



University of Colorado **Boulder**

**Department of Speech, Language, & Hearing Sciences
409 UCB
2501 Kittredge Loop Rd
Boulder, CO 80309-0409
www.colorado.edu/slhs**

Clinical Handbook - Audiology

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INTRODUCTION

Welcome to the Department of Speech, Language, and Hearing Science (SLHS) at the University of Colorado at Boulder (CU).

The Doctor of Audiology (AuD) degree program at CU is designed to prepare audiologists for autonomous clinical practice encompassing the entire scope of practice of audiology. The clinical doctorate model at CU stresses the integration of academic classroom learning and practical experience across a broad spectrum of clinical specialties and practice environments. Our AuD curriculum provides a strong foundation in the scientific knowledge base and a wide range of clinical field experiences that prepares AuD graduates with the tools necessary for evidence-based clinical practice. The CU AuD curriculum also is designed to enable AuD students to meet current standards required for ASHA certification in audiology as well as Colorado state licensure standards.

The purpose of this handbook is to provide AuD students with the basic information needed regarding the clinical aspect of the program throughout their course of study and to assist students in navigating their way through the graduate degree program and certification process. This handbook is not meant to be an exhaustive collection of all policies at the University of Colorado - Boulder. Students also should review the CU Graduate School website (<http://www.colorado.edu/graduateschool/>), which is the final source regarding University policies on graduate programs. Some of the information provided in the handbook also is available on the department's AuD website (www.colorado.edu/slhs). If additional questions and/or concerns arise that are not formally addressed in these sources, your advisor will be a valuable asset as you progress through the program. You are urged to maintain close contact with your advisor and to seek additional information as the need arises. Academic and clinical faculty members also are available for advice, guidance, and consultation regarding all academic and clinical requirements, policies, and procedures. It is however, the responsibility of AuD students to be informed about all academic and clinical requirements of the AuD program at CU.

Department of Speech, Language & Hearing Sciences

Mission

The Department of Speech, Language & Hearing Sciences at the University of Colorado-Boulder is dedicated to the pursuit of excellence in education, research and scholarship in the science and practice of human communication in order to benefit individuals and families in the local community, the state of Colorado and the world.

Currently, the Department of Speech, Language and Hearing Sciences has an enrollment of about 300 undergraduate majors, over 100 graduate students, 9 tenure-track faculty, 10 clinical faculty, over 25 adjunct faculty and more than 30 community professionals who participate in various aspects of our academic and/or clinical training programs. The Department offers a broad academic curriculum, comprehensive clinical experiences, and active research programs in a variety of areas. For detailed information regarding SLHS faculty and staff, please visit SLHS's website: <https://www.colorado.edu/slhs/meet-us>

Description of Facility & Services

Graduate students in Department of Speech, Language and Hearing Science (SLHS) provide clinical services under direct supervision of ASHA-certified clinical faculty members.

THE SPEECH, LANGUAGE, & HEARING CLINIC at CU Boulder

The Department of Speech and Hearing Science houses the Speech Language and Hearing Clinic (SLHC), which provides campus-based clinical training for our SLP and AuD programs. Through this clinic, diagnostic and rehabilitative speech language pathology services, auditory processing assessment, and nursing home hearing aid check visits are provided through the SLHC to the general public on a fee-for-service basis.

Sound booths and audiometric equipment located on the first floor of the SLHS building are for use in faculty research. The sound booth for student learning and practice as well as student research (capstone) is located on the 3rd floor.

The SLHC's Policy and Procedure manual can be found on your practicum's Canvas page.

UNIVERSITY OF COLORADO HEALTH – BOULDER HEALTH CENTER

AuD students begin their on-site clinical experience at the University of Colorado Health – Boulder Health Center. The Hearing and Balance Center at University of Colorado Health provides clinical services, resources, education, and research to support the needs of individuals in metro Denver who are deaf and hard of hearing.

The center, which is a partnership between University of Colorado Health and the University of Colorado School of Medicine, provides resources, education, and research to support the needs of individuals who are deaf and hard of hearing, their families, the community and hearing health professionals.

The Center values individual and family rights in communication and technology choices, and strives to optimize the quality of life for all it serves.

The Hearing and Balance Center is recognized worldwide for its unique leadership and progressive innovations in the realm of hearing and deafness.

The UCHealth – Boulder Health Center is located at:

5495 Arapahoe Avenue, Boulder, CO 80303

Parking spaces closest to the clinic itself are reserved for patients. Student clinicians and clinic staff are asked to park in the spaces further away from the building.

The phone number to the audiology work area at the Center is 303-544-3665. Given the fact that audiologists are most often working with patients, it is very likely that when you call this number, you will reach voicemail. Therefore, be sure to inquire with your preceptor (and refer to your course syllabus) as to his/her preferred contact method.

Other Facilities

AuD students will engage in clinical activities at other facilities in the Denver/Boulder area as they progress through the program. While some sites are accessible by RTD bus, many of these sites will require a student to have his/her own transportation. It is the student's responsibility to ensure that he/she understands where the facility is as well as whether parking is available. The student must discuss these things with preceptors/instructors prior to his/her first day at the site.

Facilities

Administrative office

The Speech, Language, & Hearing Center's administrative assistant handles issues related to student clinical education such as tracking students' immunization and compliance information (e.g., liability insurance) as well as assisting with paperwork for clinical placements. This office is located on the first floor of the SLHS building near the SLHC waiting room.

Mailboxes

Faculty/staff and AuD student mailboxes are located on the 2nd floor of the SLHS building near the elevator. All graduate students are assigned mailboxes at the beginning of each semester. Be sure to check your mailbox regularly since important messages may be left for you which require prompt attention. Use discretion when leaving items of value in your mailbox.

Waiting Room

Note that clinical discussions should not take place in a patient waiting room. If important information needs to be exchanged with patients/parents, it should be discussed in the privacy of an exam room or test suite.

Confidentiality

Patient reports/notes that are done using a method other than the electronic health record system are to be de-identified appropriately per HIPAA regulations (see Appendix A for more information on HIPAA). Do **not** save patient reports or other patient information on your personal computer or flash drive. Any reports or other material printed with patient identifying information **must** be shredded. Discard of these materials in the appropriate bin (this bin is clearly identified). If you do not know where this bin is, ask your preceptor.

Infection Control

Standard Precautions should be used any time you work with a patient. Infection Control guidelines can be found in Appendix A. The guidelines provided in this handbook reflect those that are in use at University of Colorado Hospital and its clinics. Note that other sites' guidelines may differ slightly. It is the responsibility of the student to inquire with preceptors regarding the site's infection control policies.

Maintenance of Audiologic Equipment/Space in SLHS

It is the responsibility of all individuals who use the audiology space and equipment in SLHS to leave the areas in clean and neat condition and to replace all equipment in the proper location following test procedures. All speculum and immittance probe tips should be cleaned and returned for re-use. The ultra-sonic cleaner is available for this purpose (instructions for use are in the teaching booth). All otoscopes should be re-charged when they are no longer working. All

equipment should be turned off after use and all rooms should be locked in order to maintain security.

No food or drinks are allowed in the suites or labs.

Malfunctioning Equipment

If a piece of equipment is not working properly, the student clinician should first troubleshoot the problem in attempt to correct it. If the problem cannot be fixed, identify, as clearly as possible, what the problem seems to be. This information should be submitted to the Director of Audiology Clinical Education who will respond to the request for equipment repair. A note should also be left on the equipment, indicating the problem.

Logbook

First year AuD students are assigned a month in which they are responsible for ensuring the audiology teaching spaces and equipment are in good working order and clean. The students assigned each month will document in the logbook (kept in Booth) which tasks were finished when as well as note any problems and/or supplies that are low.

Professionalism for Clinical Practice

Professional behavior is expected of all graduate student clinicians. The following outline provides information as to what professional behavior entails. Please note that this list is not intended to be exhaustive. Note that particular sites may have specific requests regarding particular aspects of professionalism above and beyond this outline.

Ethical Practices

- Conducts all clinical work in accordance with the Code of Ethics set forth by the American Speech-Language-Hearing Association. (See Appendix D)

Dependability

- Prepares for and conducts clinical services as assigned (reviews appropriate files, develops questions and/or key points for discussion).
- Prepares for and conducts meetings/conferences/consultations (reviews appropriate files, develops questions and/or key points for discussion).
- Carries out all duties to accomplish total case management (e.g., forms, phone calls, referrals, etc.).
- Makes appropriate arrangements and notifies all concerned regarding any schedule change or cancellation.

Punctuality

- In case of student clinician illness, accepts responsibility to:
 - (a) Notify clinical preceptor as early as possible
 - (b) Discuss arrangements for make-up time with clinical preceptor.
- Never leaves the clinic without notifying/checking with clinical preceptor first.
- Requests approval for absence from clinic in writing from Coordinator of Clinical Audiology Education (if student clinician is in an on-site rotation) or his/her preceptor (if student clinician is at an off-site rotation) well in advance of any anticipated absences from professional responsibilities.
- Submits all written assignments (e.g., test results, reports, letters, etc.) in acceptable form (appropriate grammatical usage, paragraph structure, punctuation, and spelling) by scheduled deadlines.

- Attends all meetings/conferences/consultations on time.

Confidentiality

- Abides by HIPAA regulations. The Health Insurance Portability and Accountability Act (HIPAA) was designed to ensure the privacy and security of patient information and give patients greater rights related to their information. (See Appendix A for more information regarding HIPAA.)
- Utilizes discretion concerning patient information in written and oral communication with others.
- Accesses patient information on an “as needed” basis only.

Personal Appearance

- Wears name badge to provide patients, family members, and others with a means of easily identifying graduate students.
- Maintains and promotes a positive professional image.
- Does not wear scented products (i.e., perfume, hair products, body lotions, etc.).
- Maintains proper personal hygiene.
- All attire must appear neat, pressed and professional looking
- No denim jeans or shorts are allowed. Pants must not be excessively baggy or ride excessively low on the hips
- Skirts must cover the knee and be loose enough to allow for movement.
- Any pants/skirt/shirt combination must cover the midriff when the arms are raised and also cover the back when bending over.
- Shirts for men should have collars and be tucked in.
- Low-cut tops and shirts that show through are not allowed.
- Shoes should look professional and be closed in the front. Open back shoes such as mules are acceptable. No flip-flops or athletic shoes are allowed.
- Unusual hair coloring (e.g. pink, blue, green etc.) and style (e.g. Mohawk) are not commonly allowed.

- Visible or potentially visible body art should be removed or covered. Oral or facial piercings (tongue, lip, and eyebrow) must be removed. Tattoos must be covered with long sleeves or a high collar.
- Any student who is not dressed appropriately will not be allowed to participate in clinic.

Communication

- Utilizes appropriate communication in all professional activities.
- Provides appropriate communication model for patients and families.
- Uses appropriate written and oral communication with all persons involved in the case including clinical preceptor, co-clinicians, and other professionals.
- Checks email regularly and promptly replies to clinical preceptor emails/phone calls. (Note: Email is the official mode of communication within CU-Boulder (<http://www.colorado.edu/policies/student-e-mail-policy>))

Accountability

- Keeps documentation (test results, data on specific goals, correspondence, release of information, hearing aid status etc.) up-to-date and filed in appropriate location, if applicable.
- Fills out appropriate chart notes/paperwork in a timely manner.
- Ensures that evidence-based protocols are used each semester enrolled in SLHS 5918/SLHS 5928 (e.g., those that are created as part of coursework).

Failure to meet the standards of professionalism outlined above and in the Technical Standards document signed by all students prior to their start in the program may result in probationary status to be determined by the AuD faculty. The result may also be lowering of the semester clinical grade and/or termination of clinical responsibilities.

Clinical Training Requirements

The Department of Speech and Hearing Science at University of Colorado (CU) has developed a clinical training program for AuD students. Clinical rotations/externships enable students preparing for a career as an audiologist to obtain training at on-campus and off-campus sites.

The AuD clinical training program at CU has been designed such that upon completion, students will have met all the clinical requirements for national certification as an audiologist. In addition, students will have met the standard of excellence that we set for all graduates from our professional training program. In meeting our standards for quality clinical services, it is important for students to understand that they will gain more than the minimum experiences required for certification because we are preparing students to assume the roles and functions of an audiologist across a variety of different settings and service delivery models. This training model is designed to maximize students' employment opportunities upon entry into the professional job market. Clinical placements will result in the accumulation of over 2000 hours of clinical experience in different clinical settings and with different populations in order to obtain and demonstrate skills across the scope of practice in audiology (see Appendix C: scope of practice). In order to be recommended to ASHA for Clinical Certification in Audiology, a student must accumulate a minimum of 1820 hours of supervised clinical practicum sufficient in depth and breadth to achieve the knowledge and skills outcomes stipulated in the ASHA 2012 standards. Individuals who hold the Certificate of Clinical Competence in the appropriate area of practice must provide supervision for these 1820 hours.

The clinical component of the AuD program stresses the importance of students first gaining exposure, then supervised experience, and eventually independent service provision as they progress through a series of diverse and challenging campus-based and off-campus clinical placements at a variety of facilities. Clinical placements are selected to provide students with experience in audiological service provision across the life span, diverse populations, and entire scope of practice in audiology from diagnostic services through rehabilitative management of hearing-impaired children and adults. Acceptable clinical rotation experience includes clinical and administrative activities directly related to patient care.

Required Clinical Training

The clinical training program is structured around the concept of completing core clinical placement requirements and adding areas of emphasis desired by the student. The clinical rotations are sequenced to evolve in scope and complexity. All AuD students are required to complete a total of 32 clinical credits including two semesters of clinic preparation and observation, three on-campus and three off-campus clinical rotation placements, and the 4th-year Audiology Externship, which is the culmination of the AuD program. By definition, a clinical rotation refers to short-term clinical training within or outside the University and an externship refers to long-term clinical training outside the university. Rotations selected are based on a combination of the student's clinical interest and the fulfillment of their ASHA competency and state licensure requirements.

General Guidelines

Student participation in clinical practicum should be considered a privilege rather than a right. Clinical practicum participation is different in many ways from class and laboratory assignments. It involves the welfare of the patients in our clinics as well as the training needs of students. We are ethically bound to protect the welfare of the patients in our clinics, so special policies apply to these educational opportunities. Admission to graduate study in audiology in the Department of Speech, Language, and Hearing Sciences at University of Colorado - Boulder does not guarantee participation in clinical practicum. All AuD students must demonstrate competency in basic audiological procedures prior to enrolling in SLHS 5928 by passing an initial Practical Exam that takes place during the 1st year of the AuD program.

Requirements for the ASHA Certificate of Clinical Competence in Audiology (CCC-A) include the completion of a minimum of 1820 hours of supervised clinical practicum by audiologists who hold the Certificate of Clinical Competence in Audiology. CU graduation requirements include the completion of three semesters (summer, fall and spring) in the fourth year even if excess hours are accrued during this time. It is the intent to distribute clinical hours across the 4-year AuD program in settings that provide a breadth of clinical experiences. These experiences may include basic and advanced auditory and vestibular system assessment, hearing amplification, cochlear implants and other implantable devices, pediatric and adult aural rehabilitation, hearing conservation, educational audiology, sedated assessments and intra-operative monitoring using evoked electrophysiological measures, and business practices in audiology.

Progression of Clinical Assignments

First-year AuD students observe/assist in the audiology clinic and attend clinical laboratory experiences (SLHS 5918) designed to prepare students for their first clinical on-campus rotation. This experience culminates in the Practical Examination.

Beginning in the 2nd year of the AuD program, students spend three semesters in university-based clinical rotations at University of Colorado Health – Boulder Health Center while also obtaining experiences in the community through nursing home visits and hearing screenings (SLHS 5928). During the 3rd year, students continue their training in approved off-campus clinical rotation placements throughout the Denver Front Range area (SLHS 5938/SLHS 5948). Off-campus clinical rotation sites are chosen to match: (a) program goals, (b) level of student preparation, and (c) student interest(s). Participating clinical sites are selected based on their commitment to the: (a) education of AuD students, (b) certification/licensure status of clinical preceptors, (c) quality of facilities and equipment, and (d) variety of broad-based clinical experiences and diverse clinical populations offered.

The culmination of the clinical portion of the program is the Audiology Externship (SLHS 6938/SLHS 6948), which involves full-time placement in approved regional or national facilities.

On- and off-campus clinical rotation assignments are designed to fulfill ASHA certification requirements and provide the student with a variety of clinical experiences in preparation for externship placement and a professional career. Students who have been scheduled to provide clinical services are obligated to fulfill each of their clinic responsibilities throughout the semester. Because of our commitment to the clients and facilities, there are no provisions for a student to withdraw from a clinical rotation unless clinical performance is unsatisfactory or it is in the best interest of the client(s) for the student to be assigned to a different preceptor. Additional factors for withdrawal may be considered by the clinical supervisor/preceptor in consultation with the department's AuD Committee Chair and the Director of Audiology Clinical Education.

Students are free to indicate clinical rotation preferences, and when possible, these preferences will be accommodated. It is important to note, however, that the primary obligation of the program is to provide a well-rounded clinical training experience that meets the quality standards of the department and clinic. To maintain the high quality of the training program, students can be assigned to a clinical rotation placement that was not necessarily their first choice but necessary to meet the goals of the training program and ASHA certification and state licensure requirements. Clinical rotation assignments are requested in the semester prior to the desired registration through the Director of Audiology Clinical Education. Each approved site must have a formal affiliation agreement filed with University of Colorado prior to the placement of audiology students. Affiliation agreements are the responsibility of the Director of Audiology Clinical Education and Director of Clinical Operations.

Titles

Students will introduce themselves to patients with their first and last name and state that they are a graduate student in audiology. They will also introduce their clinical instructor by their full name or as Mrs. _____ or Dr. _____ and state they are the 'supervising audiologist'. Off-campus students in placements will use "Audiology Extern" or other title as preferred by their clinical preceptor.

Clinical Time Demands

Enrollment in clinical practicum places significant time demands on students during the work week. Student clinicians registered for clinical practica should be prepared to devote approximately 5 to 10 hours per week to the preparation, implementation, and analysis of clinical experiences *in addition* to the actual time spent in the clinic working with clients. In a typical 15-week semester, students registering for two credits of SLHS 5928 are typically engaged in clinical activity one day per week and are responsible for the service delivery and reports/chart notes for anywhere from three to thirty patients! Students registering for three credits of SLHS 5938/5948 are typically in clinic for at two to three full days per week at an offsite placement and are responsible for service delivery and reports/chart notes as directed by the offsite preceptor. SLHS 6938/6948 is a full-time externship.

Attendance Policy

Consistent attendance in clinic is required to gain appropriate clinical skills and make adequate progress each semester. **All students are therefore expected to attend each scheduled clinical session during a semester.** Illness or funeral attendance are the only reasons considered acceptable for missing clinic. A doctor's note may be required if you miss significant time in clinic.

If you anticipate that you will miss clinic in order to attend a conference, you are **required** to obtain **written approval** from your clinical preceptor(s) **at the beginning of the semester. Do not make your travel plans before you obtain approval from your clinical preceptor(s).** Missing clinic for conference attendance does not necessarily relieve you of the clinical hours you missed. Be sure to offer your preceptor times/days to make up for time missed.

Tardiness: Students are expected to be **on time** and ready for their scheduled clinical experiences. Tardiness is unacceptable except in cases beyond the graduate student clinician's

control (e.g., traffic accident, inclement weather). The student should do his/her best to contact his/her clinical preceptor to let him/her know the student is running late.

Documentation of Clinical Hours and Competencies

Tracking Progress

An online database program (Calipso) has been adopted to help track student progress in the AuD program. Additional tracking documents have been developed to assist the student and the academic advisor(s) in systematically tracking and monitoring the satisfactory completion of academic coursework, clinical practicum, and progress toward the attainment of the knowledge and skills required in the ASHA Standards. According to the ASHA guidelines, applicants for certification should maintain documentation of academic coursework, practicum hours, and practicum supervision verified by the program. This documentation must demonstrate that the applicant possesses the knowledge and skills delineated in Standard IV. Documentation must be made available (to ASHA) upon request. By keeping current and accurate advising check sheets, AuD graduate students and advisors know precisely which courses and competencies are needed to complete degree and certification requirements. Please also refer to <http://www.asha.org/Certification/2012-Audiology-Certification-Standards/> for the most current version of the 2012 Standards and Implementation Procedures for the Certificate of Clinical Competence in Audiology (see also Appendix G).

The Doctor of Audiology course schedule (Appendix G) lists all required courses and clinical practica for the AuD degree. All AuD graduate courses are offered on a once-a-year or every-other-year basis. As a result, any failure to complete a required graduate course during the appropriate semester of enrollment will likely delay graduation. A table outlining ASHA's 2012 Standards (Appendix E) provides a summary of specific knowledge and skills required by the ASHA certification guidelines and where within the AuD curriculum these areas are covered. Students should use this table to document what courses were taken, which courses met which standards, and when these courses were taken. Information regarding the completion of various knowledge/skill competencies in the ASHA certification standards will be addressed on the syllabi of courses.

Clock hours

Students who are enrolled in practicum and seeing patients in the clinic are required to log the amount of time spent participating in each session including preparation, report writing etc. Each student is required to keep track of his/her clock hours each semester including off-campus sites and in the fourth year. All clock hours need to be logged into Calipso and signed off on by the clinical preceptor. Students should also track clock hours via paper/electronic log each day as backup and keep a copy of these logs while they are in the program. **This information is necessary for graduation as well as ASHA certification. It is the student's responsibility to maintain accurate records.**

Upon graduation, should a student wish to obtain his/her Certificate of Clinical Competence from ASHA, the application form for the Certificate of Clinical Competence must be signed the Program Director. Every effort will be made to have this form signed and ready for students at the time of graduation. The graduate will need to submit this document to ASHA for certification.

Clinical Rotation Credits

AuD students need to complete a minimum of 32 clinical credits to graduate. Clinical experiences are distributed across eleven semesters. An example of how the clinical experiences progress through the program is shown below:

1st year –

- Fall – observe at UCH Boulder clinic, clinical labs (SLHS 5918 – 1 credit)
- Spring – observe/assist at UCH Boulder clinic, clinical labs (SLHS 5918 – 1 credit)

2nd year –

- Summer – UCH Boulder clinic, various specialty opportunities (~8 hours/wk) (SLHS 5928 – 2 credits)
- Fall – UCH Boulder clinic, various specialty opportunities (~8 hours/wk) (SLHS 5928 – 2 credits)
- Spring – UCH Boulder clinic, various specialty opportunities (~8 hours/wk) (SLHS 5928 – 2 credits)

3rd year –

- Summer – off site 3x/week (24+ hours/week) (SLHS 5938 – 4 credits)
- Fall – off site 2x/week (16+ hours/wk) (SLHS 5938/5948 – 4 credits)
- Spring – off site 2x/week (16+ hours/wk) (SLHS 5938/5948 – 4 credits)

4th year –

- Externship (12 months) (SLHS 6938/6948 – 13 credits total)

Annual requirements

Students are required to complete training in Universal Precautions and HIPAA annually (trainings for both are offered through CU). CPR training is required; proof of up-to-date CPR training must be provided to the SLHC Administrative Assistant (certification is typically good for two years). Students are also required to provide documentation of immunizations and a complete a criminal background check. These documents should be turned into the SLHC Administrative Assistant.

Liability Insurance

Liability Insurance needs to be obtained by the beginning of the fall semester, prior to the beginning of practicum beginning at the commencement of the AuD program. Liability insurance policies are typically valid for one full year. Proof of liability insurance needs to be submitted to the SLHS Administrative Assistant each fall. Liability insurance is available through ASHA or AAA. Failure to possess up-to-date liability insurance will result in inability of the student to take part in clinical activities.

Evaluation of Clinical Practicum

Practical Exams

Clinical practical exams are conducted during the 1st year of the program. The practical exam consists of the following components:

- Earmold impression
- Electroacoustic evaluation of hearing aid and interpretation of results
- Programming of hearing aid
- Real Ear assessment
- Case history
- Immittance testing
- Basic audiometric test battery
 - Pure tone air and bone conduction
 - Speech audiometry
 - Masking as needed
- Interpretation of test results
- Counseling patient regarding evaluation results

Students should be prepared to answer clinical questions relative to the component being assessed. Each component of the practical exam must be passed in order for the student to move on to SLHS 5928.

Practicum

Student clinicians will be assigned to one or more clinical preceptors during each semester of practicum. According to requirements for ASHA certification, the amount of supervision will be dependent upon student clinician skill levels and needs.

Students are strongly encouraged to schedule a time to meet with his/her clinical preceptor at the beginning of each semester and as needed throughout the semester. These meetings can be used to reflect and evaluate clinical performance, discuss areas of strengths and weaknesses, discuss proposed plans and goals, or communicate upcoming responsibilities.

Evaluation and Remediation Procedures for Audiology Clinical Practicum

Students will receive written and verbal feedback from their clinical preceptors during each semester. Students are encouraged to discuss individual learning styles with their clinical preceptors to facilitate clinical learning. A formal evaluation will be completed by preceptors using Calipso at midterm and the final of the semester.

At the midterm and final evaluations the student and preceptor meet to discuss the semester and the completed evaluation form. This is a mechanism for the student and the clinical preceptor to identify areas of strength, as well as areas needing improvement and possibly remediation.

Failure of a student clinician to demonstrate expected levels of performance in any area of clinical or professional skills will be recorded on the evaluation. The Director for Audiology

Clinical Education and the clinical preceptor for that practicum assignment will discuss specific recommendations for those areas that are not at expected performance levels; these recommendations will be incorporated into a remediation plan.

Remediation procedures for clinical and professional competencies will result when the student fails to demonstrate clinical knowledge and or skills at the level expected given the student's level in the program. Guidelines regarding remediation and probation for below satisfactory performance are outlined in the SLHS Graduate Handbook, available on the SLHS website (www.colorado.edu/slhs) .

Lines of Communication

We hope that students will be able to discuss most concerns directly with the involved parties but know that situations can arise in which other advice is needed. Audiology faculty, the SLHS department chair, and the graduate program director are all available to discuss student concerns. Please see the SLHS Graduate Handbook for the grievance policy.

Certification and Licensure

At the successful completion of the AuD program, students are eligible to apply for ASHA certification (CCC-A). The Praxis II exam in Audiology (code: 5342) is required for ASHA certification. Information about the exam is available at <http://www.asha.org/students/praxis/>. The Praxis II exam is administered by the Educational Testing Service. The website is www.ets.org/praxis. The address is:

ETS – Praxis Series
P.O. Box 6052
Princeton, NJ 08541-6052
Phone number: 800-772-9476

It is recommended that students register for and take this exam at the end of Year III after completion of all coursework, but prior to the end of the Fall semester of the 4th year externship. The Praxis II exam scores should be reported directly to the SLHS Department. It is recommended that students print and keep a copy of their results for their records after completing the exam. Students can identify specific recipients to receive a copy of their Praxis score when they register to take the exam. Codes for these recipients are:

- For SLHS, 0037 (**Be sure to list this code so that our department receives a copy of your results!)
- For School of Education, 4841
- For ASHA, 5031

The application for ASHA certification is available in Calipso as well as online at <http://www.asha.org>. At the time of graduation, the Director of Clinical Audiology Education will print a completed application for ASHA certification and have it signed by the program director; it will be ready for pick up by the student on graduation day. Students can contact the ASHA Action Center at 800-498-2071 for assistance/questions.

Certification is also available through the American Board of Audiology (ABA). Information about ABA certification can be found at <http://www.americanboardofaudiology.org/about/about.html>. Board Certification in Audiology requires a minimum of 2000 hours of direct patient care supervised by a licensed audiologist. A handbook containing application information and materials can be found at <http://www.americanboardofaudiology.org/pdf/BCHandbook201303.pdf>.

State licensure/registration is required in most states to practice Audiology, and the requirements vary by state. Colorado state licensure requirement information, instructions and application forms are available at <http://cdn.colorado.gov/cs/Satellite/DORA-Reg/CBON/DORA/1251632508562>. Check individual state requirements if you are applying for jobs elsewhere.

Appendix A: The Health Insurance Portability and Accountability Act (HIPAA)

HIPAA and Privacy (from University of Colorado Hospital)

The Health Insurance Portability and Accountability Act (HIPAA) was designed to ensure the privacy and security of patient information and give patients greater rights related to their information.

Patient information is referred to as Protected Health Information (PHI).

- Privacy covers all forms of information maintained or disclosed, including paper, electronic and oral.
- Security refers to electronic PHI only. We are required to control access and protect information from accidental or intentional disclosure to unauthorized persons and to protect it from alteration, destruction or loss

Your responsibilities related to privacy and security.

- Only share information with those that have a “need to know” the information in order to perform their job duties.
- Share only the minimum amount of information required. For example, distributing a report with patient identifying information on it, such as name or medical record #, when those receiving the report did not need to know the information.
 - This does not apply to information needed to treat the patient.
 - Remember that any information, not just name or medical record number can be used to identify a patient. This could include things like a unique injury or occupation. Even if there is no name or medical record number information must be protected if it can be used to identify patients.
 - Refer requests for copies of patient information to Health Information Management. Trained staff will track and release the information. Exceptions may be made if a referring physician requires information in order to treat the patient.
 - Keep your passwords secure. If you believe someone might have learned your password contact the help desk immediately so your password can be deactivated and reissued. You are responsible for all accesses under your password.
 - Keep patient information secure. When unattended, lock it up. If information is shared with or learned by someone without a need to know the information it is a disclosure that must be tracked and is a potential violation.
 - Discuss patient information, when possible, in private areas. If a private area is not available speak in a low to moderate voice to prevent the information from being overheard.

- Ask patients, preferably in private, before sharing their information in front of someone.
- Do not review patient information, including demographic information, unless you have a need to do so in order to perform your job duties.
- Do not store patient information on a mobile device unless it is encrypted.
- Dispose of all paper in confidential trash bins so that it is properly destroyed.
- Report any suspected violations to your manager or director, the privacy officer or the Compliance Hotline, 877-454-6344. Reports can be anonymous and the organization is prohibited from retaliating for reports that are believed to be privacy or security violations.
 - Unfounded, malicious reports, however, may subject you to disciplinary action.
 - Failure to report suspected violations can result in disciplinary action.

Sanctions for failure to follow privacy and security regulations:

- The organization will enforce disciplinary action up to and including termination.
- Health and Human Services/Office for Civil Rights can levy fines (\$100 - \$1.5 million) on the individual as well as the organization for violations. In addition, criminal penalties, including up to 10 years in jail can be assessed.

Appendix B: Infection Control: Standard Precautions in Health Care

(adapted from WHO 2007)

Background

Standard precautions are meant to reduce the risk of transmission of bloodborne and other pathogens from both recognized and unrecognized sources. They are the basic level of infection control precautions which are to be used, as a minimum, in the care of all patients.

Hand hygiene is a major component of standard precautions and one of the most effective methods to prevent transmission of pathogens associated with health care. In addition to hand hygiene, the use of **personal protective equipment** should be guided by **risk assessment** and the extent of contact anticipated with blood and body fluids, or pathogens.

In addition to practices carried out by health workers when providing care, all individuals (including patients and visitors) should comply with infection control practices in health-care settings. The control of spread of pathogens from the source is key to avoid transmission. Among source control measures, **respiratory hygiene/cough etiquette**, developed during the severe acute respiratory syndrome (SARS) outbreak, is now considered as part of standard precautions.

Worldwide escalation of the use of standard precautions would reduce unnecessary risks associated with health care. Promotion of an **institutional safety climate** helps to improve conformity with recommended measures and thus subsequent risk reduction. Provision of adequate staff and supplies, together with leadership and education of health workers, patients, and visitors, is critical for an enhanced safety climate in health-care settings.

Important advice

- Promotion of a safety climate is a cornerstone of prevention of transmission of pathogens in health care.
- Standard precautions should be the minimum level of precautions used when providing care for all patients.
- Risk assessment is critical. Assess all health-care activities to determine the personal protection that is indicated.
- Implement source control measures for all persons with respiratory symptoms through promotion of respiratory hygiene and cough etiquette.

Hand hygiene

- Perform hand hygiene by means of hand rubbing or hand washing (see detailed indications in table).
- Perform hand washing with soap and water if hands are visibly soiled, or exposure to spore-forming organisms is proven or strongly suspected, or after using the restroom. Otherwise, if resources permit, perform hand rubbing with an alcohol-based preparation.
- Ensure availability of hand-washing facilities with clean running water.
- Ensure availability of hand hygiene products (clean water, soap, single use clean towels, alcohol-based hand rub). Alcohol-based hand rubs are available at the point of care.

Personal protective equipment (PPE)

- ASSESS THE RISK of exposure to body substances or contaminated surfaces BEFORE any health-care activity. **Make this a routine!**
- Select PPE based on the assessment of risk:
 - clean non-sterile gloves
 - clean, non-sterile fluid-resistant gown
 - mask and eye protection or a face shield.

Respiratory hygiene and cough etiquette

- Cover the mouth and nose when coughing or sneezing.
- Hand hygiene after contact with respiratory secretions.
- Spatial separation of persons with acute febrile respiratory symptoms.

Health-care facility recommendations for standard precautions: key elements at a glance

1. Hand hygiene

Summary technique:

- Wash hands whenever they are visibly soiled. Hand washing (40–60 sec): wet hands and apply soap; rub all surfaces; rinse hands and dry thoroughly with a single use towel; use towel to turn off faucet.
- Rub hands for hand hygiene, but wash them when they are visibly soiled! Hand rubbing (20–30 sec): apply enough product to cover all areas of the hands; rub hands until dry.

Summary indications:

- Before and after any direct patient contact and between patients, whether or not gloves are worn.
- Immediately after gloves are removed.
- Before handling an invasive device.
- After touching blood, body fluids, secretions, excretions, non-intact skin, and contaminated items, even if gloves are worn.
- During patient care, when moving from a contaminated to a clean body site of the patient.
- After contact with inanimate objects in the immediate vicinity of the patient.

2. Gloves

- Wear when touching blood, body fluids, secretions, excretions, mucous membranes, nonintact skin.
- Change between tasks and procedures on the same patient after contact with potentially infectious material.
- Remove after use, before touching non-contaminated items and surfaces, and before going to another patient. Perform hand hygiene immediately after removal.

3. Facial protection (eyes, nose, and mouth)

- Wear (1) a surgical or procedure mask and eye protection (eye visor, goggles) or (2) a face shield to protect mucous membranes of the eyes, nose, and mouth during activities

that are likely to generate splashes or sprays of blood, body fluids, secretions, and excretions.

4. Gown

- Wear to protect skin and prevent soiling of clothing during activities that are likely to generate splashes or sprays of blood, body fluids, secretions, or excretions.
- Remove soiled gown as soon as possible, and perform hand hygiene.

5. Prevention of needle stick and injuries from other sharp instruments²

Use care when:

- Handling needles, scalpels, and other sharp instruments or devices.
- Cleaning used instruments.
- Disposing of used needles and other sharp instruments.

6. Respiratory hygiene and cough etiquette

Persons with respiratory symptoms should apply source control measures:

- Cover their nose and mouth when coughing/sneezing with tissue or mask, dispose of used tissues and masks, and perform hand hygiene after contact with respiratory secretions.

Health-care facilities should:

- Place acute febrile respiratory symptomatic patients at least 1 metre (3 feet) away from others in common waiting areas, if possible.
- Post visual alerts at the entrance to health-care facilities instructing persons with respiratory symptoms to practise respiratory hygiene/cough etiquette.
- Consider making hand hygiene resources, tissues and masks available in common areas and areas used for the evaluation of patients with respiratory illnesses.

7. Environmental cleaning

- Use adequate procedures for the routine cleaning and disinfection of environmental and other frequently touched surfaces.

8. Linens

Handle, transport, and process used linen in a manner which:

- Prevents skin and mucous membrane exposures and contamination of clothing.
- Avoids transfer of pathogens to other patients and or the environment.

9. Waste disposal

- Ensure safe waste management.
- Treat waste contaminated with blood, body fluids, secretions and excretions as clinical waste, in accordance with local regulations.
- Human tissues and laboratory waste that is directly associated with specimen processing should also be treated as clinical waste.
- Discard single use items properly.

10. Patient care equipment

- Handle equipment soiled with blood, body fluids, secretions, and excretions in a manner that prevents skin and mucous membrane exposures, contamination of clothing, and transfer of pathogens to other patients or the environment.
- Clean, disinfect, and reprocess reusable equipment appropriately before use with another patient.

1 For more details, see: WHO Guidelines on Hand Hygiene in Health Care (Advanced draft), at:
http://www.who.int/patientsafety/information_centre/ghhad_download/en/index.html.

2 The SIGN Alliance at:
http://www.who.int/injection_safety/sign/en/

University of Colorado Hospital - Hand Hygiene Policy

Policy

Hand antisepsis is the single most effective modality for preventing the spread of infection. Many recent studies have shown that alcohol-based waterless antiseptic agents are significantly more effective in reducing the microbial load on hands than washing with soap and water. Other studies have demonstrated that inclusion of emollients and lotions in these waterless antiseptic agents may actually be more effective in maintaining skin integrity than repeated use of soap and water. Therefore, the Center for Disease Control and Prevention has recommended that the use of waterless antiseptic agents for hand hygiene in the health care setting is "highly preferable" to the use of antimicrobial soap and water when the hands are not visibly soiled.

I. Indications for hand antisepsis

If hands are not visibly soiled, use an alcohol-based waterless antiseptic agent for routinely decontaminating hands:

- A. **before entry into an occupied patient room**
- B. **upon exit from an occupied patient room**
- C. after contact with a patient's skin (does not apply in situations involving mass immunization/skin testing of healthy employees/healthcare workers.)
- D. after contact with body fluids or excretions, mucous membranes, non-intact skin or wound dressings, as long as hands are not visibly soiled
- E. if moving from a contaminated body site to a clean body site during patient care
- F. after contact with inanimate objects (including medical equipment, furniture and environmental surfaces) in the occupied patient room
- G. **before** caring for patients with severe neutropenia or other forms of severe immune suppression
- H. **before** donning sterile gloves when inserting a central intravenous catheter
- I. **before** inserting indwelling urinary catheters, peripheral vascular catheters, or other invasive devices that do not require a surgical procedure
- J. **ALWAYS** after removing gloves
- K. After smoking, or applying make-up/lipstick/lip balm.
- L. After coughing, sneezing and/or blowing your nose.
- M. After completion of the work shift prior to leaving the health care delivery environment.

II. Indications for handwashing

- A. Wash hands with a non-antimicrobial soap and water or an antimicrobial soap and water
 1. when hands are visibly soiled or contaminated with proteinaceous material.
 2. after contact with body fluids or excretions, mucous membranes, non-intact skin or wound dressings, especially if hands are visibly soiled
 3. After using the bathroom.
 4. Before and after eating and drinking.
 5. Wash hands with non-antimicrobial soap and water or with antimicrobial soap and water if exposure to *Clostridium difficile* or *Bacillus anthracis* is suspected or proven. The physical action of washing and rinsing hands under such circumstances is recommended

because alcohols, chlorhexidine, iodophors and other antiseptic agents have poor activity against spores.

- B. Hand antisepsis using an antimicrobial soap may be practiced
 - 1. in settings where time constraints are not an issue and easy access to hand hygiene facilities are insured, or
 - 2. in rare instances, when a caregiver is intolerant of the waterless antiseptic agent used in the institution.

III. Effective Hand Hygiene Procedures - to be effective, hand hygiene should be performed according to one of the following procedures.

A. ANTISEPTIC HANDRUB PROCEDURE

- 1. Alcohol-based waterless antiseptic agents will be used.
- 2. Apply dime-sized quantity of product to palm of one hand and rub hands together, covering all surfaces (between fingers, palms, backs of hands, wrists, forearms, under and around fingernails) until hands are dry.
- 3. If an adequate volume of alcohol-based handrub is used, it should take 15-25 seconds for hands to dry.

B. HANDWASHING PROCEDURE:

- 1. Antimicrobial soap is generally used in patient care areas for handwashing.
- 2. Administrative and support departments are not required to use antimicrobial soap for routine handwashing. If bar soap is used in any of these areas, the used bar must be stored for use on/in a holder/rack that allows for drainage of water away from the soap.
- 3. Steps for effective handwashing:
 - a. Remove jewelry.
 - b. Turn on water – adjust to comfort level. Avoid using hot water; repeated exposure to hot water may increase risk of dermatitis.
 - c. Wet hands under running water.
 - d. Keeping hands lower than elbows, apply 3-5 ml of soap from dispenser.
 - e. Rub hands together, using friction to clean between fingers, palms, backs of hands, wrists, forearms, and under fingernails.
 - 1. For routine handwashing, this procedure should last at least 15 seconds.
 - 2. For preparation to perform or assist with invasive procedures (outside of the operating room suites), this procedure should last 30-45 seconds.
 - f. Keeping fingers lower than wrists, rinse under running water. Let water run from wrists, over hands and off ends of fingers. Do not touch faucet handles with clean bare hands – let water run until hands are dried.
 - g. Dry hands with paper towel. Discard paper towel.
 - h. Using clean, dry paper towel, turn off faucet (if hand operated).
 - i. Use paper towel to open bathroom door. Discard paper towel at first opportunity.
- 4. Standing water (basins or bowls of collected, caught or poured standing water) may not be used for effective handwashing at any time. The contained pool of water is thoroughly contaminated by the initial entry, becoming increasingly contaminated as more entries are made, and subsequently contaminating everything entering or contacting the water in the bowl or basin.

IV. Skin Care

- A. Lotion may be applied to keep skin smooth and free of cracking. As petroleum-based lotions and creams can degrade latex and some vinyl gloves, non-petroleum-based products are recommended for use.

- B. Barrier lotions and hand creams may be used to protect hands from problems caused by excess water, harsh soaps, or irritation caused by prolonged exposure to irritant substances. Use of a barrier lotion or cream does not relieve the employee of the responsibility of appropriate hand hygiene or proper glove utilization.
- C. Lotion and cream dispensers:
 - 1. Pump or squirt dispensers containing lotion or cream must be provided if more than one person on the unit will use the product.
 - 2. A “tub” or “jar” containing lotion or cream may only be used by one person, as the first person to use the product contaminates the contents. The remaining product in the tub can become a source of contamination for all others who access it. If “tub” or “jar” product MUST be used, it must be assigned to a specific patient or employee, be labeled with the name of the sole user, and be used by that person only.

V. Other Aspects of Hand Hygiene

- A. Direct patient care providers (see Definitions and Appendix B) may not wear artificial fingernails or extenders when providing direct care for or having direct contact with patients at University of Colorado Hospital. Natural nail tips should be kept less than 1/4-inch long.
- B. Wear gloves when contact with blood or other potentially infectious materials, , mucous membranes, and non-intact skin could occur.
- C. Remove gloves after caring for a patient. Do not wear the same pair of gloves for the care of more than one patient, and do not wash gloves between patients (does not apply in situations involving mass immunization/skin testing of healthy employees/healthcare workers.).
- D. Change gloves and perform hand hygiene during patient care if moving from a contaminated body site to a clean body site.
- E. No recommendation on wearing rings in healthcare settings. (Unresolved issue at CDC)
- F. Do not add soap to a partially empty soap dispenser. This practice of “topping off” dispensers can lead to bacterial contamination of soap. Use of liquid soap dispensed from collapsible bags that cannot be refilled is recommended.

References:

- 1. Association for Professionals in Infection Control and Epidemiology; “Hand Hygiene”, APIC Text of Infection Control and Epidemiology, 3rd Edition, 2009. LEVEL VI
- 2. Boyce, John M., Infection Control and Hospital Epidemiology; 18:622. LEVEL VI
- 3. Centers for Disease Control and Prevention (HICPAC/SHEA/APIC/IDSA Hand Hygiene Task Force), Guideline for Hand Hygiene in Healthcare Settings; October, 2002. LEVEL VI
- 4. Mayhall, C. Glenn, editor. Hospital Epidemiology and Infection Control, Lippincott, Williams & Wilkins, 3rd Edition, 2004. LEVEL VI
- 5. Rutala, Wm.; Chemical Germicides in Health Care; Polyscience and APIC, 2010. LEVEL VI

Policies/Procedures:

- I.** Toys that are provided by University of Colorado Hospital, and are acceptable for use in health care areas include only those that can be cleaned and disinfected. Acceptable toys include toys made of plastic, metal and vinyl. No toys will be used that cannot be immersed in cleaning solution. Fabric, fur toys, dolls or stuffed animals are prohibited as community/shared playthings. Wooden toys that absorb fluids are not acceptable.
- II.** Toys that have been played with will be cleaned and disinfected after use by each child. All toys will be cleaned at least daily. Play materials are inspected regularly by staff and discarded if worn or heavily soiled.
- III.** Infant and toddler toys that have been put in the child's mouth should be cleaned and disinfected between individual children's use. When an infant or toddler finishes playing with a toy, the toy should be retrieved and placed in a bin reserved for dirty toys. This bin should be out of the reach of children. Toys can be cleaned at a later time and transferred back to the area for clean toys.
- IV.** To clean and disinfect toys:
 - A.** Remove surface contamination
 1. Soap and water -
 - a. Scrub the toy in warm, soapy water. If necessary use a brush to reach into crevices.
 - b. Rinse toy in clean water, OR
 2. Use a commercial, disposable, pre-moistened cloth "wipe" according to manufacturer's instructions on label to remove surface contamination
 - B.** Disinfect toy after cleaning -
 1. Immerse toys in, or squirt onto and cover toys with, a properly diluted solution of hospital approved disinfectant. Assure 10 minute contact time for disinfectant on toy. Rinse well and let air dry.
 2. Use a commercial, disposable, cloth "wipe" pre-moistened with hospital approved disinfectant(s) to wipe down toy. Assure contact of wipes into crevices on toy. Use wipes according to manufacturer's directions on label, making sure to achieve recommended 5 minute contact time for solution.
- V.** Daily documentation of cleaning and disinfection of toys will be maintained on each unit where toys are provided.

References:

- **CDC, Division of Healthcare Quality Promotion:** "Washing and Disinfecting Toys". January 1997. LEVEL VI
- Colorado Department of Health. The ABC's of Safe and Healthy Child Care, 2/13/98. LEVEL VI
- The Children's Hospital, Denver Colorado. Cleaning of Toys and Play Area, 6/98.
- Kaiser Permanente, Colorado Region. "Toys in Patient Waiting and Patient Care Areas". May 1993.
- Association for Professionals in Infection Control and Epidemiology, Inc., APIC Text of Infection Control and Epidemiology. 2010. LEVEL VI

Handling ITE's and Earmolds

There is a danger of spreading bacterial and fungal infections through handling earmolds and hearing aids without disinfecting them first. Also, there may be blood or ear drainage on the

device, which may or may not be visible at first glance. Therefore, do not handle these devices with your bare hands before disinfecting them. Here are several precautionary options:

1. Use a disinfectant wipe to handle the hearing aid/earmold. Have the patient place the device directly into the wipe. You can then wipe the device before handling it **OR**
2. Use a bowl or tissue to capture the device, and then disinfect it with a wipe

Other notes to remember:

1. It is possible there could be dried blood or mucous in the sound ports or vents. Gloves are available if needed.
2. Always sterilize tools used to clean the aid when blood or mucous is found. Disinfect the tools when blood or mucous is not present.
3. Never use any tool or instrument that has not been cleaned, disinfected, or sterilized properly.

Toys

In audiology clinics many times there are toys in the waiting room, exam room, and/or in the sound booth. Follow these guidelines to help control infection:

1. Disinfect used toys daily.
2. Use care when handling the toys. Wash your hands after handling/disinfecting the toys.
3. Always replace broken or old toys.

Disposable Items in Clinic

The following items are disposable in our clinic, therefore eliminating the need for infection control:

1. Insert earphones

Non-Disposable Items in Clinic

These are not disposable:

1. Ear impressions syringes and probe light tips are to be cleaned and disinfected after each use. If blood or mucous is noted, sterilize these items.
2. Immittance probe tips are to be sterilized after each use.
3. Otoscopic specula

Appendix C: Scope of Practice in Audiology

Ad Hoc Committee on Scope of Practice in Audiology
American Speech-Language-Hearing Association. (2004). *Scope of Practice in Audiology* [Scope of Practice].

Available from www.asha.org/policy.

Index terms: scope of practice

doi:10.1044/policy.SP2004-00192

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About This Document

This scope of practice in audiology statement is an official policy of the American Speech-Language-Hearing Association (ASHA). The document was developed by the Coordinating Committee for the ASHA vice president for professional practices in audiology and approved in 2003 by the Legislative Council (11-03). Members of the coordinating committee include Donna Fisher Smiley (chair), Michael Bergen, and Jean-Pierre Gagné with Vic S. Gladstone and Tina R. Mullins (ex officios). Susan Brannen, ASHA vice president for professional practices in audiology (2001–2003), served as monitoring vice president. This statement supersedes the Scope of Practice in Audiology statement (LC 08-95), (ASHA, 1996).

Statement of Purpose The purpose of this document is to define the scope of practice in audiology in order to (a) describe the services offered by qualified audiologists as primary service providers, case managers, and/or members of multidisciplinary and interdisciplinary teams; (b) serve as a reference for health care, education, and other professionals, and for consumers, members of the general public, and policy makers concerned with legislation, regulation, licensure, and third party reimbursement; and (c) inform members of ASHA, certificate holders, and students of the activities for which certification in audiology is required in accordance with the ASHA Code of Ethics. Audiologists provide comprehensive diagnostic and treatment/rehabilitative services for auditory, vestibular, and related impairments. These services are provided to individuals across the entire age span from birth through adulthood; to individuals from diverse language, ethnic, cultural, and socioeconomic backgrounds; and to individuals who have multiple disabilities. This position statement is not intended to be exhaustive; however, the activities described reflect current practice within the profession. Practice activities related to emerging clinical, technological, and scientific developments are not precluded from consideration as part of the scope of practice of an audiologist. Such innovations and advances will result in the periodic revision and updating of this document. It is also recognized that specialty areas identified within the scope of practice will vary among the individual providers. ASHA also recognizes that credentialed professionals in related fields may have knowledge, skills, and experience that could be applied to some areas within the scope of audiology practice. Defining the scope of practice of audiologists is not meant to exclude other appropriately credentialed postgraduate professionals from rendering services in common practice areas.

Audiologists serve diverse populations. The patient/client population includes persons of different race, age, gender, religion, national origin, and sexual orientation. Audiologists' caseloads include

individuals from diverse ethnic, cultural, or linguistic backgrounds, and persons with disabilities. Although audiologists are prohibited from discriminating in the provision of professional services based on these factors, in some cases such factors may be relevant to the development of an appropriate treatment plan. These factors may be considered in treatment plans only when firmly grounded in scientific and professional knowledge.

This scope of practice does not supersede existing state licensure laws or affect the interpretation or implementation of such laws. It may serve, however, as a model for the development or modification of licensure laws. The schema in Figure 1 depicts the relationship of the scope of practice to ASHA's policy documents that address current and emerging audiology practice areas; that is, preferred practice patterns, guidelines, and position statements. ASHA members and ASHA-certified professionals are bound by the ASHA Code of Ethics to provide services that are consistent with the scope of their competence, education, and experience (ASHA, 2003). There are other existing legislative and regulatory bodies that govern the practice of audiology.

Figure 1. Conceptual Framework of ASHA Standards and Policy Statements



Framework for Practice

The practice of audiology includes both the prevention of and assessment of auditory, vestibular, and related impairments as well as the habilitation/rehabilitation and maintenance of persons with these impairments. The overall goal of the provision of audiology services should be to optimize and enhance the ability of an individual to hear, as well as to communicate in his/her everyday or natural environment. In addition, audiologists provide comprehensive services to individuals with normal hearing who interact with persons with a hearing impairment. The overall goal of audiologic services is to improve the quality of life for all of these individuals.

The World Health Organization (WHO) has developed a multipurpose health classification system known as the International Classification of Functioning, Disability, and Health (ICF) (WHO, 2001). The purpose of this classification system is to provide a standard language and framework for the description of functioning and health. The ICF framework is useful in describing the role of audiologists in the prevention, assessment, and habilitation/rehabilitation of auditory, vestibular, and other related impairments and restrictions or limitations of functioning.

The ICF is organized into two parts. The first part deals with Functioning and Disability while the second part deals with Contextual Factors. Each part has two components.

The components of Functioning and Disability are:

- **Body Functions and Structures:** Body Functions are the physiological functions of body systems and Body Structures are the anatomical parts of the body and their components. Impairments are limitations or variations in Body Function or Structure such as a deviation or loss. An example of a Body Function that might be evaluated by an audiologist would be hearing sensitivity. The use of tympanometry to assess the mobility of the tympanic membrane is an example of a Body Structure that might be evaluated by an audiologist.
- **Activity/Participation:** In the ICF, Activity and Participation are realized as one list. Activity refers to the execution of a task or action by an individual. Participation is the involvement in a life situation. Activity limitations are difficulties an individual may experience while executing a given activity. Participation restrictions are difficulties that may limit an individual's involvement in life situations. The Activity/Participation construct thus represents the effects that hearing, vestibular, and related impairments could have on the life of an individual. These effects could include the ability to hold conversations, participate in sports, attend religious services, understand a teacher in a classroom, and walk up and down stairs.

The components of Contextual Factors are:

- **Environmental Factors:** Environmental Factors make up the physical, social, and attitudinal environment in which people live and conduct their lives. Examples of Environmental Factors, as they relate to audiology, include the acoustical properties of a given space and any type of hearing assistive technology.
- **Personal Factors:** Personal Factors are the internal influences on an individual's functioning and disability and are not a part of the health condition. These factors may include but are not limited to age, gender, social background, and profession.

Functioning and Disability are interactive and evolutionary processes. Figure 2 illustrates the interaction of the various components of the ICF. Each component of the ICF can be expressed on a continuum of function. On one end of the continuum is intact functioning. At the opposite end of the continuum is completely compromised functioning. Contextual Factors (Environmental and Personal Factors) may interact with any of the components of functioning and disability. Environmental and Personal Factors may act as facilitators or barriers to functioning.

The scope of practice in audiology encompasses all of the components of the ICF. During the assessment phase, audiologists perform tests of Body Function and Structure. Examples of these types of tests include otoscopic examination, puretone audiometry, tympanometry, otoacoustic emissions measurements, and speech audiometry. Activity/Participation limitations and restrictions are sometimes addressed by audiologists through case history, interview, questionnaire, and counseling. For example, a question such as "Do you have trouble understanding while on the telephone?" or "Can you describe the difficulties you experience when you participate in a

conversation with someone who is not familiar to you?” would be considered an assessment of Activity/Participation limitation or restriction. Questionnaires that require clients to report the magnitude of difficulty that they experience in certain specified settings can sometimes be used to measure aspects of Activity/Participation. For example: “Because of my hearing problems, I have difficulty conversing with others in a restaurant.” In addition, Environmental and Personal Factors also need to be taken into consideration by audiologists as they treat individuals with auditory, vestibular, and other related impairments. In the above question regarding conversation in a restaurant, if the factor of “noise” (i.e., a noisy restaurant) is added to the question, this represents an Environmental Factor. Examples of Personal Factors might include a person's background or culture that influences his or her reaction to the use of a hearing aid or cochlear implant. The use of the ICF framework (WHO, 2001) may help audiologists broaden their perspective concerning their role in evaluating a client's needs or when designing and providing comprehensive services to their clients. Overall, audiologists work to improve quality of life by reducing impairments of body functions and structures, Activity limitations/Participation restrictions and Environmental barriers of the individuals they serve.

Figure 2. Application of WHO (2001) Framework to the Practice of Audiology



Definition of an Audiologist

Audiologists are professionals engaged in autonomous practice to promote healthy hearing, communication competency, and quality of life for persons of all ages through the prevention, identification, assessment, and rehabilitation of hearing, auditory function, balance, and other related systems. They facilitate prevention through the fitting of hearing protective devices, education programs for industry and the public, hearing screening/conservation programs, and research. The audiologist is the professional responsible for the identification of impairments and dysfunction of the auditory, balance, and other related systems. Their unique education and training provides them with the skills to assess and diagnose dysfunction in hearing, auditory function, balance, and related disorders. The delivery of audiologic (re)habilitation services includes not only

the selecting, fitting, and dispensing of hearing aids and other hearing assistive devices, but also the assessment and follow-up services for persons with cochlear implants. The audiologist providing audiologic (re)habilitation does so through a comprehensive program of therapeutic services, devices, counseling, and other management strategies. Functional diagnosis of vestibular disorders and management of balance rehabilitation is another aspect of the professional responsibilities of the audiologist. Audiologists engage in research pertinent to all of these domains. Audiologists currently hold a master's or doctoral degree in audiology from a program accredited by the Council on Academic Accreditation in Audiology and Speech-Language Pathology (CAA) of the American Speech-Language-Hearing Association. ASHA-certified audiologists complete a supervised postgraduate professional experience or a similar supervised professional experience during the completion of the doctoral degree as described in the ASHA certification standards. Beginning January 1, 2012, all applicants for the Certificate of Clinical Competence in Audiology must have a doctoral degree from a CAA-accredited university program. Demonstration of continued professional development is mandated for the maintenance of the Certificate of Clinical Competence in Audiology. Where required, audiologists are licensed or registered by the state in which they practice.

Professional Roles and Activities

Audiologists serve a diverse population and may function in one or more of a variety of activities. The practice of audiology includes:

A. Prevention

1. Promotion of hearing wellness, as well as the prevention of hearing loss and protection of hearing function by designing, implementing, and coordinating occupational, school, and community hearing conservation and identification programs;
2. Participation in noise measurements of the acoustic environment to improve accessibility and to promote hearing wellness.

B. Identification

1. Activities that identify dysfunction in hearing, balance, and other auditory related systems;
2. Supervision, implementation, and follow-up of newborn and school hearing screening programs;
3. Screening for speech, orofacial myofunctional disorders, language, cognitive communication disorders, and/or preferred communication modalities that may affect education, health, development or communication and may result in recommendations for rescreening or comprehensive speech-language pathology assessment or in referral for other examinations or services;
4. Identification of populations and individuals with or at risk for hearing loss and other auditory dysfunction, balance impairments, tinnitus, and associated communication impairments as well as of those with normal hearing;
5. In collaboration with speech-language pathologists, identification of populations and individuals at risk for developing speech-language impairments.

C. Assessment

1. The conduct and interpretation of behavioral, electroacoustic, and/or electrophysiologic methods to assess hearing, auditory function, balance, and related systems;

2. Measurement and interpretation of sensory and motor evoked potentials, electromyography, and other electrodiagnostic tests for purposes of neurophysiologic intraoperative monitoring and cranial nerve assessment;
3. Evaluation and management of children and adults with auditory-related processing disorders;
4. Performance of otoscopy for appropriate audiological management or to provide a basis for medical referral;
5. Cerumen management to prevent obstruction of the external ear canal and of amplification devices;
6. Preparation of a report including interpreting data, summarizing findings, generating recommendations and developing an audiologic treatment/ management plan;
7. Referrals to other professions, agencies, and/ or consumer organizations.

D. Rehabilitation

1. As part of the comprehensive audiologic (re)habilitation program, evaluates, selects, fits and dispenses hearing assistive technology devices to include hearing aids;
2. Assessment of candidacy of persons with hearing loss for cochlear implants and provision of fitting, mapping, and audiologic rehabilitation to optimize device use;
3. Development of a culturally appropriate, audiologic rehabilitative management plan including, when appropriate:
 - a. Recommendations for fitting and dispensing, and educating the consumer and family/caregivers in the use of and adjustment to sensory aids, hearing assistive devices, alerting systems, and captioning devices;
 - b. Availability of counseling relating to psycho social aspects of hearing loss, and other auditory dysfunction, and processes to enhance communication competence;
 - c. Skills training and consultation concerning environmental modifications to facilitate development of receptive and expressive communication;
 - d. Evaluation and modification of the audiologic management plan.
4. Provision of comprehensive audiologic rehabilitation services, including management procedures for speech and language habilitation and/or rehabilitation for persons with hearing loss or other auditory dysfunction, including but not exclusive to speechreading, auditory training, communication strategies, manual communication and counseling for psychosocial adjustment for persons with hearing loss or other auditory dysfunction and their families/caregivers;
5. Consultation and provision of vestibular and balance rehabilitation therapy to persons with vestibular and balance impairments;
6. Assessment and non-medical management of tinnitus using biofeedback, behavioral management, masking, hearing aids, education, and counseling;
7. Provision of training for professionals of related and/or allied services when needed;
8. Participation in the development of an Individual Education Program (IEP) for school-age children or an Individual Family Service Plan (IFSP) for children from birth to 36 months old;
9. Provision of in-service programs for school personnel, and advising school districts in planning educational programs and accessibility for students with hearing loss and other auditory dysfunction;
10. Measurement of noise levels and provision of recommendations for environmental modifications in order to reduce the noise level;

11. Management of the selection, purchase, installation, and evaluation of large-area amplification systems.

E. Advocacy/ Consultation

1. Advocacy for communication needs of all individuals that may include advocating for the rights/funding of services for those with hearing loss, auditory, or vestibular disorders;
2. Advocacy for issues (i.e., acoustic accessibility) that affect the rights of individuals with normal hearing;
3. Consultation with professionals of related and/or allied services when needed;
4. Consultation in development of an Individual Education Program (IEP) for school-age children or an Individual Family Service Plan (IFSP) for children from birth to 36 months old;
5. Consultation to educators as members of interdisciplinary teams about communication management, educational implications of hearing loss and other auditory dysfunction, educational programming, classroom acoustics, and large-area amplification systems for children with hearing loss and other auditory dysfunction;
6. Consultation about accessibility for persons with hearing loss and other auditory dysfunction in public and private buildings, programs, and services;
7. Consultation to individuals, public and private agencies, and governmental bodies, or as an expert witness regarding legal interpretations of audiology findings, effects of hearing loss and other auditory dysfunction, balance system impairments, and relevant noise-related considerations;
8. Case management and service as a liaison for the consumer, family, and agencies in order to monitor audiologic status and management and to make recommendations about educational and vocational programming;
9. Consultation to industry on the development of products and instrumentation related to the measurement and management of auditory or balance function.

F. Education/ Research/Administration

1. Education, supervision, and administration for audiology graduate and other professional education programs;
2. Measurement of functional outcomes, consumer satisfaction, efficacy, effectiveness, and efficiency of practices and programs to maintain and improve the quality of audiologic services;
3. Design and conduct of basic and applied audiologic research to increase the knowledge base, to develop new methods and programs, and to determine the efficacy, effectiveness, and efficiency of assessment and treatment paradigms; disseminate research findings to other professionals and to the public;
4. Participation in the development of professional and technical standards;
5. Participation in quality improvement programs;
6. Program administration and supervision of professionals as well as support personnel.

Practice Settings

Audiologists provide services in private practice; medical settings such as hospitals and physicians' offices; community and university hearing and speech centers; managed care systems; industry; the military; various state agencies; home health, subacute rehabilitation, long-term care, and intermediate-care facilities; and school systems. Audiologists provide academic education to students and practitioners in universities, to medical and surgical students and residents, and to other related professionals. Such education pertains to the identification, functional

diagnosis/assessment, and non-medical treatment/management of auditory, vestibular, balance, and related impairments.

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Appendix D: ASHA Code of Ethics



CODE OF ETHICS

Reference this material as: American Speech-Language-Hearing Association. (2016). Code of Ethics [Ethics]. Available from www.asha.org/policy.

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PREAMBLE

The American Speech-Language-Hearing Association (ASHA; hereafter, also known as “The Association”) has been committed to a framework of common principles and standards of practice since ASHA’s inception in 1925. This commitment was formalized in 1952 as the Association’s first Code of Ethics. This Code has been modified and adapted as society and the professions have changed. The Code of Ethics reflects what we value as professionals and establishes expectations for our scientific and clinical practice based on principles of duty, accountability, fairness, and responsibility. The ASHA Code of Ethics is intended to ensure the welfare of the consumer and to protect the reputation and integrity of the professions.

The ASHA Code of Ethics is a framework and focused guide for professionals in support of day-to-day decision making related to professional conduct. The Code is partly obligatory and disciplinary and partly aspirational and descriptive in that it defines the professional’s role. The Code educates professionals in the discipline, as well as students, other professionals, and the public, regarding ethical principles and standards that direct professional conduct.

The preservation of the highest standards of integrity and ethical principles is vital to the responsible discharge of obligations by audiologists, speech-language pathologists, and speech, language, and hearing scientists who serve as clinicians, educators, mentors, researchers, supervisors, and administrators. This Code of Ethics sets forth the fundamental principles and rules considered essential to this purpose and is applicable to the following individuals:

- a member of the American Speech-Language-Hearing Association holding the Certificate of Clinical Competence (CCC)
- a member of the Association not holding the Certificate of Clinical Competence (CCC)
- a nonmember of the Association holding the Certificate of Clinical Competence (CCC)
- an applicant for certification, or for membership and certification

By holding ASHA certification or membership, or through application for such, all individuals are automatically subject to the jurisdiction of the Board of Ethics for ethics complaint adjudication. Individuals who provide clinical services and who also desire membership in the Association must hold the CCC.

The fundamentals of ethical conduct are described by Principles of Ethics and by Rules of Ethics. The four Principles of Ethics form the underlying philosophical basis for the Code of Ethics and are reflected in the following areas: (I) responsibility to persons served professionally and to research participants, both human and animal; (II) responsibility for

one's professional competence; (III) responsibility to the public; and (IV) responsibility for professional relationships. Individuals shall honor and abide by these Principles as affirmative obligations under all conditions of applicable professional activity. Rules of Ethics are specific statements of minimally acceptable as well as unacceptable professional conduct.

The Code is designed to provide guidance to members, applicants, and certified individuals as they make professional decisions. Because the Code is not intended to address specific situations and is not inclusive of all possible ethical dilemmas, professionals are expected to follow the written provisions and to uphold the spirit and purpose of the Code. Adherence to the Code of Ethics and its enforcement results in respect for the professions and positive outcomes for individuals who benefit from the work of audiologists, speech-language pathologists, and speech, language, and hearing scientists.

TERMINOLOGY

ASHA Standards and Ethics – The mailing address for self-reporting in writing is American Speech-Language-Hearing Association, Standards and Ethics, 2200 Research Blvd., #313, Rockville, MD 20850.

advertising – Any form of communication with the public about services, therapies, products, or publications.

conflict of interest – An opposition between the private interests and the official or professional responsibilities of a person in a position of trust, power, and/or authority.

crime – Any felony; or any misdemeanor involving dishonesty, physical harm to the person or property of another, or a threat of physical harm to the person or property of another. For more details, see the “Disclosure Information” section of applications for ASHA certification found on www.asha.org/certification/AudCertification/ and www.asha.org/certification/SLPCertification/.

diminished decision-making ability – Any condition that renders a person unable to form the specific intent necessary to determine a reasonable course of action.

fraud – Any act, expression, omission, or concealment—the intent of which is either actual or constructive—calculated to deceive others to their disadvantage.

impaired practitioner – An individual whose professional practice is adversely affected by addiction, substance abuse, or health-related and/or mental health-related conditions.

individuals – Members and/or certificate holders, including applicants for certification.

informed consent – May be verbal, unless written consent is required; constitutes consent by persons served, research participants engaged, or parents and/or guardians of persons served to a proposed course of action after the communication of adequate information regarding expected outcomes and potential risks.

jurisdiction – The “personal jurisdiction” and authority of the ASHA Board of Ethics over an individual holding ASHA certification and/or membership, regardless of the individual’s geographic location.

know, known, or knowingly – Having or reflecting knowledge.

may vs. shall – May denotes an allowance for discretion; shall denotes no discretion.

misrepresentation – Any statement by words or other conduct that, under the circumstances, amounts to an assertion that is false or erroneous (i.e., not in accordance with the facts); any statement made with conscious ignorance or a reckless disregard for the truth.

negligence – Breaching of a duty owed to another, which occurs because of a failure to conform to a requirement, and this failure has caused harm to another individual, which led to damages to this person(s); failure to exercise the care toward others that a reasonable or prudent person would take in the circumstances, or taking actions that such a reasonable person would not.

nolo contendere – No contest.

plagiarism – False representation of another person’s idea, research, presentation, result, or product as one’s own through irresponsible citation, attribution, or paraphrasing; ethical misconduct does not include honest error or differences of opinion.

publicly sanctioned – A formal disciplinary action of public record, excluding actions due to insufficient continuing education, checks returned for insufficient funds, or late payment of fees not resulting in unlicensed practice.

reasonable or reasonably – Supported or justified by fact or circumstance and being in accordance with reason, fairness, duty, or prudence.

self-report – A professional obligation of self-disclosure that requires (a) notifying ASHA Standards and Ethics and (b) mailing a hard copy of a certified document to ASHA Standards and Ethics (see term above). All self-reports are subject to a separate ASHA Certification

review process, which, depending on the seriousness of the self-reported information, takes additional processing time.

shall vs. may – Shall denotes no discretion; may denotes an allowance for discretion.

support personnel – Those providing support to audiologists, speech-language pathologists, or speech, language, and hearing scientists (e.g., technician, paraprofessional, aide, or assistant in audiology, speech-language pathology, or communication sciences and disorders).

telepractice, teletherapy – Application of telecommunications technology to the delivery of audiology and speech-language pathology professional services at a distance by linking clinician to client/patient or clinician to clinician for assessment, intervention, and/or consultation. The quality of the service should be equivalent to in-person service.

written – Encompasses both electronic and hard-copy writings or communications.

PRINCIPLE OF ETHICS I

Individuals shall honor their responsibility to hold paramount the welfare of persons they serve professionally or who are participants in research and scholarly activities, and they shall treat animals involved in research in a humane manner.

RULES OF ETHICS

- A. Individuals shall provide all clinical services and scientific activities competently.
- B. Individuals shall use every resource, including referral and/or interprofessional collaboration when appropriate, to ensure that quality service is provided.
- C. Individuals shall not discriminate in the delivery of professional services or in the conduct of research and scholarly activities on the basis of race, ethnicity, sex, gender identity/gender expression, sexual orientation, age, religion, national origin, disability, culture, language, or dialect.
- D. Individuals shall not misrepresent the credentials of aides, assistants, technicians, support personnel, students, research interns, Clinical Fellows, or any others under their supervision, and they shall inform those they serve professionally of the name, role, and professional credentials of persons providing services.
- E. Individuals who hold the Certificate of Clinical Competence may delegate tasks related to the provision of clinical services to aides, assistants, technicians, support personnel, or any other persons only if those persons are adequately prepared and are appropriately supervised. The responsibility for the welfare of those being served remains with the certified individual.
- F. Individuals who hold the Certificate of Clinical Competence shall not delegate tasks that require the

unique skills, knowledge, judgment, or credentials that are within the scope of their profession to aides, assistants, technicians, support personnel, or any nonprofessionals over whom they have supervisory responsibility.

- G. Individuals who hold the Certificate of Clinical Competence may delegate to students tasks related to the provision of clinical services that require the unique skills, knowledge, and judgment that are within the scope of practice of their profession only if those students are adequately prepared and are appropriately supervised. The responsibility for the welfare of those being served remains with the certified individual.
- H. Individuals shall obtain informed consent from the persons they serve about the nature and possible risks and effects of services provided, technology employed, and products dispensed. This obligation also includes informing persons served about possible effects of not engaging in treatment or not following clinical recommendations. If diminished decision-making ability of persons served is suspected, individuals should seek appropriate authorization for services, such as authorization from a spouse, other family member, or legally authorized/appointed representative.
- I. Individuals shall enroll and include persons as participants in research or teaching demonstrations only if participation is voluntary, without coercion, and with informed consent.
- J. Individuals shall accurately represent the intended purpose of a service, product, or research endeavor and shall abide by established guidelines for clinical practice and the responsible conduct of research.
- K. Individuals who hold the Certificate of Clinical Competence shall evaluate the effectiveness of services provided, technology employed, and products dispensed, and they shall provide services or dispense products only when benefit can reasonably be expected.
- L. Individuals may make a reasonable statement of prognosis, but they shall not guarantee—directly or by implication—the results of any treatment or procedure.
- M. Individuals who hold the Certificate of Clinical Competence shall use independent and evidence-based clinical judgment, keeping paramount the best interests of those being served.
- N. Individuals who hold the Certificate of Clinical Competence shall not provide clinical services solely by correspondence, but may provide services via telepractice consistent with professional standards and state and federal regulations.
- O. Individuals shall protect the confidentiality and security of records of professional services provided, research and scholarly activities conducted, and products dispensed. Access to these records shall be allowed only when doing so is necessary to protect the welfare of the person or of the community, is legally authorized, or is otherwise required by law.
- P. Individuals shall protect the confidentiality of any professional or personal information about persons served professionally or participants involved in research and scholarly activities and may disclose confidential information only when doing so is necessary to protect the welfare of the person or of the community, is legally authorized, or is otherwise required by law.
- Q. Individuals shall maintain timely records and accurately record and bill for services provided and products dispensed and shall not misrepresent services provided, products dispensed, or research and scholarly activities conducted.
- R. Individuals whose professional practice is adversely affected by substance abuse, addiction, or other health-related conditions are impaired practitioners and shall seek professional assistance and, where appropriate, withdraw from the affected areas of practice.
- S. Individuals who have knowledge that a colleague is unable to provide professional services with reasonable skill and safety shall report this information to the appropriate authority, internally if a mechanism exists and, otherwise, externally.
- T. Individuals shall provide reasonable notice and information about alternatives for obtaining care in the

event that they can no longer provide professional services.

PRINCIPLE OF ETHICS II

Individuals shall honor their responsibility to achieve and maintain the highest level of professional competence and performance.

RULES OF ETHICS

- A. Individuals who hold the Certificate of Clinical Competence shall engage in only those aspects of the professions that are within the scope of their professional practice and competence, considering their certification status, education, training, and experience.
- B. Members who do not hold the Certificate of Clinical Competence may not engage in the provision of clinical services; however, individuals who are in the certification application process may engage in the provision of clinical services consistent with current local and state laws and regulations and with ASHA certification requirements.
- C. Individuals who engage in research shall comply with all institutional, state, and federal regulations that address any aspects of research, including those that involve human participants and animals.
- D. Individuals shall enhance and refine their professional competence and expertise through engagement in lifelong learning applicable to their professional activities and skills.
- E. Individuals in administrative or supervisory roles shall not require or permit their professional staff to provide services or conduct research activities that exceed the staff member's certification status, competence, education, training, and experience.
- F. Individuals in administrative or supervisory roles shall not require or permit their professional staff to provide services or conduct clinical activities that compromise the staff member's independent and objective professional judgment.

PRINCIPLE OF ETHICS III

Individuals shall honor their responsibility to the public when advocating for the unmet communication and swallowing needs of the public and shall provide accurate information involving any aspect of the professions.

RULES OF ETHICS

- A. Individuals shall not misrepresent their credentials, competence, education, training, experience, and scholarly contributions.
- B. Individuals shall avoid engaging in conflicts of interest whereby personal, financial, or other considerations have the potential to influence or compromise professional judgment and objectivity.

- C. Individuals shall not misrepresent research and scholarly activities, diagnostic information, services provided, results of services provided, products dispensed, or the effects of products dispensed.
- D. Individuals shall not defraud through intent, ignorance, or negligence or engage in any scheme to defraud in connection with obtaining payment, reimbursement, or grants and contracts for services provided, research conducted, or products dispensed.
- E. Individuals' statements to the public shall provide accurate and complete information about the nature and management of communication disorders, about the professions, about professional services, about products for sale, and about research and scholarly activities.
- F. Individuals' statements to the public shall adhere to prevailing professional norms and shall not contain misrepresentations when advertising, announcing, and promoting their professional services and products and when reporting research results.
- G. Individuals shall not knowingly make false financial or nonfinancial statements and shall complete all materials honestly and without omission.

PRINCIPLE OF ETHICS IV

Individuals shall uphold the dignity and autonomy of the professions, maintain collaborative and harmonious interprofessional and intraprofessional relationships, and accept the professions' self-imposed standards.

RULES OF ETHICS

- A. Individuals shall work collaboratively, when appropriate, with members of one's own profession and/or members of other professions to deliver the highest quality of care.
- B. Individuals shall exercise independent professional judgment in recommending and providing professional services when an administrative mandate, referral source, or prescription prevents keeping the welfare of persons served paramount.
- C. Individuals' statements to colleagues about professional services, research results, and products shall adhere to prevailing professional standards and shall contain no misrepresentations.
- D. Individuals shall not engage in any form of conduct that adversely reflects on the professions or on the individual's fitness to serve persons professionally.
- E. Individuals shall not engage in dishonesty, negligence, fraud, deceit, or misrepresentation.
- F. Applicants for certification or membership, and individuals making disclosures, shall not knowingly make false statements and shall complete all application and disclosure materials honestly and without omission.
- G. Individuals shall not engage in any form of harassment, power abuse, or sexual harassment.
- H. Individuals shall not engage in sexual activities with individuals (other than a spouse or other individual with whom a prior consensual relationship exists) over whom they exercise professional authority or power, including persons receiving services, assistants, students, or research participants.
- I. Individuals shall not knowingly allow anyone under their supervision to engage in any practice that violates the Code of Ethics.

- J. Individuals shall assign credit only to those who have contributed to a publication, presentation, process, or product. Credit shall be assigned in proportion to the contribution and only with the contributor's consent.
- K. Individuals shall reference the source when using other persons' ideas, research, presentations, results, or products in written, oral, or any other media presentation or summary. To do otherwise constitutes plagiarism.
- L. Individuals shall not discriminate in their relationships with colleagues, assistants, students, support personnel, and members of other professions and disciplines on the basis of race, ethnicity, sex, gender identity/gender expression, sexual orientation, age, religion, national origin, disability, culture, language, dialect, or socioeconomic status.
- M. Individuals with evidence that the Code of Ethics may have been violated have the responsibility to work collaboratively to resolve the situation where possible or to inform the Board of Ethics through its established procedures.
- N. Individuals shall report members of other professions who they know have violated standards of care to the appropriate professional licensing authority or board, other professional regulatory body, or professional association when such violation compromises the welfare of persons served and/or research participants.
- O. Individuals shall not file or encourage others to file complaints that disregard or ignore facts that would disprove the allegation; the Code of Ethics shall not be used for personal reprisal, as a means of addressing personal animosity, or as a vehicle for retaliation.
- P. Individuals making and responding to complaints shall comply fully with the policies of the Board of Ethics in its consideration, adjudication, and resolution of complaints of alleged violations of the Code of Ethics.
- Q. Individuals involved in ethics complaints shall not knowingly make false statements of fact or withhold relevant facts necessary to fairly adjudicate the complaints.
- R. Individuals shall comply with local, state, and federal laws and regulations applicable to professional practice, research ethics, and the responsible conduct of research.
- S. Individuals who have been convicted; been found guilty; or entered a plea of guilty or nolo contendere to (1) any misdemeanor involving dishonesty, physical harm—or the threat of physical harm—to the person or property of another, or (2) any felony, shall self-report by notifying ASHA Standards and Ethics (see Terminology for mailing address) in writing within 30 days of the conviction, plea, or finding of guilt. Individuals shall also provide a certified copy of the conviction, plea, nolo contendere record, or docket entry to ASHA Standards and Ethics within 30 days of self-reporting.
- T. Individuals who have been publicly sanctioned or denied a license or a professional credential by any professional association, professional licensing authority or board, or other professional regulatory body shall self-report by notifying ASHA Standards and Ethics (see Terminology for mailing address) in writing within 30 days of the final action or disposition. Individuals shall also provide a certified copy of the final action, sanction, or disposition to ASHA Standards and Ethics within 30 days of self-reporting.

Appendix E: Audiology Certification Standards (2012)

Audiology Certification Standards (2012) Knowledge & Skill Requirements:

Description of requirement

A. Foundations of Practice
A1. Embryology and development of the auditory and vestibular systems, anatomy and physiology, neuroanatomy and neurophysiology and pathophysiology
A2. Genetics and associated syndromes related to hearing and balance
A3. Normal aspects of auditory physiology and behavior over the life span
A4. Normal development of speech and language
A5. Language and speech characteristics and their development across the life span
A6. Phonologic, morphologic, syntactic, and pragmatic aspects of human communication associated with hearing impairment
A7. Effects of hearing loss on communication and educational, vocational, social, and psychological functioning
A8. Effects of pharmacologic and teratogenic agents on the auditory and vestibular systems
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
A10. Pathologies related to hearing and balance and their medical diagnosis and treatment
A11. Principles, methods, and applications of psychometrics
A12. Principles, methods, and applications of psychoacoustics
A13. Instrumentation and bioelectrical hazards
A14. Physical characteristics and measurement of electric and other non-acoustic stimuli
A15. Assistive technology
A16. Effects of cultural diversity and family systems on professional practice
A17. American Sign Language and other visual communication systems
A18. Principles and practices of research, including experimental design, statistical methods, and application to clinical populations
A19. Legal and ethical practices (e.g., standards for professional conduct, patients rights, credentialing, and legislative and regulatory mandates)
A20. Health care and educational delivery systems
A21. Universal precautions and infectious/contagious diseases
A22. Oral and written forms of communication
A23. Principles, methods, and applications of acoustics (e.g., basic parameters of sound, principles of acoustics as related to speech sounds, sound/noise measurements and analysis, and calibration of audiometric equipment), as applicable to: <ul style="list-style-type: none"> a. occupational and industrial environments b. community noise c. classroom and other educational environments

d. workplace environments
A24. The use of instrumentation according to manufacturer's specifications and recommendations
A25. Determining whether instrumentation is in calibration according to accepted standards
A26. Principles and applications of counseling
A27. Use of interpreters and translators for both spoken and visual communication
A28. Management and business practices, including but not limited to cost analysis, budgeting, coding and reimbursement, and patient management
A29. Consultation with professional in related and/or allied service areas

B. Prevention and Identification
B1. Implement activities that prevent and identify dysfunction in hearing and communication, balance, and other auditory-related systems
B2. Promote hearing wellness, as well as the prevention of hearing loss and protection of hearing function by designing, implementing, and coordinating universal newborn hearing screening, school screening, community hearing, and occupational conservation and identification programs
B3. Screen individuals for hearing impairment and disability/handicap using clinically appropriate, culturally sensitive, and age- and site-specific screening measures.
B4. Screen individuals for speech and language impairments and other factors affecting communication function using clinically appropriate, culturally sensitive, and age- and site-specific screening measures
B5. Educate individuals on potential causes and effects of vestibular loss
B6. Identify individuals at risk for balance problems and falls who require further vestibular assessment and/or referral for other professional services

C. Assessment
C1. Measuring and interpreting sensory and motor evoked potentials, electromyography, and other electrodiagnostic tests for purposes of neurophysiologic intraoperative monitoring and cranial nerve assessment
C2. Assessing individuals with suspected disorders of hearing, communication, balance, and related systems
C3. Evaluating information from appropriate sources and obtaining a case history to facilitate assessment planning
C4. Performing otoscopy for appropriate audiological assessment/management decisions, determining the need for cerumen removal, and providing a basis for medical referral
C5. Conducting and interpreting behavioral and/or electrophysiologic methods to assess hearing thresholds and auditory neural function
C6. Conducting and interpreting behavioral and/or electrophysiologic methods to assess balance and related systems
C7. Conducting and interpreting otoacoustic emissions and acoustic immittance (reflexes)
C8. Evaluating auditory-related processing disorders
C9. Evaluating functional use of hearing

C10. Preparing a report, including interpreting data, summarizing findings, generating recommendations, and developing an audiologic treatment/management plan
C11. Referring to other professionals, agencies, and/or consumer organizations

D. Intervention (Treatment)
D1. The provision of intervention services (treatment) to individuals with hearing loss, balance disorders, and other auditory dysfunction that compromises receptive and expressive communication
D2. Development of a culturally appropriate audiologic rehabilitative management plan that includes, when appropriate, the following: <ul style="list-style-type: none"> a. evaluation, selection, verification, validation, and dispensing of hearing aids, sensory aids, hearing assistive devices, alerting systems, and captioning devices, and educating consumer and family/caregivers in the use of and adjustment to such technology b. determining of candidacy of persons with hearing loss for cochlear implants and other implantable sensory devices and provision of fitting, mapping, and audiologic rehabilitation to optimize device use c. counseling relating to psychosocial aspects of hearing loss and other auditory dysfunction, and process to enhance communication competence d. 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
D3. Determination of candidacy for vestibular and balance rehabilitation therapy to persons with vestibular and balance impairments
D4. Treatment and audiologic management of tinnitus
D5. Provision of treatment services for infants and children with hearing loss; collaboration/consultation with early interventionists, school based professionals, and other service providers regarding development of intervention plans (i.e., individualized education programs and/or individualized family service plans)
D6. Management of the selection, purchase, installation, and evaluation of large-area amplification systems
D7. Evaluation of the efficacy of intervention (treatment) services

E. Advocacy/Consultation
E1. Educating and advocating for communication needs of all individuals that may include advocating for the programmatic needs, rights and funding of services for those with hearing loss, other auditory dysfunction, or vestibular disorders
E2. Consulting about accessibility for persons with hearing loss and other auditory dysfunctions in public and private buildings, programs, and services
E3. Identifying underserved populations and promoting access to care

F. Education/Research/Administration
F1. Measuring functional outcomes, consumer satisfaction, efficacy, effectiveness, and efficiency of practices and programs to maintain and improve the quality of audiologic services
F2. Applying research findings in the provision of patient care (evidence based practice)

F3. Critically evaluating and appropriately implementing new techniques and technologies supported by research based evidence
F4. Administering clinical programs and providing supervision of professionals as well as support personnel
F5. Identifying internal programmatic needs and developing new programs
F6. Maintaining or establishing links with external programs, including but not limited to education programs, government programs, and philanthropic agencies

Appendix F: Association Information

ASHA - The American Speech-Language-Hearing Association

ASHA is the national scientific and professional association for speech-language pathologists, audiologists, and speech-language and hearing scientists concerned with communication behavior and disorders. ASHA also accredits our graduate programs in Speech-Language Pathology and Audiology. We urge you to become familiar with its goals, its programs, and its publications. You will learn about ASHA in your coursework, from your clinical preceptors, and from publications that will be made available to you at various times.

The manner in which you receive your clinical training follows certain guidelines prescribed by ASHA. The guidelines call for a minimum number of clinical clock hours of experience in and require supervised clinical experiences. However, it is the philosophy of our program that merely meeting minimum requirements does not necessarily mean that you have received adequate practicum experience. Our objective is to provide students with the number and quality of clinical experiences that will make them competent professionals. Meeting competency requirements often means that students will accumulate academic and clinical experiences in excess of the ASHA minimum requirements. More information regarding ASHA can be found at www.asha.org

NSSLHA - The National Student Speech-Language and Hearing Association

NSSLHA is the national organization for students interested in the study of normal and disordered communication behavior. Membership is open to undergraduate graduate students. Many universities, including CU, maintain active chapters, which meet during the year on a regular basis. The CU Chapter of NSSLHA encourages your membership and support of its activities. Through CU Chapter programs, you will learn more about the opportunities that can result from your professional training, more about the national NSSLHA Chapter, and about the workings of the ASHA. More information regarding NSSLHA can be found at <http://www.nsslha.org/default.htm>

SAA - CU Student Academy of Audiology

SAA is the student division of the American Academy of Audiology. Learn more about SAA here: <http://www.audiology.org/SAA/aboutus/Pages/default.aspx>. CU-Boulder's SAA Chapter has a bulletin board on SLHS' 2nd floor (north hallway) where meeting information, activities, and contact information for officers is located.

CAA - Colorado Academy of Audiology

CAA is the state organization for individuals working or interested in the field of audiology. Membership is open to undergraduate, masters and doctoral level graduate students. CAA encourages you to become a member and participate in its activities. Through involvement in CAA you will learn more about the opportunities available in Indiana. More information regarding CAA can be found at <https://coaudiology.org/>

AAA – American Academy of Audiology

AAA is the professional organization for audiologists. Student membership allows you to receive JAAA, the Journal of the American Academy of Audiology and Audiology Today. The annual convention is a site for clinical presentations, new amplification products and job opportunities. More information regarding AAA can be found at www.audiology.org.

ASA – Acoustical Society of America

ASA is the professional organization for acousticians, engineers, psychoacousticians and hearing scientists. Like ARO, this organization is also a research organization suited for students interested in a career in hearing research, particularly psychoacoustics. More information regarding ASA can be found at <http://asa.aip.org/>

Appendix G: Course Schedule

Course Schedule: The following is a typical course schedule for the AuD program. Note that changes may occur due to faculty availability.

Year 1 Fall:

<u>Course #</u>	<u>Course Title</u>	<u>Credit Hours</u>
SLHS 5576	Communication Neuroscience	3
SLHS 5918	Audiology Clinical Practica: Level 1	1
SLHS 6544	Auditory Processes: Adult Assessment	3
SLHS 6006	Advanced Hearing Science	3
SLHS 6564	Auditory Processes: Neurodiagnostics	3

Year 1 Spring:

<u>Course #</u>	<u>Course Title</u>	<u>Credit Hours</u>
SLHS 5918	Audiology Clinical Practica: Level 1	1
SLHS 6614	Fundamentals of Amplificatio	3
SLHS 6554	Auditory Processes: Child Assessment	3
SLHS 7000	Research Designs in Human Communication Sciences and Disorders	3

Year 2 Summer:

<u>Course #</u>	<u>Course Title</u>	<u>Credit Hours</u>
SLHS 5928	Audiology Clinical Practica: Level 1	1

Year 2&3 Fall (Even Years: 2016-17, 2018--19):

<u>Course #</u>	<u>Course Title</u>	<u>Credit Hours</u>
SLHS 5674	Signals and Systems	3
SLHS 6670	Adult Aural Rehabilitation	3
SLHS 7614	Implantable Devices: Technology and Clinical Application	3
SLHS 5928	Audiology Clinical Practica: Level 1 (2nd year students)	2
SLHS 5938/5948	Audiology Clinical Practica: Level 2 (3rd year students)	4

Year 2&3 Spring (Even Years: 2016-17, 2018--19):

<u>Course #</u>	<u>Course Title</u>	<u>Credit Hours</u>
SLHS 7540	Auditory Processes: Physiology, Assessment, and Management of the Vestibular System	3
SLHS 7714	Advanced Topics in Amplification	3
SLHS 5928	Audiology Clinical Practica: Level 1 (second year students)	2
SLHS 5938/5948	Audiology Clinical Practica: Level 2 (third year students)	4
SLHS 7450	Audiology Capstone Project (all students)	3

Year 2&3 Summer (Even Years: 2016-17, 2018--19):

<u>Course #</u>	<u>Course Title</u>	<u>Credit Hours</u>
SLHS 5938	Audiology Clinical Practica: Level 2 (third year students)	4
SLHS 6938	Audiology Clinical Externship	4

Year 2&3 Fall (Odd Years: 2017-2018, 2019-20):

<u>Course #</u>	<u>Course Title</u>	<u>Credit Hours</u>
SLHS 7640	Communication Processes and Hearing Loss: Birth through Six	3
SLHS 7530	Auditory Processes: Theory and Application in School Environment	3
SLHS 7520	Auditory Processes: Medical and Genetic Bases	3
SLHS 5928	Audiology Clinical Practica: Level 1 (second year students)	2
SLHS 5938/5948	Audiology Clinical Practica: Level 2 (third year students)	4

Year 2&3 Spring (Odd Years: 2017-2018, 2019-20):

<u>Course #</u>	<u>Course Title</u>	<u>Credit Hours</u>
SLHS 7550	Management and Prevention of Noise and Noise Induced Hearing Loss	2
SLHS 7200	Business, Management & Ethics in Audiology	3
SLHS 5928	Audiology Clinical Practica: Level 1 (second year students)	2
SLHS 5938/5948	Audiology Clinical Practica: Level 2 (third year students)	4
SLHS 7554	Instrumentation and Calibration in Audiology	1
SLHS 6650	Counseling and Professional Ethics	2
SLHS 6660	Multicultural Issues in SLHS and its Disorders	1

Year 2&3 Summer (Odd Years: 2017-2018, 2019-20):

SLHS 5948	Audiology Clinical Practica: Level 2 (third year students)	4
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SLHS 6948	Audiology Clinical Externship	4
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Year 4:

Fall:

<u><i>Course #</i></u>	<u><i>Course Title</i></u>	<u><i>Credit Hours</i></u>
SLHS 6938/6948	Audiology Clinical Externship	4

Spring:

<u><i>Course #</i></u>	<u><i>Course Title</i></u>	<u><i>Credit Hours</i></u>
SLHS 6938/6948	Audiology Clinical Externship	5