and assist you in studying for the course. Your "binder" should be well organized for ease of reading and studying. Your binders should include information on 3-4 pathologies for each of the five categories of hearing loss. PowerPoint slides will be submitted via Canvas. See more details on the assignment in Canvas.

Requirement	Date	% of final grade		
Hearing Disorders Project	slides due – 3/21 presentation – varies	20%		
Resource Binder/Notebook	04/04 (end of day, 11:59 pm)	20%		
Midterm Exam	03/09	25%		
Quizzes	Varies; see Schedule and/or Canvas	10%		
Final Exam Cumulative	04/18	25%		

ACADEMIC REQUIREMENTS AND GRADING

UF Audiology Program Grading Scale

Letter Grade	Α	A-	B+	В	B-	C+	С	D+	D	D-	E
Percentage	93- 100	90- 92.9	87- 89.9	83- 86.9	80- 82.9	77- 79.9	70- 76.9	67- 69.9	63- 66.9	60- 62.9	<60
Grade Points	4.0	3.67	3.33	3.0	2.67	2.33	2.0	1.33	1.0	0.67	0.0

For detail on the meaning of letter grades and university policies related to them, see the Registrar's Grade Policy regulations at: <u>http://gradcatalog.ufl.edu/content.php?catoid=8&navoid=149</u>

Policy Related to Make up Exams or Other Work

In general make-up exams will not be given. If you have an extenuating circumstance, please contact the instructors in advance when possible or as soon as possible afterwards (within 48 hours) of an emergency to discuss if the absence qualifies for an excused absence and to set make-up dates as needed. You may not be given the same exam as the class for any approved makeup exams.

Policy Related to Required Class Attendance

Attendance is expected. Personal issues with respect to class attendance or fulfillment of course requirements will be handled on an individual basis. It is the student's responsibility to inform the instructors of a missed class and to re-schedule make-up activities if offered. Students are still responsible for topics and content covered during the missed class. Physician notes or other documentation will be required to make up exams.

Inclusive Learning Environment

Public health and health professions are based on the belief in human dignity and on respect for the individual. As we share our personal beliefs inside or outside of the classroom, it is always with the understanding that we value and respect diversity of background, experience, and opinion, where every individual feels valued. We believe in, and promote, openness and tolerance of differences in ethnicity and culture, and we respect differing personal, spiritual, religious and political values. We further believe that celebrating such diversity enriches the quality of the educational experiences we provide our students and enhances our own personal and professional relationships. We embrace The University of Florida's Non-Discrimination Policy, which reads, "The University shall actively promote equal opportunity policies and practices conforming to laws against discrimination. The University is committed to non-discrimination with respect to race, creed, color, religion, age, disability, sex, sexual orientation, gender identity and expression, marital status, national origin, political opinions or affiliations, genetic information and veteran status as protected under the Vietnam Era Veterans' Readjustment Assistance Act." If you have questions or concerns about your rights and responsibilities for inclusive learning environment, please see your instructor or refer to the Office of Multicultural & Diversity Affairs website: <u>www.multicultural.ufl.edu</u>

The UF Audiology Program, as well as this instructor, work to provide a safe and respectful environment in which students can learn independently as well as cooperatively. Furthermore, ASHA and AAA Ethics require us to always interact with our patients and each other in professional manners. It is possible to have differing opinions or beliefs *yet* interact in a respectful manner towards your patients and/or colleagues. Therefore, it is the expectation of the instructor that you will facilitate a positive learning environment during class. Students that deliberately and specifically make the learning environment toxic, either by word, action, attitude, or behavior may be asked to leave the class, earn a grade of "zero" for that day's activity, and/or be referred to the Dean of Students for harassment.

STUDENT EXPECTATIONS, ROLES, AND OPPORTUNITIES FOR INPUT

Professionalism

Students are training for a professional career. As such, students are expected to demonstrate professionalism. Professionalism includes, but is not limited to, attending class, arriving early, submitting work by due date/time, participation in class discussions, courteous interactions with faculty and fellow students, respect for presenters, professional appearance, etc.

Expectations Regarding Course Behavior

You are expected to attend each class and, once in class, you are expected to participate. Your questions, comments, and observations make the class lively and interesting and are an intrinsic aspect of professionalism.

Communication Guideline

Your participation in classroom discussions is essential to this course. Group discussion related to assigned readings and weekly lecture topics will be an integral part of the class meeting time and full participation is expected. Laptops may be used for note taking in class; laptop use during class for reasons outside of the course is distracting and will not be permitted.

Academic Integrity

Students are expected to act in accordance with the University of Florida policy on academic integrity. As a student at the University of Florida, you have committed yourself to uphold the Honor Code, which includes the following pledge:

"We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity."

You are expected to exhibit behavior consistent with this commitment to the UF academic community, and on all work submitted for credit at the University of Florida, the following pledge is either required or implied:

"On my honor, I have neither given nor received unauthorized aid in doing this assignment." It is your individual responsibility to know and comply with all university policies and procedures regarding academic integrity and the Student Honor Code. Violations of the Honor Code at the University of Florida will not be tolerated. Violations will be reported to the Dean of Students Office for consideration of disciplinary action. For additional information regarding Academic Integrity, please see Student Conduct and Honor Code or the Graduate Student Website for additional details: https://www.dso.ufl.edu/sccr/process/student-conducthonor-code/ http://gradschool.ufl.edu/students/introduction.html

Please remember cheating, lying, misrepresentation, or plagiarism in any form is unacceptable and inexcusable behavior.

Online Faculty Course Evaluation Process

Students are expected to provide feedback on the quality of instruction in this course by completing online evaluations at https://evaluations.ufl.edu.

Evaluations are typically open during the last two or three weeks of the semester, but students will be given specific times when they are open. Summary results of these assessments are available to students at https://evaluations.ufl.edu/results/

SUPPORT SERVICES

Accommodations for Students with Disabilities

If you require classroom accommodation because of a disability, you must register with the Dean of Students Office http://www.dso.ufl.edu within the first week of class. The Dean of Students Office will provide documentation of accommodations to you, which you must then give to me as the instructor of the course to receive accommodations. Please make sure you provide this letter to me by the end of the second week of the course. The College is committed to providing reasonable accommodations to assist students in their coursework.

Counseling and Student Health

Students sometimes experience stress from academic expectations and/or personal and interpersonal issues that may interfere with their academic performance. If you find yourself facing issues that have the potential to or are already negatively affecting your coursework, you are encouraged to talk with an instructor and/or seek help through University resources available to you.

- The Counseling and Wellness Center 352-392-1575 offers a variety of support services such as psychological assessment and intervention and assistance for math and test anxiety. Visit their web site for more information: http://www.counseling.ufl.edu . On line and in person assistance is available.
- You Matter We Care website: http://www.umatter.ufl.edu/ . If you are feeling overwhelmed or stressed, you can reach out for help through the You Matter We Care website, which is staffed by Dean of Students and Counseling Center personnel.
- The Student Health Care Center at Shands is a satellite clinic of the main Student Health Care Center located on Fletcher Drive on campus. Student Health at Shands offers a variety of clinical services. The clinic is located on the second floor of the Dental Tower in the Health Science Center. For more information, contact the clinic at 392-0627 or check out the web site at: https://shcc.ufl.edu/
- Crisis intervention is always available 24/7 from: Alachua County Crisis Center: (352) 264-6789 http://www.alachuacounty.us/DEPTS/CSS/CRISISCENTER/Pages/CrisisCenter.aspx

Do not wait until you reach a crisis to come in and talk with us. We have helped many students through stressful situations impacting their academic performance. You are not alone so do not be afraid to ask for assistance.