

University of Florida
College of Public Health & Health Professions Syllabus
SPA 6317 Vestibular Disorders (3 credit hours)
Semester: Fall 2024
Delivery Format: On-Campus

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Course Overview

Development of the theoretical and practical framework for vestibular anatomy and physiology and the assessment and use of these skills in a clinical setting including standard protocols, test interpretation, diagnosis, and management across the lifespan.

Relation to Program Outcomes

The content of this course is designed to provide students with both information and activities that apply to specific knowledge and skills set forth by the American Speech-Language-Hearing Association (ASHA) in regards to completion of academic and certification requirements in Audiology. Content will be learned from assigned readings, lectures, labs, and class discussions. Outcomes will be assessed through class discussions, labs, student reflections, and written examinations.

Governing Body	KASA Standard	Test
ASHA	Standard II-A: Foundations of Practice <ul style="list-style-type: none"> • A2. Effects of pathogens, and pharmacologic and teratogenic agents, on the auditory and vestibular systems • A5. Calibration and use of instrumentation according to manufacturers' specifications and accepted standards • A6. Standard safety precautions and cleaning/disinfection of equipment in accordance with facility-specific policies and manufacturers' instructions to control for infectious/contagious diseases • A9. Implications of biopsychosocial factors in the experience of and adjustment to auditory disorders and other chronic health conditions • A12. Effective interaction and communication with clients/patients, families, professionals, and other individuals through written, spoken, and nonverbal communication • A13. Principles of research and the application of evidence-based practice (i.e., scientific evidence, clinical expertise, and client/patient perspectives) for accurate and effective clinical decision making • A14. Assessment of diagnostic efficiency and treatment efficacy through the use of quantitative data (e.g., number of tests, standardized test results) and 	Tests*, In-Class Assignments**, Readings, Labs**

	<p>qualitative data (e.g., standardized outcome measures, client/patient-reported measures)</p> <ul style="list-style-type: none"> • A16. Principles and practices of client/patient/person/family-centered care, including the role and value of clients'/patients' narratives, clinician empathy, and shared decision making regarding treatment options and goals • A17. Importance, value, and role of interprofessional communication and practice in patient care • A18. The role, scope of practice, and responsibilities of audiologists and other related professionals 	
ASHA	<p>Standard II-B: Prevention and Screening</p> <ul style="list-style-type: none"> • B1. Educating the public and those at risk on prevention, potential causes, effects, and treatment of congenital and acquired auditory and vestibular disorders • B3. Participating in programs designed to reduce the effects of noise exposure and agents that are toxic to the auditory and vestibular systems 	Tests*, In-Class Assignments**, Readings, Labs**
ASHA	<p>Standard II-C: Audiologic Evaluation</p> <ul style="list-style-type: none"> • 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 • 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 • 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) • C17. Posturography • C18. Rotary chair tests • C19. Video head impulse testing (vHIT) 	Tests*, In-Class Assignments**, Readings, Labs**
ASHA	<p>Standard II-D: Counseling</p> <ul style="list-style-type: none"> • D3. Facilitating and enhancing clients'/patients' and their families' understanding of, acceptance of, and adjustment to auditory and vestibular disorders • D8. Enhancing adherence to treatment plans and optimizing treatment outcomes • D9. Monitoring and evaluating client/patient progress and modifying counseling goals and approaches, as needed 	Tests*, In-Class Assignments**, Readings, Labs**

ASHA	<p>Standard II-E: Audiologic Rehabilitation Across the Life Span</p> <ul style="list-style-type: none"> • E2. Identifying the need for, and providing for assessment of, concomitant cognitive/developmental concerns, sensory-perceptual and motor skills, and other health/medical conditions, as well as participating in interprofessional collaboration to provide comprehensive management and monitoring of all relevant issues • E3. Responding empathically to clients'/patients' and their families' concerns regarding communication and adjustment difficulties to establish a trusting therapeutic relationship • E7. Developing and implementing individualized intervention plans based on clients'/patients' preferences, abilities, communication needs and problems, and related adjustment difficulties • E26. Providing canalith repositioning for patients diagnosed with benign paroxysmal positional vertigo (BPPV) • E27. Providing intervention for central and peripheral vestibular deficits • E28. Ensuring treatment benefit and satisfaction by monitoring progress and assessing treatment outcome 	Tests*, In-Class Assignments**, Readings, Labs**
CAA	<p>3.1.2.A Foundations of Audiology Practice...each student can demonstrate knowledge of the...</p> <ul style="list-style-type: none"> • embryology, anatomy, and physiology of the auditory, vestibular, and related body systems; • normal aspects of auditory and vestibular function across the lifespan; • effects and role of genetics in vestibular function, diagnosis, and management of vestibular disorders; • effects of chemicals and other noxious elements on auditory and vestibular function; • effects of pathophysiology on the auditory, vestibular, and related body systems; • medical and surgical interventions that may be used to treat the results of pathophysiology in these systems; • methods of biologic, acoustic, and electroacoustic calibration of clinical equipment to ensure compliance with current American National Standards Institute (ANSI) standards (where available) and other recommendations regarding equipment function; • principles and practices of research, including experimental design, evidence-based practice, statistical methods, and application of research to clinical populations 	Tests*, In-Class Assignments**, Readings, Labs**
CAA	<p>3.1.3A Identification and Prevention of Hearing Loss, Tinnitus, and Vestibular Disorders...each student can learn and demonstrate knowledge and skills in...</p> <ul style="list-style-type: none"> • the prevention of the onset of loss of auditory system function, loss of vestibular system function, development of tinnitus, and development of communication disorders; 	Tests*, In-Class Assignments**, Readings, Labs**

	<ul style="list-style-type: none"> ● the use of protocols to minimize the impact of the loss of hearing, tinnitus, loss of vestibular system function, and development of communication disorders; ● administering programs designed to reduce the effects of noise exposure, tinnitus, and agents that are toxic to the auditory and vestibular systems; ● applying the principles of evidence-based practice; ● selection and use of outcomes measures that are valid and reliable indicators of success of prevention programs 	
<p>CAA</p>	<p>3.1.4A Assessment of the structure and function of the auditory and vestibular systems...each student can learn and demonstrate knowledge and skills in order to...</p> <ul style="list-style-type: none"> ● evaluate information from appropriate sources to facilitate assessment planning; ● obtain a case history; ● administer clinically appropriate and culturally sensitive assessment measures; ● perform assessment to plan for rehabilitation; ● perform balance system assessment and determine the need for balance rehabilitation; ● document evaluation procedures and results; ● interpret results of the evaluation to establish type and severity of disorder; ● generate recommendations and referrals resulting from the evaluation processes; ● provide counseling in a culturally sensitive manner to facilitate understanding of the hearing loss, tinnitus, or balance disorder of the individual being served; ● engage in interprofessional practice to facilitate optimal assessment of the individual being served; ● assign the correct Common Procedural Terminology (CPT) code(s) and the correct International Classification of Diseases (ICD) code(s); ● apply the principles of evidence-based practice; ● select and use outcomes measures that are valid and reliable indicators of success in assessment protocols that are used. 	<p>Tests*, In-Class Assignments**, Readings, Labs**</p>
<p>CAA</p>	<p>3.1.5A Intervention to minimize the effects of changes in the auditory and vestibular systems on an individual’s ability to participate in his or her environment. The program’s curriculum provides academic content and clinical education experiences so that each student can learn and demonstrate knowledge and skills in order to</p> <ul style="list-style-type: none"> ● perform assessment for vestibular rehabilitation; ● develop and implement treatment plans using appropriate data; ● counsel individuals served, families, and other appropriate individuals regarding prognosis and treatment options; ● develop culturally sensitive and age-appropriate management strategies; 	<p>Tests*, In-Class Assignments**, Readings, Labs**</p>

	<ul style="list-style-type: none"> ● serve as an advocate for individuals served, their families, and other appropriate individuals; ● monitor and summarize treatment progress and outcomes; ● assess efficacy of interventions for auditory, tinnitus, and balance disorders; ● apply the principles of evidence-based practice; ● document treatment procedures and results; ● communicate results, recommendations, and progress in a culturally sensitive and age-appropriate manner to appropriate individual(s); ● select and use outcomes measures that are valid and reliable indicators of success in determining the impact of the interventions used to minimize the effects of changes in structure and function of the auditory and vestibular systems. 	
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*summative assessment, **formative assessment

Course Objectives

1. To describe the structures and function of the human vestibular system and other systems that affect balance.
2. To develop an understanding of the methods used to assess vestibular function and balance.
3. To describe the symptoms, clinical presentations, and current research with regard to vestibular disorders and other disorders affecting the vestibular system and balance.
4. To develop an understanding of the management strategies for medical and non-medical intervention as well rehabilitation candidacy and techniques.

Instructional Methods: Lectures, labs, assigned readings, and class discussions

Required Textbook:

Jacobson, G. P., Shepard, N. T., Barin, K., Burkard, R. F., Janky, K., & McCaslin, D. L. (2021). *Balance Function Assessment and Management* (3rd ed.). Plural Publishing.

Supplemental Readings and Text:

Honaker, J. A. (2021). *Diagnostic vestibular pocket guide: Evaluation of dizziness, vertigo, and imbalance*. Plural Publishing.

McCaslin, D. L. (2013). *Electronystagmography and videonystagmography*. Plural Publishing.

Other readings will be available on Canvas.

Week	Date(s)	Topic(s)	Readings
1	8/22	Categorical Clinical Reasoning, A&P	pg. 1-14, 16-86
2	8/29	Balance Function, Case History, Pretest Instructions	pg. 87-104, 125-166
3	9/5	Oculomotor Testing, Exam Review	pg. 189-224
4	9/12	Exam 1	
5	9/19	Manual Vestibular Tests, Positional Testing, BPPV	pg. 167-188, 225-256
6	9/26	Caloric Testing, Labyrinthitis/Vestibular Neuronitis	pg. 225-256
7	10/3	ECOG, Meniere’s, Vestibular Migraine, Exam Review	pg. 439-456
8	10/10	Exam 2	
9	10/17	vHIT, VEMP, 3 rd Window Phenomena	pg. 333-364, 399-438

Please be aware that a C- is not an acceptable grade for graduate students. The GPA for graduate students must be 3.0 based on 5000 level courses and above to graduate. A grade of C counts toward a graduate degree only if based on credits in courses numbered 5000 or higher that have been earned with a B+ or higher.

More information on UF grading policy may be found at:

<http://gradcatalog.ufl.edu/content.php?catoid=10&navoid=2020#grades>
<https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/>

Expectations Regarding Course Behavior

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. You may use your laptop or tablet for class notes and class participation. Reviewing your e-mail, on-line shopping, completing other assignments or any other non-class related activity is disrespectful and distracting and you will be asked to remove yourself from class. Use of phones during class is unacceptable there will be ample breaks in class to attend to your personal calls or texts. If there is an impending emergency or pressing issue please discuss with me prior to the beginning 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 professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a

professional and respectful manner is available at <https://gatorevals.aa.ufl.edu/students/>. Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via <https://ufl.bluera.com/ufl/>. Summaries of course evaluation results are available to students at <https://gatorevals.aa.ufl.edu/public-results/>.

Accommodations for Students with Disabilities

If you require classroom accommodation because of a disability, it is strongly recommended you register with the Dean of Students Office <http://www.dso.ufl.edu> within the first week of class or as soon as you believe you might be eligible for accommodations. 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 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.
- **U 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>
- **University Police Department:** [Visit UF Police Department website](#) or call 352-392-1111 (or 9-1-1 for emergencies).
- **UF Health Shands Emergency Room / Trauma Center:** For immediate medical care call 352-733-0111 or go to the emergency room at 1515 SW Archer Road, Gainesville, FL 32608; [Visit the UF Health Emergency Room and Trauma Center website.](#)

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

- 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.
- 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: www.multicultural.ufl.edu