University of Florida  
College of Public Health & Health Professions Syllabus  
SPA 6341 (2 credit lecture)  
(2 hours) Section  
Spring Semester 2023  
Delivery Format: On-Campus

Instructor’s Name: Emily Gaines, Au.D., CCC-A  
Office Location: HPNP 2144  
Phone Number: (352) 273-6565  
Email Address: emily.gaines@phhp.ufl.edu  
Office Hours: Wednesdays 10am-12pm or by appointment in-person or via Zoom/Teams  
Preferred Course Communication: e-mail  
Delivery Format: On-Campus

Class Meeting Time: Tuesdays, 8:30am-11:30am  
Meeting Location: HPNP G-111, Lab Location-TBD

PURPOSE AND OUTCOME

Course Description: This course is designed to build upon fundamentals learned in Amplification I, by providing clinically relevant training related to the assessment, selection, fitting, verification, and validation processes associated with modern hearing aids. This course will cover theoretical and applied understanding of current and future technology in amplification systems, recent advances in programmable and digital hearing aids, hearing aid selection procedures for special populations, assistive listening devices, verification procedures, and classroom amplification systems. This course includes a lab course component, SPA 6581.

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.

<table>
<thead>
<tr>
<th>KASA Standard (Audiology)</th>
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<tbody>
<tr>
<td><strong>Standard II-A: Foundations of Practice</strong></td>
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<tr>
<td>A5. Calibration and use of instrumentation according to manufacturers’ specifications and accepted standards</td>
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<td>A7. Applications and limitations of specific audiologic assessments and interventions in the context of overall client/patient management</td>
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<tr>
<td>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</td>
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<tr>
<td>A14. Assessment of diagnostic efficiency and treatment efficacy using quantitative data (e.g., number of tests, standardized test results) and qualitative data (e.g., standardized outcome measures, client/patient-reported measures)</td>
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</table>
### Standard II-D: Prevention and Screening

**D1.** Identifying the counseling needs of individuals who are deaf or hard of hearing based on the narratives and results of client/patient and/or caregiver responses to questionnaires and validation measures

**D2.** Providing individual, family, and group counseling as needed based on client/patient and clinical population needs

**D4.** Enhancing clients'/patients’ acceptance of and adjustment to hearing aids, hearing assistive technologies, and osseointegrated and other implantable devices

**D5.** Addressing the specific interpersonal, psychosocial, educational, and vocational implications of hearing loss for the client/patient, family members, and/or caregivers to enhance their well-being and quality of life

**D6.** Facilitating clients'/patients’ acquisition of effective communication tools and techniques of coping skills

**D7.** Promoting clients'/patients’ self-efficacy beliefs and promoting self-management of communication and related adjustment 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

### Standard II-E: Audiologic Rehabilitation Across the Life Span

1. The use of protocols to minimize the impact of the loss of hearing, tinnitus, loss of vestibular system function, and development of communication disorders

2. The use of protocols to minimize the impact of the loss of hearing, tinnitus, loss of vestibular system function, and development of communication disorders

5. The use of screening tools for functional assessment

8. Applying the principles of evidence-based practice

9. Selection and use of outcome measures that are valid and reliable indicators of success of prevention programs

### Standard 3.1.4A Assessment of the Structure and Function of the Auditory and Vestibular Systems

**E1.** Engaging clients/patients in the identification of their specific communication difficulties and adjustment to them by eliciting client/patient narratives and interpreting self-reported and/or caregiver-reported measures

**E4.** Providing assessments of family members’ perception of and reactions to communication difficulties

**E5.** Identifying the effects of hearing loss and subsequent communication difficulties on marital dyads, family dynamics, and other interpersonal communication functioning

**E6.** Engaging clients/patients (including, as appropriate, school-aged children and adolescents) and family members in shared decision-making regarding treatment goals and options

**E7.** Developing and implementing individualized intervention plans based on clients'/patients’ preferences, abilities, communication needs and problems, and related adjustment difficulties

**E8.** Selecting and fitting appropriate amplification devices (i.e., standard, bone, osseointegrated, and implantable devices) and assistive technologies

**E9.** Defining appropriate electroacoustic characteristics of amplification fittings based on frequency-gain characteristics, maximum output sound pressure level, and input-output characteristics

**E10.** Verifying that amplification devices meet quality control and American National Standards Institute (ANSI) and U.S. Food and Drug Administration (FDA) standards

**E11.** Conducting real-ear measurements to (a) establish audibility, comfort, and tolerance of speech and sounds in the environment and (b) verify compression, directionality, and automatic noise management performance

**E13.** Conducting individual and/or group hearing aid and wireless technology orientations to ensure that clients/patients can use, manage, and maintain their instruments appropriately

**E14.** Identifying individuals who are candidates for cochlear implantation and other implantable devices

**E17.** Identifying the need for—and fitting—electroacoustically appropriate hearing assistive technology systems (HATS) based on clients’/patients’ communication, educational, vocational, and social needs when conventional amplification is not indicated or provides limited benefit
E18. Providing HATS for those requiring access in public and private settings or for those requiring necessary accommodation in the work setting, in accordance with federal and state regulations

E19. Ensuring compatibility of HATS when used (a) in conjunction with hearing aids, cochlear implants, or other devices and (b) in different-use environments

**Standard II-F: Pediatric Audiologic (Re)Habilitation**

F5. Selecting age- and developmentally appropriate amplification devices and HATS to minimize auditory deprivation and maximize auditory stimulation

F6. Instructing parents and/or child(ren) regarding the daily use, care, and maintenance of amplification devices, implanted devices, and HATS

F9. Administering self-assessment, parental, and educational assessments to monitor treatment benefit and outcome

**How Achieved:** Through lecture and presentation notes, required readings; case study discussions, student presentations and reflections, and examinations

**How Assessed:**

**Formative Assessment:**
- In Class Presentations/Debates/Discussions
- Clinical Activities

**Summative Assessment:**
- Case Studies
- Exams (written and practical)

**Student Learning Outcomes:**

Students who have successfully completed this course will demonstrate competencies in the following areas:

- Demonstrate knowledge of process of selling and dispensing amplification
- Demonstrate knowledge of the effects of compression on the input/output response of hearing aids
- Describe and demonstrate hearing aid characteristics for different digital hearing aids
- Demonstrate knowledge of hearing aid selection criteria and outcome measures
- List the advantages and limitations of advanced digital hearing aid features
- Identify common hearing aid related malfunctions and prescribe appropriate remedies
- Describe the hearing aid orientation process
- Describe appropriate hearing aid outcome measures
- Assess outcomes of hearing rehabilitation
- Understand considerations for binaural hearing aid fittings
- Describe special considerations for the pediatric and geriatric patient
- Describe non-conventional amplification systems
- Identify and assess the need for assistive listening devices and explain how they function
**Instructional Methods:** Lectures, class discussions, and student projects.

**Required Textbook:**

**Supplemental Readings and Text:**
Research Articles will be assigned and available on course website.

*Other readings will be available on Canvas.*

Website: e-Learning in Canvas, accessed via http://elearning.ufl.edu/
For technical support for this class, please contact the UF Help Desk at:
- Learning-support@ufl.edu
- (352) 392-HELP - select option 2
- [https://kb.helpdesk.ufl.edu/FAQs/E-Learning](https://kb.helpdesk.ufl.edu/FAQs/E-Learning)
- [https://lss.at.ufl.edu/help.shtml](https://lss.at.ufl.edu/help.shtml)
# Topical Outline/Course Schedule

<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Lecture/Clinical Activity</th>
<th>Readings for Following Week</th>
<th>10 min Tech Updates</th>
<th>Activity Due</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>01/09</td>
<td>Course Introduction and Syllabus Review</td>
<td>Article #1-2, 4-5 Review EMHA Ch. 5-9, 18</td>
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<tr>
<td></td>
<td></td>
<td>The Basics of Hearing Aid Troubleshooting</td>
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<td>Tubing/Receivers for Smarties</td>
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<td></td>
<td>Review of Earmold Impressions</td>
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<tr>
<td>2</td>
<td>01/16</td>
<td>Selecting Hearing Aids for Today’s Patients and the Hearing Aid Fitting Process</td>
<td>Article #3 Review EMHA Ch. 1, 16, 17, 19</td>
<td></td>
<td>Activity #1</td>
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<tr>
<td>3</td>
<td>01/23</td>
<td>Lab 1</td>
<td>Article #3 Review EMHA Ch. 1, 16, 17, 19</td>
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<tr>
<td>4</td>
<td>01/30</td>
<td>Evidence-Based Practice in Amplification</td>
<td>Article #6-7</td>
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<td>Activity #2</td>
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<tr>
<td>5</td>
<td>02/06</td>
<td>Navigating Hearing Aid Needs: Fine-tuning, tips and tricks for keeping aids out of the drawer</td>
<td>Articles #8-11</td>
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<td>Activity #3</td>
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<tr>
<td>6</td>
<td>02/13</td>
<td>Lab 2</td>
<td>Article #8-11</td>
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<td>7</td>
<td>02/20</td>
<td>Special Considerations in Hearing Aid Fittings – Bilateral vs Unilateral Fits, CROS, bone conduction systems, Fitting Musicians and Tinnitus Patients and general overview of Implants</td>
<td>Activity #4</td>
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<tr>
<td>8</td>
<td>02/27</td>
<td>Midterm Exam</td>
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<tr>
<td>9</td>
<td>03/05</td>
<td>Lab 3</td>
<td>Article #12</td>
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<td></td>
<td>03/12</td>
<td>SPRING BREAK</td>
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<tr>
<td>10</td>
<td>03/19</td>
<td>Considerations in Pediatric Amplification</td>
<td>Article #13-18 Review EMHA Ch. 2-3</td>
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<td>Activity #5</td>
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<tr>
<td>11</td>
<td>03/26</td>
<td>Thinking Beyond Hearing Aids: Difficult Scenarios</td>
<td>Practical Activity due</td>
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<td></td>
<td></td>
<td>The Art of Selling in A Clinical Framework</td>
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<tr>
<td>12</td>
<td>04/02</td>
<td>The Big Debate!</td>
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<td>Activity #6</td>
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<tr>
<td>13</td>
<td>04/09</td>
<td>Lab 4</td>
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<tr>
<td>14</td>
<td>04/16</td>
<td>Clinical Case Presentations</td>
<td></td>
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<td>Activity #7</td>
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<tr>
<td>15</td>
<td>04/23</td>
<td>Final Exam</td>
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**Syllabus may be modified during the semester. If necessary, students will be immediately notified of changes.**

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**Graded Course Components:**

- Midterm Exam
- Final Exam

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1. Activities: Students are required to work independently on assigned activities. These activities are designed to “put into practice” what is learned during course lectures.

Activities 1-7: The documents for each activity are posted under each individual activity assignment and on Canvas Pages for each week. Completed activities should then be posted under the assignments section. Make sure to title your completed activity document as follows: Last Name_Activity#. Activities 1-7 will count towards 20% of the final grade.

Practical Activity: The document for this activity is posted under the “Practical Activity” assignment in Canvas. This will require you to perform different hearing aid related “hands on” skills. All of the supplies, materials, and equipment needed to complete this activity will be sorted in the lab for your use. This activity can be completed at any point during the semester but is due on 03/26/2024. The Practical Activity will count towards 5% of the final grade.

2. Presentations: For this course, students are required to participate in both independent and group presentations. A large part of getting comfortable with amplification is being aware of the latest technology and fitting trends. Presentation topics are designed to update the class on technology and tie together clinical decision making based on the audiologic assessment and patient’s needs.

Debates: There will be a scheduled debate (see calendar for specific dates). The debate will involve 2 topics in amplification in which both research and audiologic opinion varies. Students will be assigned to a specific group and will need to research the topic so that they can provide compelling reasons as to why their view is best. It will be important to understand both sides of the debate so that you can counter your opponent’s view. Grading will be based on the rubric posted in Canvas. The debates will take place on 04/02/2024. The debate averaged with the case presentation will count towards 20% of the final grade.

Case Presentation: In groups, students will be assigned a clinical case. The purpose of the presentation is to summarize the case and present the group’s clinical decision making regarding further testing and recommendations for amplification. The presentation should draw upon everything learned during the course of the semester as well as in clinical practicum. Cases will be posted on Canvas. The amplification option that is chosen should be covered in specific and thorough detail, including all the features available in the product and compatible accessories recommended. If the patient needs to be fit with earmolds or receivers this information should also be included (in great detail – style, material, venting, length of canal, etc). Case presentations will take place on 04/16/2024. The case presentation averaged with the debate will count towards 20% of the final grade.

10-Minute Technology Updates: Students will be assigned a technology topic and will be asked to present the information on this topic in 10 minutes. This is meant to be an informative way for all students to learn about some of the latest technology, accessories, applications, and gadgets available to those with hearing loss. Keeping up to date on technology is essential when working with patients with hearing loss. The 10-minute tech update will count towards 10% of the final grade.

Link to sign-up:
10-minute technology update topics

- Video Impressions and Vanish Tube:
- IIC (invisible-in-the-canal) Hearing Aids and Lyric:
- Rechargeable HA Batteries:
- Hearables and PSAPs:
- Apps for those with hearing loss:
- M/T ratings for cell phones and captioning apps:
- Movie theater closed captioning:
- Waterproof/ dust resistance ratings and Dehumidifiers:
- HyperSound Speakers, Smart Home Alerting System:
- Tinnitus Relief: Sound Pillow, SmartApps for Tinnitus:
- ADA Hotel Kits for Hearing Impaired and Hearing Aid Looping:
- Artificial Intelligence in Hearing Aids:
- Eargo and Lively Hearing Devices:

3. Exams:

Midterm and Final: There will be 2 equally-weighted exams worth 30% of the final grade. The exams will consist of multiple choice, true/false, short answer, and essay questions. Questions will be based on information from readings, weekly class materials, and other materials provided by the instructor. As the course builds upon itself over time, the second exam will be comprehensive in nature but will emphasize the material covered since the first exam. The exam dates are listed on the course calendar included at the end of the syllabus. There will be NO EXCEPTIONS to the test schedule posted unless student has an excused absence and make prior arrangements to take the exam at another time or there is a unanimous agreement on a modification by the entire class and instructor.

Practical Exam: Students will be required to complete a practical application exercise outside of normal class time with the instructor. Available times will be posted and students will be asked to sign up based on their availability. The practical exercise will comprise of clinical skills taught during both lectures and hands-on activity. This practical will be scheduled for 30 minutes and will comprise of applications regarding hearing aid troubleshooting and verification. The practical exam will take place on 04/10/2024 or 04/12/2024. The practical exam will count towards 15% of the final grade.

Link to sign-up:
https://docs.google.com/spreadsheets/d/1rLLb5djlAHTDj5MBk0d6w_wu64yUgnQ3SRx7kxlyv EO/edit?usp=sharing
Final Grade Weighting:

<table>
<thead>
<tr>
<th>Course Components</th>
<th>Weight in Percentage</th>
<th>Due Date</th>
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<tbody>
<tr>
<td>Activities 1-7</td>
<td>20%</td>
<td>01/16, 01/30, 02/06, 02/20, 03/19, 04/02, &amp; 04/16</td>
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<td>Practical Activity</td>
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</tr>
<tr>
<td>10-min Tech Update</td>
<td>10%</td>
<td>Individual due dates</td>
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<tr>
<td>Debate &amp; Clinical Case Presentation</td>
<td>20%</td>
<td>04/02 &amp; 04/16</td>
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<tr>
<td>Midterm and Final Exams</td>
<td>30%</td>
<td>02/27 &amp; 04/16</td>
</tr>
<tr>
<td>Practical Exam</td>
<td>15%</td>
<td>04/10 or 04/12</td>
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Grading Scale

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<tr>
<th>Letter Grade</th>
<th>A</th>
<th>A-</th>
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<th>C+</th>
<th>C</th>
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<th>D+</th>
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<th>D-</th>
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<tbody>
<tr>
<td>Percentage</td>
<td>93-100</td>
<td>90-92.9</td>
<td>87-89.9</td>
<td>83-86.9</td>
<td>80-82.9</td>
<td>77-79.9</td>
<td>73-76.9</td>
<td>70-72.9</td>
<td>67-69.9</td>
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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. 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 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 WeCare 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

**Important:** 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