



College of Public Health & Health Professions Syllabus
SPA 6581 Auditory Bases of Language and Literacy (3hours)
Section Spring Semester 2020
Delivery Format: On-Campus

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Office Hours: Monday 1:00 to 5:00 or by appointment

When: Thursdays 8:30 to 11:30 AM
Where: HPNP 301

PURPOSE AND OUTCOME Course Overview

This course is designed to enrich the knowledge of professional students in both the Doctorate of Audiology program and the Masters of Speech-Language Pathology program regarding auditory functions that underlie the acquisition and processing of spoken and written language. It will inform students regarding the development of the peripheral and central auditory pathways, and foster knowledge regarding how to work with individuals across the lifespan who have communication disorders related to dysfunctions of the auditory system, with an emphasis on children who have hearing loss or disorders/diseases of the auditory system that interfere with the acquisition of language or literacy.

Relation to Program Outcomes

The content of this course is designed to help you meet the following **CCC-SLP** Standard IV: Knowledge and Skills Outcomes.

Standard IV-A

The applicant must have demonstrated knowledge of the biological sciences, physical sciences, statistics, and the social/behavioral sciences.

Standard IV-B

The applicant must have demonstrated knowledge of basic human communication and swallowing processes, including the appropriate biological, neurological, acoustic, psychological, developmental, and linguistic and cultural bases. The applicant must have demonstrated the ability to integrate information pertaining to normal and abnormal human development across the life span.

Standard IV-C

The applicant must have demonstrated knowledge of communication and swallowing disorders and differences, including the appropriate etiologies, characteristics, anatomical/physiological, acoustic, psychological, developmental, and linguistic and cultural correlates in the following areas: articulation; fluency; voice and resonance, including respiration and phonation; receptive and expressive language (phonology, morphology, syntax, semantics, pragmatics, prelinguistic communication, and paralinguistic communication) in speaking, listening, reading, writing; hearing

(including the impact on speech and language); swallowing (oral, pharyngeal, esophageal, and related functions, including oral function for feeding, orofacial myology); cognitive aspects of communication (attention, memory, sequencing, problem solving, executive functioning); social aspects of communication (including challenging behavior, ineffective social skills, and lack of communication opportunities); and augmentative and alternative communication modalities.

The content of this course is designed to help you meet the following **CCC-A** Standard IV: Knowledge and Skills Outcomes.

Standard IV-A: Foundations of Practice

IV-a4. Normal development of speech and language

IV-a5. Language and speech characteristics and their development across the life span

IV-a6. Phonologic, morphologic, syntactic, and pragmatic aspects of human communication associated with hearing impairment

IV-a7. Effects of hearing loss on communication and educational, vocational, social, and psychological functioning

IV-a9. Patient characteristics (e.g., age, demographics, cultural and linguistic diversity, medical history and status, cognitive status, and physical and sensory abilities) and how they relate to clinical services

IV-a16. Effects of cultural diversity and family systems on professional practice

IV-a29. Consultation with professionals in related and/or allied service areas

Standard IV-D: Intervention (Treatment)

IV-D1. The provision of intervention services (treatment) to individuals with hearing loss, balance disorders, and other auditory dysfunction that compromises receptive and expressive communication

IV-D2. Development of a culturally appropriate, audiologic rehabilitative management plan that includes, when appropriate, the following:

- Counseling relating to psychosocial aspects of hearing loss and other auditory dysfunction, and processes to enhance communication competence
- Provision of comprehensive audiologic treatment for persons with hearing loss or other auditory dysfunction, including but not exclusive to communication strategies, auditory training, speech reading, and visual communication systems

Standard IV-F: Education/Research/Administration

IV-F2. Applying research findings in the provision of patient care (evidence-based practice)

Course Objectives:

At the end of this course, students will be able to:

- apply knowledge concerning the embryology and related disturbances of the auditory system to diagnosis and treatment of children presenting with auditory, language, or literacy problems
- evaluate and apply age appropriate assessment procedures for auditory functioning
- evaluate hearing loss in terms of types and degree to understand how those factors should affect choice of auditory device or prosthesis
- collaborate with interdisciplinary colleagues and advocate for patients exhibiting a full range of auditory dysfunction

- integrate information regarding age-related declines in hearing status into treatment of older patients
- assess and develop treatment plans for children with literacy challenges that incorporate accommodations or remediation involving auditory functioning

Instructional Method: Lectures, group discussions, and student projects

DESCRIPTION OF COURSE CONTENT

Required Textbook:

Readings will be assigned in conjunctions with a topic one or more weeks in advance of the related presentation. Students are responsible for completing those readings.

Week	Date	Topic(s)
1	1/14	INTRODUCTION AND GROUP ASSIGNMENTS Surprise Introduction Review of syllabus and course requirements Establish groups; begin team building (what makes a good team member); setting of goals for the team Assignment: 1. Watch assigned pre-recorded lecture; discuss as group, as necessary to ensure understanding of all members; 2. Read assigned article: Ambrose et al. (2012)
2	1/21	REVIEW OF SOUND Review of sound, its propagation, measurements Discuss assigned article Assignment: 1. Watch assigned pre-recorded lecture; 2. Prepare a 3 page review of the article discussed
3	1/28	REVIEW OF THE AUDITORY SYSTEM Review of the auditory system (GUEST SPEAKER: Nancy Schaeffer, library resources) DUE: Paper review Assignment: 1. Select topic for paper. 2. Once approved, begin selecting published articles for paper and making outline
4	2/4	G Paul Moore symposium or Speech Acoustics Activity; attend one or the other and write a one-page review of the activity Due: Selected topic for paper and one-page review of day's activity Assignment: 1. Study for first quiz; 2. Begin working on paper
5	2/11	REVIEW OF SPEECH PERCEPTION Quiz 1 on sound and the auditory system Categorical perception for speech; review speech acoustics Group activity Assignment: 1. Watch pre-recorded lecture; 2. Begin working on research paper
6	2/18	DEVELOPMENT OF SPEECH PERCEPTION Speech perception development Assignment: 1. Complete research paper
7	2/25	SCREENING AND REFERRAL Newborn hearing screening; working through EHDI; early intervention; coaching parents; how to do screenings Group activity: Select project topic Due: Individual paper Assignment: 1. Begin work on group presentation; 2. Study for quiz

8	3/4	<p>PRESCHOOL INTERVENTIONS</p> <p>Quiz 2 on speech acoustics, categorical perception, and speech perception development</p> <p>Preschool intervention; aural rehabilitation for children</p> <p>(GUEST SPEAKER: Cynthia Robinson, early intervention for deaf children)</p> <p>Assignment: 1. Continue work on group presentation 2. Watch prerecorded lecture</p>
9	3/11	<p>SCHOOL-AGE INTERVENTIONS</p> <p>Six principles for working with school-age children with HL</p> <p>Assignment: 1. Continue work on group presentation; 2. Read assigned article: Sussman</p>
10	3/18	<p>SUPRATHRESHOLD AUDITORY FUNCTIONS</p> <p>Auditory scene analysis; suprathreshold auditory functions; perceptual organization; development of these skills</p> <p>Assignment: Continue work on group presentation</p>
11	3/25	<p>AUDITORY BASES OF READING</p> <p>Reading: Why is it different from other language skills; theories regarding auditory bases of literacy disorders; treatment</p> <p>Assignment: 1. Continue work on group presentation; 2. Study for in-class exam</p>
12	4/1	<p>In class exam</p> <p>Assignment: 1. Continue work on group presentation; 2. Read assigned article: Gordon-Salant</p>
13	4/8	<p>DECLINES OF HEARING AND LANGUAGE WITH OLDER AGE</p> <p>Working with older adults: problems of aging auditory systems; diagnoses; aural rehabilitation with older adults with hearing loss</p> <p>Assignment: Complete group presentations</p>
14	4/15	<p>Presentations</p>

ACADEMIC REQUIREMENTS AND GRADING

Assignments

A total of 1000 points is possible in this course. These points will be credited over the following assignments.

1. Quizzes: The student is responsible for reading any materials assigned before the associated class happens. Two quizzes on assigned readings and in-class material from the previous weeks will be given, and results will contribute **250 points** to your final grade. The first quiz will count for 125 points, and the second quiz will count for 125 points.

These quizzes will consist of tests of basic concepts.

2. A review of the assigned paper will be due January 28th. This will be worth **100 points** towards the student's final grade.
3. A one-page reflection on a presentation by a speaker at the G Paul Moore symposium or the class instruction of Dr. Joanna Lowenstein is due by the end of the day on February 6th. This will be worth **50 points**.
4. A paper on a topic of the student's choice is due on February 25th. It should include at least five primary sources; sources strictly online will not be permitted. All references must be documented in American Psychological Association (APA) scientific style. This paper will count for **200 points** towards the student's final grade. Some potential topics are below:

1. Prenatal infections or prematurity
 2. Peri-natal risks for hearing loss
 3. Fetal Alcohol Syndrome
 4. Hyperbilirubinemia
 5. Auditory neuropathy/dyssynchrony spectrum disorder
 6. Connexin 26 and the resulting hearing loss
 7. Ototoxic medication in infants and children
 8. Treacher Collins Syndrome
 9. Down Syndrome (Trisomy 21)
 10. Bacterial Meningitis and Toxoplasmosis
 11. Pendred Syndrome/Enlarged vestibular aqueducts
 12. Waardenberg Syndrome
 13. Usher Syndrome
 14. Auditory problems that may underlie dyslexia: history and current evidence
 15. Chronic otitis media with effusion
 16. Auditory electrophysiology in diagnostic testing, including newborn hearing screening
 17. History of services for deaf children, including sign language
 18. Hearing aids and their use with children or the elderly; possible benefits of different types of hearing aids; signal processing or noise reduction
 19. Cochlear implants in children or in adults: history, effects on language development or in adults; use with progressive hearing loss; signal processing of the devices, including history
 20. Evidence for "early is better:" How true is it?
 21. History of oral/aural approaches in the United States: How effective are they?
 22. Reading in deaf children
 23. Fastforward or other auditory training methods for children with normal thresholds or hearing loss
 24. Quality of Life questionnaires
 25. The relationship between age-related hearing loss and cognitive decline
5. Group project: These projects will count for **200 points** of your grade, and all students in the group will receive the same grade. Students will work in groups of five to develop a project on a topic of their choosing. These projects should be professional in presentation and in-depth in content. Possible presentation styles could involve a documentary on a particular auditory disorder; how it affects individuals; an in-depth case study; history of a particular disorder or intervention method, such as cochlear implants or reading disorder. The group can explore research in a specific area, visiting a lab and interviewing the head of the lab, but it must be a lab that explores how auditory functioning affects other aspects of wellbeing. Total presentation time should be 10 minutes. Projects will be graded both on content and presentation. Heavily annotated slides should be submitted.
6. Exam: An exam will be given in a class session near the end of the semester. It will consist of essay questions related to the topics covered all semester. This will consist of short essay questions. This will count for **200 points** of your grade.

Thus, grades will consist of:

Quizzes: 250 points

Article review: 100 points

Reflection piece: 50 points

Individual paper: 200 points

Group project: 200 points

Last exam: 200 points

Extra credit: Up to 20 points can be received through “extra credit” activities. The extra activities that can be included are listed below. This extra credit activity must be communicated to the instructor in advance, and approved to ensure agreement on what will be done. The activity must be completed and documentation must be received by April 8th to receive credit.

- Participate in a community screening day, testing hearing if you are on the SLP track and testing language if you are on the AuD track. Write a 2-page summary of your experience.
- Select a test instrument, and administer it to three children or three elderly people. This can be an auditory/listening battery if you are a SLP or a language measure if you are on the AuD track. Write a 2 page summary of your experience.
- Participate in a research project in hearing for two hours of testing, and interview the investigator. Write a 2 page summary of the experience and what the research is about.

Grading

Letter Grade	A	A-	B+	B	B-	C+	C	C-	D+	D	D-	F
Percentage	93-100%	90-92%	87-89%	83-86%	80-82%	77-79%	73-76%	70-72%	67-69%	63-66%	60-62%	<60%
Grade points	4.0	3.67	3.33	3.0	2.67	2.33	2.0	1.67	1.33	1.0	0.67	0.0

Grades of *WF*, *I*, *NG*, and *S-U* each correspond with 0.0 grade points. For greater detail on the meaning of letter grades and university policies related to them, see the Registrar’s Grade Policy regulations at:

<http://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx>

Policy Related to Required Class Attendance

Attendance is required. Personal issues regarding attendance or fulfillment of course requirements are to be submitted in writing and will be dealt with on an individual basis. Absences that are unexcused will reduce your overall grade by 3 points.

STUDENT EXPECTATIONS, ROLES, AND OPPORTUNITIES FOR INPUT

Expectations Regarding Course Behavior and Communication Guidelines

You are expected to attend class and participate. Each class member has a different perspective and sharing provides a more meaningful exchange of ideas and interest. As a professional you will often be required to voice your opinion and perspective. Be respectful to the ideas of peers or the instructor if they differ from your own beliefs or experiences.

Use of laptops during class is forbidden, except for the taking of notes and completing quizzes. Use of phones during class is forbidden. If there is an impending emergency or pressing issue that requires you keep your cell phone in sight please discuss with me prior to the start of class.

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-conduct-honor-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, it is strongly recommended you register with the [Disability Resource Center](#) within the first week of class or as soon as you believe you might be eligible for accommodations. The Disability Resource Center will provide documentation of accommodations to you, which you must then give to me as the instructor of the course to receive accommodations. Please do this as soon as possible after you receive the letter. Students with disabilities should follow this procedure as early as possible in the semester. 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.

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 NonDiscrimination 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: www.multicultural.ufl.edu
