



University of Maryland

GRADUATE PROGRAMS IN

HEARING AND SPEECH SCIENCES

Dual-degree Track: AuD/Ph.D.

Program Code: CAUD

Check out our Website:

<http://www.hesp.umd.edu>

**DEPARTMENT OF HEARING AND SPEECH SCIENCES
UNIVERSITY OF MARYLAND, COLLEGE PARK**

Dual-degree Path Au.D./Ph.D.

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Program Overview

The Doctoral Program in Clinical Audiology (CAUD) is an academically based, clinically oriented program designed primarily to prepare professional Audiologists. There are two tracks within the CAUD program: one track leads to the Doctor of Audiology (Au.D.) degree and the other track leads to dual degrees [Au.D./ Doctor of Philosophy (Ph.D.) degree]. The Au.D./Ph.D. is a highly rigorous program that combines clinical training with a significant research component culminating in a 12-credit dissertation. This guide is designed for students who wish to learn more about the dual-degree track (for students interested exclusively in the Au.D. track, please see the “Green Book” guide to the CAUD program).

The dual-degree track entails a comprehensive educational program to provide knowledge and promote advanced competencies in the assessment, prevention, and habilitation/rehabilitation of disorders of hearing and vestibular function. The initial stage of the educational program (toward the Au.D.) entails clinical practicum and coursework that trains individuals to become professional audiologists; the second stage of the program involves extensive research training so that graduates with a Ph.D. are able to develop an independent research program. However, there is significant overlap between these two components of training, and many aspects occur simultaneously rather than sequentially.

Students preparing for clinical practice in Audiology generally seek certification by the American Speech-Language-Hearing Association and by the American Board of Audiology, as well as state licensure. The dual-degree track of the Doctoral Program in Clinical Audiology exceeds the academic and clinical practicum requirements for both *Board Certification in Audiology* granted by the American Board of Audiology (ABA) and for the *Certificate of Clinical Competence (CCC)* granted by the American Speech-Language-Hearing Association (ASHA). The graduate program at the University of Maryland is accredited by the Council on Academic Accreditation (CAA), which is associated with ASHA.

ASHA requirements stipulate that individuals seeking certification in Audiology are required to have 75 hours of graduate study in Audiology and related disciplines, a one-year, full-time clinical internship, and demonstration of acquisition of knowledge and mastery of skills in a number of specific substantive areas. A doctoral degree, which includes the one-year, full-time clinical experience, is required by ASHA for the practice of Audiology. Both tracks of the Doctoral Program in Clinical Audiology exceed these requirements. Details of the requirements for ASHA certification are described later in this document. The American Academy of Audiology (AAA) specifies that a doctoral level degree in Audiology from a regionally accredited college or university, in addition to specified clinical practice, is required for Board Certification in Audiology. Further details of the American Board of Audiology Certification Program can be found in Appendix I. Additionally, most states have licensure requirements for the practice of Audiology, which vary from state to state. However, most state licensure laws follow ASHA requirements

The Doctoral Program in Clinical Audiology (CAUD) at the University of Maryland accepts students who hold a Bachelor's degree in Hearing and Speech Sciences, or who come from non-hearing-and-speech backgrounds. The latter group of students is required to complete appropriate preparatory coursework prior to full participation in the graduate program. Students are accepted into the post-BA CAUD program on a full-time basis. The Doctoral Program in Clinical Audiology is also offered to students who have already earned a Master's degree in Audiology and who have practiced in the field for at least two years.

Admission Requirements for the Dual-Degree Track Doctoral Program in Clinical Audiology

Students can apply for the dual-degree track after having been enrolled in the Au.D. program for at least two years. Admissions decisions to the dual-degree track are based on academic performance during the student's graduate program and a letter of recommendation from the research mentor. Primary indices of performance include overall GPA, performance in Statistics and Research Design courses, and a writing sample of a research-based paper. A formal process for applying to switch tracks from the Au.D. degree to the dual Au.D./Ph.D. degrees is described in a later section.

Students may not apply directly to the dual-degree track upon admission to the CAUD program. Students who are potentially interested in the dual-degree program must apply for initial admission to the CAUD program, which has the Doctor of Audiology (Au.D.) as the degree objective.

Initial admission to all graduate programs in the Department of Hearing and Speech Sciences is primarily confined to fall matriculation, although students may enter the program in the preceding summer session to complete undergraduate pre-requisites. Prospective applicants should note that decisions on fall admissions are made between February and April. Students must submit completed application materials for the fall semester by the deadline stated on the University of Maryland Graduate School website (<http://www.gradschool.umd.edu>) [note: this deadline is usually in early January].

Important note to all applicants: **Please Specify the Degree Program to Which You Are Seeking Admission**

Please note that graduate students are admitted to a specific degree program in the Graduate School (i.e., Au.D. degree in Doctoral Program in Clinical Audiology, M.A. degree in Speech-Language Pathology, traditional Ph.D. in Hearing and Speech Sciences). Students interested in the Au.D. (and eventually the dual degree, Au.D./Ph.D.) must specify the program code **CAUD** on the Graduate School application. Students interested in a traditional research Ph.D., without any clinical practicum training, should apply directly for admission to the Ph.D. program in Hearing and Speech Sciences (Program Code: **HESP**).

Applicants with a Graduate Degree in Audiology

Professional audiologists (post-M.A.) may apply directly to the dual-degree program. To be competitive for this program, these applicants must demonstrate unusual promise for a career in research. Such evidence would include outstanding performance in prior graduate coursework, high GRE scores, and/or prior experience in a research laboratory culminating in presentations or publications of research findings. In addition to the standard application materials for the CAUD program (transcript, GRE scores, 3 letters of recommendation, and a letter of intent), these individuals must also provide a copy of their certification and licensure for full admission into the program. Post-MA applicants must have worked the equivalent of two years full-time as a clinical audiologist prior to seeking admission to the program. On the Graduate School application, they should specify that they seek admission to the dual-degree program and also identify a faculty mentor from the program to serve as their research mentor.

Applications to Switch from the Au.D. to the Dual-Degree (Au.D./Ph.D.) Program

Students in the Au.D. track have the option to apply to switch to the Au.D./ Ph.D. track. The Department encourages academically talented students who seek a career in research or academia to contemplate this degree option. A formal mechanism exists for requesting a change in the degree program from the Au.D. degree to the dual (Au.D./Ph.D.) degree.

Students may request a change in their graduate degree no sooner than the end of the second year of graduate study up until the completion of the Au.D. degree. The best time to initiate the formal process is the fall of Year 4 of the Au.D. phase of the program. This time-frame is desirable so that students have had an opportunity to complete the Research Design and Quantitative Research Methods courses, have demonstrated unusual promise to pursue a career in research, and are eligible to apply for funding during the Ph.D. phase of the program. Students must fulfill all requirements for admission to Au.D. candidacy, the Au.D. degree, Ph.D. candidacy and the Ph.D. dissertation as they proceed in their program of study.

Students requesting a change in the graduate degree must submit a packet of materials to the Director of the Doctoral Program in Clinical Audiology. These materials include the following:

- 1) a letter of intent
- 2) a transcript of the first two or more years of graduate study
- 3) a paper written by the student during any course in graduate school
- 4) a curriculum vitae highlighting prior research experiences

The student's materials will be reviewed by a committee of the CAUD faculty, and the faculty will make a recommendation to the HESP Department's Admissions Committee. The CAUD faculty committee will take into consideration the student's overall GPA and performance in the following classes: Research Design (HESP 724) and Quantitative Research Methods (EDMS 645). The Department's Admissions Committee may conduct its own review of the application and will make a final decision regarding admission to the dual-degree program. The student will be informed of the final decision by the Director of the Doctoral Program in Clinical Audiology. Students are well advised to request this "switch" during the fall admissions cycle (year 4) so that they can compete for funding allotted to HESP Ph.D. students by the College of Behavioral and Social Sciences.

If the request is approved, the Director of the Doctoral Program in Clinical Audiology will complete the form "Change of Graduate Degree" and submit it to Graduate Enrollment Management Services (GEMS) via e-mail. The form must be signed by the student's academic advisor, Director of the Doctoral Program in Clinical Audiology, and the HESP Department Chair. This form can be downloaded from the department website. The Director of the CAUD program will notify the appropriate administrators in the Registrar's Office and the Graduate School of the request for the degree change. However, the student is not officially admitted to the Ph.D. phase of the program until after all requirements for the Au.D. degree are completed (see next paragraph).

The student is also required to submit a new application for the Ph.D. program on the Graduate School website to establish the official record that the student is requesting enrollment in the Ph.D. phase of the program. This can only be done during the final year of the Au.D. phase of the program. Students will not be charged for completing this separate application to the Ph.D. phase of the program.

Academic Requirements and Length of Program Dual-Degree Program (Au.D./ Ph.D.)

Post-BA applicants

The track leading to the Au.D./Ph.D. degrees in Clinical Audiology requires 60 credit hours of graduate coursework, 6 credit hours of pre-candidacy research (called the Candidacy Paper), 12 credit hours of dissertation research, 14 credit hours of clinical practicum registration, and 18 credit hours of full-time Clinical Internship registration, for a total of 110 credit hours. Au.D./Ph.D. students must develop an Individual Study Plan with the approval of a faculty Program Planning Committee (PPC), complete Candidacy Research, pass comprehensive examinations, and complete a dissertation and oral defense. The PPC minimally includes the faculty research mentor and two other HESP faculty members, all of whom are Regular Members of the Graduate Faculty at the University of Maryland. Additional faculty members and members of the research community may participate on the PPC. Annual meetings will be held between the student and the PPC after the student is admitted to the dual-degree program, until the time the student is admitted to Ph.D. Doctoral Candidacy.

Full-time students are expected to complete the Au.D./Ph.D. track in approximately 6-7 years, including summers. Students advance to Au.D. Doctoral Candidacy upon completing coursework, passing Au.D. comprehensive examinations, and receiving approval for their Candidacy Research project proposal. The Au.D. degree is awarded upon completion of the Candidacy Research project and the Clinical Internship. Students must also advance to Ph.D. Doctoral Candidacy, and this occurs after the student completes all requirements for the Au.D. degree and completes the Ph.D.-level comprehensive examination. The Ph.D. degree is awarded following successful defense of the dissertation.

Post-MA applicants

Professional audiologists who enter the Doctoral Program in Clinical Audiology will be evaluated on an individual basis to determine the minimum requirements to complete the course of study for the dual-degree track. (See “Registration Requirements” for further details). Professional audiologists who seek this track generally will require 4-5 years of equivalent full-time study for the Au.D./Ph.D. degree. As is noted above, a PPC will be formed to evaluate the student’s Individual Study Plan. These students will be awarded the Au.D. degree upon completion of coursework, Au.D. comprehensive examinations, and the Candidacy Research project, and will be awarded the Ph.D. upon successful completion of the Ph.D.-level comprehensive examination and defense of the dissertation.

Registration Requirements

Pre-requisites

Students whose undergraduate degrees are not in Hearing and Speech Sciences will be required to take undergraduate preparatory courses prior to, or concurrent with, enrolling in graduate-level courses. In addition, some general education requirements are specified by ASHA. These general education courses must be verified in the application for the CCC.

General pre-requisites. Any student who has not taken a course in statistics at the undergraduate level must complete a course in their graduate program, prior to enrolling in graduate-level statistics courses required for the degree. Students should note that courses for which only a portion of the semester was devoted to statistics are not acceptable. Additionally, students must have completed undergraduate coursework in the areas of life sciences, physical sciences, behavioral sciences, and mathematics beyond college algebra. At least one three-credit course in each of these areas must be completed for an applicant to be eligible for ASHA certification. Students must also demonstrate completion of relevant coursework in the areas of oral and written communication.

Discipline-specific pre-requisites. Students must have completed the following HESP undergraduate courses or their equivalents (see the Course Descriptions section of this document for further information):

HESP 311: Anatomy, Physiology, and Pathology of the Auditory System

HESP 400: Speech and Language Development in Children

HESP 407: Bases of Hearing Science

HESP 411: Introduction to Audiology

*HESP 417: Principles and Methods of Speech-Language Pathology and Audiology
(clinical course or equivalent)*

Credit for Previous Graduate Coursework

The University of Maryland allows transfer of up to six credits (e.g., two courses) of eligible graduate coursework taken before matriculation, or at another institution, into a graduate program, pending approval by the Department. These transferred credits often satisfy elective coursework, but may or may not satisfy required coursework. A new Graduate School policy enables departments to exercise discretion in raising this number to 12 credits (four courses). Students wishing to transfer up to 12 credits must petition the HESP faculty for consideration of these additional credits.

Post-B.A. Students

The Doctoral Program in Clinical Audiology (dual-degree path) for post-BA students is a full-time program; part-time students are not accepted. Graduate education in this discipline requires timely and concurrent registrations in both academic and clinical experiences. Full-time registration is formally defined by the University as registration for a combination of courses equivalent to 48 units per semester. Full-time graduate assistants (20 hours/week) holding regular appointments have full-time status if they are registered for at least 24 units in addition to the assistantship. Part-time graduate assistants (10 hours/week) meet the requirements for full-time status if they are registered for at least 36 units in addition to the assistantship. Courses in the series, 600-889, carry 6 units/credit hour, whereas research courses, 898-899, carry 18 units/credit hour.

A typical graduate course load in the Department of Hearing and Speech Sciences is enrollment for 8-12 graduate credits per semester. This enables students to complete the program of study in the anticipated time-frame for each graduate degree. In the first two years of study, course registrations will typically consist of three graduate courses and two credits of clinical practicum per semester. For Au.D./Ph.D. students, Years 3 and 4 include additional coursework, clinical practicum, a Candidacy

Research* project (which also serves as the capstone research requirement for the Au.D.), and the full-time Clinical Internship. Students will also take the Au.D. comprehensive examinations (and preferably the Ph.D. portion of the comprehensive examinations as well) during the third-year of study. Upon satisfactory completion of these requirements (including Au.D. comprehensive exams), the student is awarded the Au.D. degree. Subsequent years (5 and 6) are typically devoted to dissertation research and, upon successful completion of the Ph.D. comprehensive examination and defense of the dissertation, the student is awarded the Ph.D. Students may choose to complete the Clinical Internship before or during the time that they engage in dissertation research. However, only one degree will be awarded during a given graduation, and the sequence of earning the degrees will be Au.D. followed by the Ph.D. (the terminal degree).

Full-time commitment and course sequence are critical, because most graduate courses are offered only once per academic year and course content is closely tied to clinical practicum assignments. Moreover, full-time enrollment assures timely completion of the program. Enrollment in clinical practicum places significant time demands on students during the work week. Clinicians registered for clinical practica should be prepared to devote approximately 20-30 hours per week to the preparation, implementation, and analysis of clinical experiences.

Students pursuing the dual-degree track (Au.D./Ph.D.) must successfully complete 110 hours of graduate level academic coursework, research-based coursework, and clinical practicum. For students accepted into the dual-degree track, the Individual Study Plan will be developed by the student in consultation with the research mentor/advisor. This Plan must be approved annually by a Program Planning Committee (PPC) composed of the advisor and at least two additional members of the Department's faculty who are members of the Graduate Faculty of the University of Maryland. The Individual Study Plan for Au.D./Ph.D. students will include required courses, elective courses, planned research projects (Candidacy Research and other research projects), and comprehensive exam areas. The dissertation research plan may be discussed with the PPC, although a formal Dissertation Examining Committee will be constituted prior to the dissertation proposal meeting. The members of the Dissertation Examining Committee may or may not be the same faculty members as those who served on the PPC.

Post-MA students

As noted above, post-MA students who are practicing audiologists may enroll in the dual-degree path within the Doctoral Program in Clinical Audiology. These students may enroll on either a full-time or a part-time basis, although full-time enrollment is strongly recommended for those pursuing the dual-degree path. Full-time registration is defined by the Department of Hearing and Speech Sciences as enrollment for 8-12 credits per semester. A typical part-time load is two courses per semester (approximately 6 credits).

Each student who has already earned an M.A. in Audiology will furnish a transcript of previous graduate coursework successfully completed, as well as a documented description of clinical experience. It is generally expected that a minimum of 30 credits will be taken in the core and elective areas combined, comprehensive examinations will be completed, and a minimum of 6 credits will be taken for the Candidacy Research project for satisfactory completion of the Au.D. degree. Clinical practicum registrations will be available in advanced diagnostic and rehabilitative techniques.

* The Candidacy Research project and requirements for completion are described in detail in a later section

A professional student who selects the dual-degree track will develop an Individual Study Plan with their research mentor, in consultation with the Program Planning Committee (PPC), and will take coursework and research registrations commensurate with that degree.

The Individual Study Plan for post-M.A. students will be limited to required courses that have not been taken previously, elective courses, comprehensive exam areas, a research project/dissertation plan, and potential clinical rotations if they are deemed necessary.

Admission to Doctoral Candidacy and Subsequent Registration

The Graduate School requires that students seeking the dual Au.D./Ph.D. degree path be admitted to Doctoral Candidacy twice: once prior to earning the Au.D. and once prior to earning the Ph.D. For each degree, the student must be admitted to Doctoral Candidacy at least six months before the degree can be awarded.

Au.D. Degree. Students who have completed all coursework requirements for the Au.D. degree, passed Au.D. comprehensive examinations, and obtained approval for the Candidacy Research project from the PPC will be advanced to Doctoral Candidacy for the Au.D. degree. Students planning spring graduation for the Au.D. must advance to Doctoral Candidacy no later than October 1 of the preceding semester.

The final requirements for earning the Au.D. (for dual-degree students) are completion of the Clinical Internship and completion of the Candidacy Research requirement (HESP 898 registration, 6 credits). This latter requirement includes completing the experiment that serves as the Candidacy Research project, presenting a talk describing the study at Capstone Research Day (held in April each year), and writing a document describing this research project for final approval by the PPC. The written document will be in the form of a manuscript suitable for submission to a peer-reviewed journal.* Students are also expected to submit this manuscript for peer review to a highly ranked journal and present it at a local, state or national conference. Students must be enrolled for at least one credit, regardless of credits already accumulated, in the semester of graduation. Students who are graduating in the summer must register for one credit of either HESP 898 or HESP 829 (Candidacy Research or Clinical Internship, respectively) to satisfy this requirement, depending on the reason for delayed graduation. A registration of Independent Study (HESP 708) may also be used to satisfy this requirement.

Ph.D. Degree. In addition, students seeking the dual degree must be admitted to Ph.D. Doctoral Candidacy at least six months prior to earning the Ph.D. degree. This will normally occur after the student earns the Au.D. degree and passes the Ph.D.-level comprehensive examination. Once a student is admitted to Ph.D. Doctoral Candidacy, the Graduate School automatically registers the student for 6 credits of HESP 899 (Doctoral Dissertation Research) for each fall and spring semester until all requirements for the degree are completed. Additional details about the Graduate School's academic policies following admission to Ph.D. Doctoral Candidacy can be found in the Graduate School Catalog: http://apps.gradschool.umd.edu/catalog/doctoral_degree_policies.htm

* Additional Candidacy Research requirements are described in a later section
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As noted above, all students must be enrolled for at least one credit, regardless of credits already accumulated, in the semester of graduation. Students who are graduating in the summer must register for one credit of HESP 899 or HESP 708 (Independent Study) to satisfy this requirement.

Maintaining Good Academic Standing in Graduate School

A minimum grade point average of 3.0 (on a 4.0 scale) is required for all courses taken after matriculation as a graduate student. Students whose GPA falls below a 3.0 will be placed on academic probation. Students on academic probation cannot take comprehensive examinations, go on outside placements, or begin the Clinical Internship. Please see the section on Department Policy Pertaining to Clinical Practicum Enrollments for further information on implications of academic probation. The Graduate School Catalog also has relevant information on academic probation (see http://apps.gradschool.umd.edu/catalog/academic_record.htm)

Requests to switch from Au.D./Ph.D. to Au.D. Program

The intent of the dual-degree program is to train audiologists who also seek to engage in a research career. Students are discouraged from applying to this program unless they are committed to a career in research. Once a student has applied to this program and been accepted, they are expected to fulfill all of the requirements for the two degrees. The department strongly discourages students from switching back from the dual-degree program to the Au.D. program. Students may submit a formal request to change degree programs to the Department Chair and the program faculty, but such requests will be granted only for highly unusual and extenuating circumstances.

Detailed Curriculum for the Dual-Degree (Au.D./Ph.D.) Doctoral Program in Clinical Audiology

NOTE: The curricula shown do not reflect additional coursework that may be necessary to meet ASHA certification requirements for students coming to the graduate program from non-HESP backgrounds.

Undergraduate Pre-Requisite Courses (15 credits)

| | |
|----------|--|
| HESP 311 | Anatomy and Physiology of the Auditory System (3) |
| HESP 400 | Speech and Language Development in Children (3) |
| HESP 407 | Bases of Hearing Science (3) |
| HESP 411 | Introduction to Audiology (3) |
| HESP 417 | <i>Principles and Methods in Speech-Language Pathology and Audiology (3)</i> |

Core Courses

a. Basic Science (12 credits)

| | |
|----------|---|
| HESP 600 | Instrumentation (3) OR HESP 604 Acoustic and Perceptual Phonetics (3) |
| HESP 628 | Anatomy and Physiology of the Auditory and Vestibular Systems (3) |
| HESP 722 | Experimental Audiology (Psychoacoustics) (3) |
| HESP 724 | Research Design (3) |

b. Audiology (30 credits)

| | |
|----------|--|
| HESP 606 | Basic Hearing Measurement (3) |
| HESP 630 | Electrophysiologic Measurements I (3) |
| HESP 632 | Medical Audiology (3) |
| HESP 635 | Rehabilitative Audiology (3) |
| HESP 636 | Geriatric Audiology (3) |
| HESP 645 | Pediatric Audiology (3) |
| HESP 700 | Hearing Aids I (3) |
| HESP 701 | Hearing Aids II (3) |
| HESP 706 | Advanced Clinical Audiology (3) |
| HESP 730 | Vestibular-ocular Function and Assessment (Electrophysiologic Measures II) (3) |

c. Additional Course Requirements: (8 credits)

| | | |
|----------|--------------------------------------|---|
| BIOL 600 | Scientific Ethics (2) | } or approved substitutions for statistics sequence |
| EDMS 645 | Quantitative Research Methods I (3) | |
| EDMS 646 | Quantitative Research Methods II (3) | |

Clinical Practicum Requirements (32 credits)

| | |
|-----------|--|
| HESP 649A | Clinical Practice in Audiology: Diagnostic Audiology (8) |
| HESP 649B | Clinical Practice in Audiology: Aural Rehabilitation (2) |
| HESP 729 | Advanced Clinical Practice in Audiology: Advanced Graduate Laboratory Practicum in Audiology (4) |
| HESP 829 | Clinical Internship Residency (18) |

Electives (10 credits)

[Note: undergraduate courses do not satisfy the requirement for an elective course]

Pre-Dissertation and Dissertation Research: (18 credits)

| | |
|----------|-------------------------------------|
| HESP 898 | Doctoral Candidacy Research (6) |
| HESP 899 | Doctoral Dissertation Research (12) |

Clinical Certification Requirements by the American Speech-Language-Hearing Association

In order to meet requirements for ASHA's Certificate of Clinical Competence (C.C.C.) in Audiology, students must earn a doctoral degree. The program of graduate study includes academic coursework and a minimum of 1820 hours of supervised clinical practicum sufficient in depth and breadth to achieve the knowledge and skills outcomes stipulated in the standard.

Although specific coursework is not detailed in the standard, applicants for certification must have acquired knowledge and developed skills in four areas: foundations of practice, prevention and identification, evaluation, and treatment. In addition, applicants must have prerequisite skills in oral and written or other forms of communication, as well as in life sciences, physical sciences, behavioral sciences, and mathematics. Evidence of successful completion of the required knowledge and skills is through formative and summative assessments. Each student will be required to maintain a portfolio of the formative and summative assessments conducted as part of coursework, clinical practicum, and the comprehensive examination process. Further, **it is crucial that students meet with advisors to assure that their curriculum plan will satisfy ASHA requirements for certification.**

Specific requirements for certification in Audiology may be found in the ASHA Membership and Certification handbook, which may be accessed at www.asha.org. A copy of the ASHA certification requirements is always included in the orientation packet and should be retained for future reference.

The requirements are also posted on ASHA's website:

<http://www.asha.org/Certification/2012-Audiology-Certification-Standards/>

Clinical Certification by the American Board of Audiology

The American Board of Audiology (ABA) does not detail any specific coursework required for certification. The ABA requires applicants to have an earned doctoral degree in Audiology from a regionally accredited college or university, including 2,000 hours of mentored professional practice in Audiology. Please see Appendix I for further details of ABA certification. Links to the ABA Certification Handbook can be found online at:

http://www.americanboardofaudiology.org/pdf/20120917_HANDBOOK.pdf

GPA Requirements

The Graduate School requires that students maintain a 3.0 overall GPA (including both academic coursework and clinical practica); students with GPAs below this go on academic probation. However, our department has slightly more specific requirements, above and beyond these graduate-school requirements:

1. A minimum grade point average of 3.0 (on a 4.0 scale) is required for all academic courses taken after matriculation as a graduate student. In other words, A-level work in clinical practica cannot make up for poor academic performance.
2. All clinical practicum students receiving a grade lower than a B- will be reviewed by the faculty to determine eligibility for future practicum placement; thus, A-level work in academic coursework cannot make up for poor clinical performance.
3. Students pursuing prerequisite coursework (that is, students with provisional admission) must maintain a 3.25 GPA in these courses in order to maintain their eligibility for graduate-level coursework.

Finally, the Graduate School determines probationary status on the basis of graduate-level coursework only – this includes courses 400-level and above. Thus, a student who is taking prerequisite coursework needs not only to maintain an overall 3.25 GPA, but must also be above a 3.0 when only the courses at the 400-level and above are considered.

A student on academic probation at the end of a given semester is not eligible for outside placement during the next semester (he or she must register for a semester of in-house practicum). Moreover, students cannot graduate, take comprehensive exams, or present a Capstone Project while on academic probation.

Please note that it is the student's responsibility to calculate his or her own GPA and to ensure continued non-probationary status. Instructions on how to calculate GPA can be found at this link: <http://testudo.umd.edu/gpa/index.html> . If a student's grades fall below the minimum levels, he or she is responsible for setting up an immediate meeting with the academic advisor to discuss the situation, prior to receiving any notification from the Graduate School or the Department.

Clinical Practicum

In order to be recommended to the American Speech-Language-Hearing Association for Clinical Certification in Audiology, and to comply with standards effective for applications made to the Association after January 1, 2012, a student must accumulate 1820 supervised clock hours of clinical practicum. ABA certification requires 2,000 hours of mentored professional practice within the last two years. These requirements are satisfied through the doctoral program's required clinical practicum sequence. Practicum enrollment is concurrent with coursework registration, and carries additional registration charges.

Students engage in practicum throughout their first three years to ensure breadth of clinical experience. First and second year students complete their practicum training on campus at the Department's Speech

and Hearing Clinic, under the supervision of program faculty. Beginning with the second semester of the second year, students will continue the training in at least two external placements throughout the Greater Washington, DC and Baltimore, MD areas. Externships are chosen to match program goals and student interest.

The Clinical Internship, typically completed during the fourth year of the program, is the final clinical requirement necessary for the student's training. The Doctoral program in Clinical Audiology will make every effort to ensure that students obtain internships consistent with the goals of the training program.

Clinical Practicum Enrollment

Students interested in obtaining certification/licensure shall participate in clinical practicum during all or most semesters of their graduate training, until the clinical skills and the minimum amount of clinical experience required for the ASHA CCC-A have been obtained. Prior to enrolling in clinical practicum, all students must have completed the undergraduate course, HESP 417 (Principles and Methods in Speech-Language Pathology and Audiology) or its equivalent. Initially, all students perform evaluation and treatment activities at the University of Maryland Speech and Hearing Clinic. Registration in HESP 649A (Clinical Practice in Audiology: Diagnostic Procedures) is for two credit hours per semester. Registration in HESP 649B (Clinical Practice in Audiology: Aural Rehabilitation) is for two credit hours.

Students who have (1) demonstrated adequate skills in the University of Maryland Clinic, (2) obtained a satisfactory number of hours of clinical experience in HESP 649, and (3) satisfactorily completed appropriate coursework may apply for outside placement (HESP 729) in one of the hospital/clinic/school facilities in the Washington, D.C. or Baltimore metropolitan areas. These placements, which usually do not occur until the second or third year of graduate study, must be arranged and approved by the HESP faculty. Registration for HESP 729 (Advanced Clinical Practice in Audiology) is always for two credit hours per semester. A listing of current outside placement opportunities for HESP students is provided in Appendix II. This list should be considered representative of student opportunities but is subject to change.

The Clinical Internship

Students in the fourth or fifth year of the Au.D./Ph.D. program will participate in a full-time Clinical Internship. Registration for the Clinical Internship (HESP 829: Clinical Internship Residency) is for a total of 18 credit hours. Students register for 6 credit hours for each of three semesters (summer, fall, and spring) during the designated year of the Clinical Internship. During the summer session, students register with "Summer School" (Office of Extended Studies). During the regular academic year (fall and spring semesters), the Graduate School and Registrar's Office will automatically register students for the required 6 credits, until the student graduates. The Internship can occur during the fourth or fifth year for students in the Au.D./Ph.D. track.

The Clinical Internship will be arranged by the student in conjunction with the HESP faculty. The Clinical Internship experience must receive prior approval by the HESP faculty. Students may identify sites for potential Internship placements and present the sites to the faculty for approval. Internship sites must provide the student with an on-site clinical supervisor who is certified and licensed and must also provide the student with the opportunity to participate in a range of audiological services. The

Clinical Internship may take place in the Baltimore-Washington region or at a remote site. The minimum time commitment for the Clinical Internship is nine months of full-time employment.

Department Policy Pertaining to Clinical Practicum Enrollments

Students should note that admission to the academic degree programs **does not** guarantee access to the clinical training component of the department. Clinical training is required for eventual ASHA Certification, but is not a requirement of any of the degree programs at the University of Maryland.

Departmental permission is required for registration in clinical practicum and is granted only to matriculated students. Students must possess the communicative competencies requisite for the satisfactory conduct of usual clinical procedures. Further, as the client population served by this program is predominantly English-speaking, participants in any clinical practicum must be fluent, intelligible speakers of English. Students whose spoken and/or written English is inadequate for provision of clinical services will be recommended for remediation.

All students enrolled in clinical practicum are expected to abide by the ASHA Code of Ethics, the ABA Code of Ethics, and the AAA Code of Ethics, provided to each student upon admission to graduate study. Violations of the Code of Ethics may result in permanent dismissal from practicum placement opportunities and may subject the student to dismissal from the academic degree program.

Clinical practicum students are expected to maintain professional dress and demeanor. Unprofessional conduct or any conduct which compromises the quality of care to clinic patients may result in dismissal from clinical practicum placements.

A student may not go on outside placement, including the Clinical Internship, if he/she is on academic probation (GPA below 3.0) or if a clinical practicum grade of B- or lower is earned in the immediately preceding semester. Students will receive credit for hours earned in clinic registrations for which the student receives a grade of B- or better; no hours will be credited for clinic registrations for which a student receives a grade of less than B-. If a student receives a grade of "B-" or less for a clinic registration, the student's performance will be reviewed by the faculty to determine eligibility for future practicum placement.

A student must complete a minimum of 30 hours of academic coursework prior to applying for outside placement. Students who receive a grade of C or less for an outside placement, or whose outside placements are terminated, must re-register for placement in the University of Maryland Speech and Hearing Clinic (through HESP 649A) and earn a final grade of B- or better during the following semester, before being permitted to re-register for outside placement.

Students must successfully complete all coursework [with the exception of Scientific Ethics (BIOL 600) and the Seminar in Supervision (HESP 658B)] with a grade of B- or better, maintain an overall GPA of 3.0 or higher, complete a minimum of two outside placements and pass the Comprehensive Examinations before they are eligible to begin their Clinical Internship. In addition, students must have made significant progress on their Candidacy Research, as demonstrated by a Candidacy Research Proposal approved by the PPC, before beginning the Clinical Internship. Arrangements for the Clinical Internship will not be made until the student has initiated their Candidacy Research project. Typically, there is a 9-month lag between the start of negotiations for outside placements and the beginning of the placement itself. Students should be aware that if they begin the Clinical

Internship prior to completing their Candidacy Research (HESP 898), they should expect that completion of the Candidacy Research project will take a significant period of time after they have finished the Clinical Internship. The faculty emphasizes that the Candidacy Research project requires a considerable time commitment outside of work hours for completion. Graduation and awarding of the Au.D. degree will be delayed until the Candidacy Research project is completed.

Research and Comprehensive Examination Requirements

Candidacy Research

The Candidacy Research project is designed to enhance students' research skills and productivity at a relatively early stage of their doctoral program. Students register for a total of 6 credits of Doctoral Candidacy Research (HESP 898). The Candidacy Research may consist of directed research on a project managed by a faculty member in the program, directed research by qualified auditory researchers at UMCP or an affiliated institution, or an independent research project under faculty supervision. The Candidacy Research project must be completed before the Au.D. degree is awarded and before the student is admitted to Ph.D. Candidacy.

There are multiple steps to completing the Candidacy Research requirement.

Step 1. Student identifies the research area and a research mentor. The student reads relevant research in this area and, in consultation with the research mentor, the student plans the experimental design (rationale, method, proposed data analyses).

Step 2. The student submits a protocol for the planned study to the University of Maryland Institutional Review Board (IRB) for Human Subjects Research. Data may not be collected until the IRB approves the project and the stamped letter of approval is received by the faculty mentor.

Step 3. The student works with the faculty mentor to develop a proposal for the Candidacy Research project. The written proposal should be prepared in the form of a manuscript submission with the following sections: Introduction (including review of relevant literature and rationale for the study), Statement of Research Questions and Hypotheses, Method (this usually includes a description of Participants, Stimuli, and Procedures but may include other sub-sections), Proposed Data Analyses, Pilot Data, and References. Style requirements of the most recent edition of the *Publication Manual of the American Psychological Association* should be followed. The proposals are usually limited to 20 pages in length, not including references.

Step 4. The written proposal is submitted to the PPC for approval prior to data collection. A formal proposal meeting with the PPC is required. At the proposal meeting, the student will make a brief (20 minute) presentation of the rationale and method of the planned study, discuss the pilot data obtained, and answer questions posed by members of the PPC.

Step 5. After the PPC approves the proposal, the student collects all remaining data, conducts statistical analyses, and prepares the final manuscript. This completed manuscript serves as the required written document for the Candidacy Research.

Step 6. The final step to completing the Candidacy Research requirement includes the presentation of the work and submission of the written document. The student must present their Candidacy Research at the annual Capstone Research Day, normally held in April. They also must receive approval of their written manuscript by the PPC. Students are encouraged to submit the manuscript to a high-quality peer-reviewed journal for publication and present their research at a local, state, or national conference. There is no formal defense of the Candidacy Research project.

Comprehensive Examinations

University of Maryland regulations state that all doctoral candidates are required to pass comprehensive examinations. The comprehensive examinations for the Au.D. phase usually will be taken during the spring semester of the third year of study for full-time, post-B.A. students. The timing and sequence of comprehensive examinations for professional, post-M.A. students will be determined on an individual basis. In all cases, comprehensive examinations must be taken within five years of admission to the program and at least 6 months prior to completion of the doctoral degree to meet Graduate School requirements.

Specific examination questions will be prepared by the program faculty. The broad content areas of the Au.D. portion of the comprehensive examinations will emphasize audiologic assessment, audiologic habilitation, and hearing science. Students will meet with program faculty and will receive detailed information about the format and content of the comprehensive examinations during the semester prior to the administration of the examination.

The Au.D. portion of the comprehensive examinations is administered in the College Computer Laboratory. Students are expected to type responses to comprehensive examination questions using Microsoft Word. Students may wish to familiarize themselves with the Open Labs in Lefrak Hall prior to their comprehensive testing date. Students requiring special accommodations must consult with their advisor at the start of the semester in which they will be taking the comprehensive examination to arrange for these accommodations. Accommodations cannot be provided unless the student is registered with the Disability Support Services (DSS) Office and presents documentation from that office. Information on evaluation and accommodations can be obtained from DSS, part of the Counseling Center (<http://www.counseling.umd.edu/DSS/index.html>).

The Au.D. portion of the comprehensive examinations consist of six questions distributed in the three broad areas of study listed above: Diagnostic Audiology (2 questions), Rehabilitative Audiology (2 questions), and Hearing Science (2 questions). Each question is graded by two faculty members. A student must pass all examination questions in order to be admitted to Doctoral Candidacy and prior to going on the Clinical Internship.

Following the examination, students will be notified of their performance on the comprehensive examinations via email. Three outcomes are possible. A pass is given if the student receives passing grades on all questions. A contingent pass is given if a student passes all questions except one, in which case the student must retake the single question in the failed area. The second administration of the single question usually occurs within two weeks after the student is informed of the results. A fail constitutes unsatisfactory performance on two or more questions of the written examination. In this case, the entire comprehensive examination must be retaken. In the case of a contingent pass, a student who fails the single question a second time must retake the entire examination. The second

administration of the entire examination (for either reason) will take place during the following fall semester. Failure to successfully pass all questions of a second administration of the comprehensive examination will result in dismissal from the program without a degree. Further information can be found in the comprehensive examination booklet that will be distributed to students the semester before they take the exam.

Students seeking the dual degree are required to fulfill one additional requirement to pass the complete comprehensive examinations. The Au.D./ Ph.D. student will write a comprehensive examination question in their area of research interest. This question will be administered in a take-home format during the Ph.D. phase of the program.

Admission to Candidacy

As noted above, students are admitted to Au.D. Doctoral Candidacy after they have completed all coursework, passed the Au.D. portion of the comprehensive examinations, and obtained approval for their Candidacy Research project. Students must be admitted to Au.D. Doctoral Candidacy at least six months prior to earning the doctoral degree.

Students are subsequently admitted to Ph.D. Doctoral Candidacy once they have earned the Au.D. degree and passed the Ph.D. portion of the comprehensive examination. As stipulated by the Graduate School, a student must be admitted to Ph.D. Candidacy within five years after admission to the (dual-degree) doctoral program and at least six months before the date on which the degree will be conferred.

Dissertation

Twelve credits of doctoral dissertation research (HESP 899) will be required of all students in the dual-degree Au.D./Ph.D. track. The dissertation research is expected to be an original, hypothesis-driven project of a theoretical, professional, or empirical nature. The dissertation will be prepared in accordance with the requirements outlined in the University's *Style and Policy Manual for Master's Theses and Doctoral Dissertations*, and should be consistent with style requirements detailed in the most recent version of the *Publication Manual of the American Psychological Association*.

Once the student is admitted to Ph.D.-level Doctoral Candidacy, the PPC is disbanded and a Dissertation Committee is established. Some faculty members may serve on both committees, but the University has established special rules for the composition of the Dissertation Committee (see the Graduate School Catalog, available at

http://apps.gradschool.umd.edu/catalog/doctoral_degree_policies.htm#4

The Dissertation Committee must include a minimum of five members of the Graduate Faculty, at least three of whom must be Full Members. The Chair of the Committee normally will be the student's advisor, who will be a Full Member of the Graduate Faculty, or who has been granted an exception to the policy by the Dean of the Graduate School. Each Committee will have appointed to it a representative of the Dean of the Graduate School (this representative is required to be present at the final defense only). A listing of the types of membership in the Graduate Faculty can be found at the Graduate School website: http://apps.gradschool.umd.edu/catalog/grad_faculty_policies.htm

Students must present a formal proposal of their dissertation research project to the Dissertation Committee for approval before work begins on the dissertation. The proposal must be submitted to members of the Dissertation Committee at least two weeks prior to a defense of the proposal. The

Dissertation Committee will meet with the student for an oral defense of the proposal. The oral defense typically includes a presentation by the student of the research plan followed by questions of members of the Dissertation Committee.

After the oral proposal defense, the student will collect empirical data, analyze the data with appropriate statistics, write the dissertation, and orally defend the dissertation. In accordance with Graduate School requirements, the student must complete the doctoral program within nine years of beginning the program, or within five years after being advanced to candidacy.

IRB Approval (Human Subjects Research)

All students conducting candidacy or dissertation research using human participants or data previously collected from humans must obtain approval for the use of human subjects in research from the University of Maryland Institutional Review Board (IRB). This approval must be obtained regardless of the location of the data collection and regardless of prior IRB approval from an off-campus site. **There are no exceptions. IRB approval must be obtained prior to collection of any data from human subjects.** Students failing to obtain approval from the IRB will not be awarded a doctoral degree by the University of Maryland at College Park.

Assistance in preparing the IRB proposal can be obtained from the University of Maryland IRB website at <http://www.umresearch.umd.edu/IRB/>, from the Department's Faculty Liaison to the IRB and from the faculty mentor.

IRB proposals are submitted online using the IRBnet at <http://www.irbnet.org>. Tutorials and other assistance is available on the IRBnet website <http://irbnetresources.org/> and from the University of Maryland IRB website at: <http://www.umresearch.umd.edu/IRB/>. Access to the IRBnet website requires the common login (Directory ID and password).

Collaborative Institutional Training Initiative (CITI) Training:

As of February 1, 2010, all graduate students involved in research must complete CITI Training before the Initial Application or Renewal IRB Application can be fully approved, or they must be temporarily removed from the research team until the training has been completed. During the administrative review of these transactions, the IRB Office will be checking the CITI Training database to ensure that training has been completed. CITI Training will not be checked during Addenda transactions unless there are changes being made to the research team. The required CITI training can be found at <https://www.citiprogram.org/>

Refresher Course:

All members of the research community are required to complete the CITI Training Refresher every three years.

Log On: Log on to: <https://www.citiprogram.org/> to complete the training. You will be able to create your own user name and password as this is not linked to your UMD ID. Be sure to select University of Maryland College Park as your institution and select the track that is most appropriate for the

research you are conducting. If you cannot complete the training in one sitting, you can save and finish at a later time (You can stop and start as many times as you need)

IACUC Approval (vertebrate animal research)

Students conducting research using live vertebrate animals must consult with the Institutional Animal Care & Use Committee (IACUC). More information may be found at <http://www.umresearch.umd.edu/IACUC/>

Other Expectations of Au.D. /Ph.D Students

Depending on the timing of entry into the dual-degree track and the sequencing of the Clinical Internship, students will be asked to fulfill some additional expectations as they approach the final years of their program of study. These expectations are intended to facilitate student progress and promote their active participation in research opportunities in the department and include:

Attending Departmental Colloquia and Professional Development Series

Presenting at the Departmental Colloquium Series (ideally yearly)

Teaching Preparation (either teaching a course or shadowing a faculty member for a course in year 1 or 2)

Outline of Degree Completion Requirements

Completion of the Doctoral Degree requires a number of steps, as described in the *Degree Completion, Examination, and Graduation Manual*, available from the Graduate School website <http://www.gradschool.umd.edu>.

Au.D./Ph.D. Dual Degree

Step 1: Student completes all required coursework for the Au.D. and Ph.D. degrees.

Step 2: Student completes supplemental departmental requirements to advance to Au.D. Doctoral Candidacy

Students must pass Au.D. Comprehensive Examinations and obtain approval for the Candidacy Research project from the PPC in order to advance to Au.D. Doctoral Candidacy.

The student must complete the Application for Advancement to Candidacy Form, available on the web at <http://www.gradschool.umd.edu/forms>

A student must be admitted to Doctoral Candidacy at least 6 months prior to completing their doctoral degree.

Step 3. Student completes requirements for Au.D. degree
Au.D./Ph.D. students must complete the Clinical Internship (usually during years 4 or 5 of

graduate study) and Candidacy Research project requirements to be awarded the Au.D. degree. Appropriate forms must be completed by the student in order to receive the degree, available from the HESP Department website:

<https://hesp.umd.edu/content/audiology-graduation-deadlines#forms>

Step 4. Student Advances to Ph.D. Doctoral Candidacy.

Au.D./Ph.D. students must earn the Au.D. degree and successfully complete the Ph.D. Comprehensive Examinations to advance to Doctoral Candidacy.

The student must complete the Application for Advancement to Candidacy Form, available on the web at <http://gradschool.umd.edu/forms>

A student must be admitted to Ph.D. Doctoral Candidacy at least 6 months prior to completing their Ph.D. degree.

[*Note: students advanced to Ph.D. Doctoral Candidacy are charged a flat rate for 6 credits of HESP 899, Dissertation Research, for each fall and spring semester until the completion of all requirements for the Ph.D. degree]

Step 5. Dissertation is successfully proposed.

Step 6. Application for Graduation is submitted.

At the beginning of the semester in which the student expects to graduate, the student should complete the electronic Application for Graduation. Failure to submit the Application for Graduation by the posted deadline results in a delay in Graduation. Forms can be found at the Graduate School website: <http://gradschool.umd.edu/forms> .

Deadline dates for submission of forms for each semester are also available at the Graduate School Website <http://www.gradschool.umd.edu/calendar/deadlines>

Step 7. Dissertation is successfully defended.

Step 8. Completion of the Report of the Dissertation Examining Committee and submission of the dissertation to the Graduate School.

After the dissertation defense, the Dissertation Examining Committee completes the Preliminary Report of the Dissertation Examining Committee. The Final Report of the Dissertation Examining Committee is completed by members of the Committee and the Advisor when the student has satisfactorily addressed all comments by the Committee. This Report must be submitted to the Graduate School by the deadline date for graduation in a particular semester.

Dissertations are to be submitted to the Graduate School in electronic format after final approval of the dissertation by the Dissertation Examining Committee. See the Graduate School Website for details about submitting and publishing the dissertation:

http://apps.gradschool.umd.edu/catalog/doctoral_degree_policies.htm

University Deadlines for Graduation for Au.D./Ph.D. students

The University has strict deadlines, which must be followed to ensure timely graduation for those students who are completing a dissertation. Deadline dates for submitting each of these forms are available on the Graduate School Website: <http://www.gradschool.umd.edu/calendar/deadlines> . University paperwork that must be completed and filed in order for a student to graduate consists of the following forms:

1. **Diploma Application (1 for Au.D. degree and a separate one for Ph.D. degree)** : due the second week of the semester during which graduation is expected
2. **Approved Program Form for Au.D. degree:** must be submitted early in the semester of the proposed graduation for the Au.D. degree
3. **Certification of Completion of Requirements (Au.D. degree):** must be completed by deadline date for semester in which the student earns the Au.D. degree.
4. **Nomination of Dissertation Committee Form (Ph.D. degree):** due six weeks after the beginning of the semester during which graduation is expected
5. **Report of the (Dissertation) Examining Committee (for Ph.D. dissertations):** due three weeks before the end of the semester in which graduation is expected

Specific dates for University paperwork deadlines are published each semester in the Schedule of Classes and are available on the website for the Graduate School (<http://www.gradschool.umd.edu/deadlines/>).

Failure to meet University deadlines will typically result in delay of graduation for one full semester. During that semester, the student will be required to enroll for a minimum of one credit of registration.

PLEASE MEET ALL DEADLINES!

*Students are responsible for delivering paperwork to the required campus offices.
The department cannot deliver materials for students.*

Reminder: Graduate school regulations require all students to carry *at least one credit of enrollment during the semester in which graduation is anticipated*, regardless of the number of credits already accumulated. Students should plan accordingly. Failure to be enrolled for at least one credit during the semester of graduation may prevent timely receipt of the diploma.

Academic Integrity and Student Conduct

"The University is an [intellectual] community. Its fundamental purpose is the creation and dissemination of knowledge. Like all other communities, the University can function properly only if its members adhere to clearly established goals and values. Essential to the fundamental purpose of the University is the commitment to the principles of truth and academic honesty. The Code of Academic

Integrity is designed to ensure that the principle of academic honesty is upheld. While all members of the University community share this responsibility, The Code of Academic Integrity is designed so that special responsibility for upholding the principle of academic honesty lies with students.” (from the Graduate Catalog; <http://apps.gradschool.umd.edu/catalog/>). By enrolling at the University of Maryland, students acknowledge their obligation to adhere to the Code of Academic Integrity. As members of the University community, students are responsible for promoting academic integrity. This includes the responsibilities to report cases of academic dishonesty to the Student Honor Council and to cooperate with faculty and the Council in resolving such cases.

Academic dishonesty includes, but is not limited to: cheating (including use of unauthorized materials or study aids in any academic exercise), fabrication, and plagiarism. The Department of Hearing and Speech Sciences considers charges of academic dishonesty very seriously. Violations of the Code of Academic Integrity may result in expulsion of the student from the graduate program.

Additional information about the Code of Academic Integrity and student responsibility can be found on the website of the Office of Student Conduct: <http://osc.umd.edu/OSC/StudentsInfo.aspx>

Student Conduct: (<http://osc.umd.edu/OSC/Resources.aspx>)

Students are expected to abide by the University of Maryland’s policies on student conduct, including sexual misconduct, responsible action, discrimination, lawful activities and ethical use of university property. These policies are outlined here:

<http://www.president.umd.edu/sites/president.umd.edu/files/documents/policies/V-100B.pdf>

Questions & Complaints

If a student has questions regarding departmental policies or experiences interpersonal challenges with a faculty member, the student is advised to first communicate with the faculty member. If the challenges are not resolved, the student may consult with the departmental chairperson, Dr. Rochelle Newman. Students may appeal adverse departmental actions. Appeals should be addressed, in writing, to the Chair, with thorough justification of the grounds for the appeal. Appeals will be reviewed by the faculty, who may, in exceptional cases, waive normal departmental policy. Students should be aware that such waivers are rarely granted.

The student may also meet with the departmental graduate ombudsperson, Ms. Kate Skinker. The ombudsperson can be consulted for information regarding departmental/university policies and other problems that cannot be resolved through typical channels. An ombudsperson listens to complaints and offers to resolve them in an independent and impartial manner. Communication with the ombudsperson is confidential. The University of Maryland also has an ombudsperson for graduate students, whose contact information can be found at <http://www.umd.edu/ombuds/>.

If students have complaints regarding the department’s compliance with standards of accreditation for audiology or speech language pathology, they may contact the Council on Academic Accreditation <http://caa.asha.org/>.

After Au.D. Graduation: ASHA Certification and Related Information

ASHA Certification

ASHA certification forms are signed by the program director, Dr. Sandra Gordon-Salant. The steps are as follows:

- Fill out your ASHA application (<http://www.asha.org/Certification/AudCertification.htm>) and Knowledge and Skills Acquisition (KASA) form FULLY and check it for accuracy. We have a model form that uses University of Maryland courses as examples to guide you in filling out your form (see the CAUD student web site <http://hesp.umd.edu/content/knowledge-and-skills-acquisition-kasa-form-and-instructions>). PLEASE READ instructions and the sample before filling out the application.
- The Department keeps a permanent copy of the ASHA application in your files for your future employment inquiries. ASHA does NOT keep a copy of the application. Please fill it out completely and neatly. Dr. Gordon-Salant will NOT sign off on incomplete applications, even though only the end pages must be submitted to ASHA. This means you must fill out all coursework and clock hour information. Forms will not be signed without this information.
- You must submit these forms TOGETHER WITH the other pages of the ASHA Certification application to Dr. Gordon-Salant and the graduate program coordinator, Ms. Valerie Brownlee.

Praxis exam

- The praxis exam can be taken any time before you apply for ASHA certification. CAUD students typically take this during the spring semester of the third year in the program (after comps). <https://www.ets.org/praxis/asha/requirements>
- Please list the University of Maryland as a recipient of your NTE ASHA exam scores. The code is RA0131.

Contact Information

- Please provide the department with your forwarding address if you will be moving after graduation, as well as your non-UMD email address.

OTHER LINKS

- AuD Certification Standards: <http://www.asha.org/Certification/2012-Audiology-Certification-Standards/>
- How to Apply for Certification in AuD: <http://www.asha.org/Certification/AudCertification.htm>
- Application for Certificate of Competence (AUD): <http://www.asha.org/uploadedFiles/2012-Aud-CCC-Application.pdf>
- Knowledge and Skills Acquisition Form (KASA): <http://hesp.umd.edu/content/knowledge-and->

[skills-acquisition-kasa-form-and-instructions](#)

- Praxis Exam: <http://www.asha.org/Certification/praxis/About-the-Audiology-Praxis-Exam/> and information about scores: http://www.asha.org/certification/praxis/praxis_scores/
- ASHA Code of Ethics: <http://www.asha.org/policy/ET2010-00309.htm?LangType=1033>
- ASHA State-by-State Guidelines: <http://www.asha.org/advocacy/state/>
- Maryland Licensure Qualifications for AUD:
<http://www.mdboardaudhadslp.org/html/professionals/speechqual.htm>

Department of Hearing and Speech Sciences Faculty and Interests

Information on current faculty and adjunct faculty members and their areas of interest can be obtained on the department website: <http://www.hesp.umd.edu>

The “Faculty/Staff” section contains links to profiles of individual faculty members. Further information on ongoing research projects can also be found under the “Research” section of the website.

Course Descriptions: Required and Elective Courses in the Doctoral Program in Clinical Audiology

Audiology/Hearing Science Courses Offered in the Department of Hearing & Speech Sciences, University of Maryland, College Park

Undergraduate HESP courses (pre-requisites denoted by *)

***HESP 300. Introduction to Psycholinguistics (3).**

Prerequisite: HESP 202.

An introduction to current theories of language and an investigation of their relationship to human communication behavior. Survey of the experimental literature relating to this question.

***HESP 311. Anatomy, Pathology and Physiology of the Auditory System (3).**

Prerequisite: HESP 202.

Gross anatomy of the ear and pathways for transmission of sound energy through the peripheral and central auditory system. Causes, development and effects of pathological conditions contributing to temporary or chronic hearing impairments.

***HESP 400. Speech and Language Development in Children (3).**

Prerequisite: HESP 300.

Analysis of the normal processes of speech and language development in children.

HESP 403. Introduction to Phonetic Science (3).

Prerequisite: HESP 305.

An introduction to physiological, acoustic and perceptual phonetics: broad and narrow phonetic transcription; current models of speech production and perception.

***HESP 407. Bases of Hearing Science (3).**

Prerequisite: HESP 311.

Fundamentals of hearing, including the physics of sound, psychophysical procedures used in measurement of auditory sensation and perception, and topics in psychological acoustics.

HESP 411. Introduction to Audiology (3).

Prerequisite: HESP 311.

An introduction to the field of audiology. Evaluation and remediation of hearing handicaps.

***HESP 417. Principles and Methods in Speech-Language Pathology and Audiology (3).**

Prerequisite: HESP 402, HESP 411.

The principles underlying the treatment of speech, language and hearing disorders in children and adults; supervised observation of clinical activities.

HESP 418. Clinical Practice in Speech-Language Pathology and Audiology (3).

Prerequisite: HESP 417. Repeatable to 6 credits.

Supervised observation with some direct participation in clinical methods for the treatment of disorders of articulation, fluency, child and adult language; evaluation and habilitation/ rehabilitation of hearing impaired children and adults.

HESP 420. Deafness and Sign Language (3) (previously 498a).

Introduction to ASL and deaf culture.

HESP 498. Seminar (3).

Prerequisite: permission of department. Repeatable to 6 credits if content differs.

Selected topics pertaining to human communication and its disorders.

HESP 499. Independent Study (1-3).

Prerequisite: permission of department. Repeatable to 6 credits if content differs.

A directed study of selected topics pertaining to human communication and its disorders.

Graduate HESP Courses**HESP 600. Instrumentation in Hearing and Speech Sciences (3).**

Prerequisite: permission of department.

Types and principles of operation of electronic equipment used in the hearing and speech sciences.

HESP 602. Neurological Bases of Human Communication (3).

Prerequisite: permission of department.

Basic neurology as it pertains to anatomical and physiological substrates of speech and language.

HESP 606. Basic Hearing Measurements (3).

Prerequisite: HESP 411 or equivalent.

Theoretical principles, methodology, and interpretation of routine audiometric tests, including pure tone, speech and acoustic immittance measures. Modification of procedures for special populations. Equipment calibration and mass hearing screening programs.

HESP 615. Counseling in Communicative Disorders (3).

Introduction to the application of counseling principles and methodologies for working with individuals with communication disorders and their families. The role of the audiologist and speech language pathologist as counselors will be explored. Class content will focus on theoretical approaches and techniques to counseling from the fields of psychology, social work, and family the family therapy. The application of counseling in the diagnostic process as well as treatment of a wide variety of communication disorders will be highlighted throughout the course.

HESP 630. Electrophysiological Measurements I (3).

Prerequisite: HESP 606 or permission of department.

Principles and techniques of physiological and electrophysiological measures of the audio-vestibular mechanisms.

HESP 632. Medical Audiology (3).

Overview of auditory pathologies, and their assessment and management in the medical setting.

HESP 634. Anatomy and Physiology of the Auditory and Vestibular Systems (3).

Comprehensive examination of the anatomy and physiology of the peripheral and central auditory and vestibular systems. Both afferent and efferent pathways will be presented. Applications of basic auditory neuroscience to contemporary clinical audiology practice will be highlighted.

HESP 635. Aural Rehabilitation/Habilitation (3).

Principles, methods and procedures for aural rehabilitation/habilitation in children and adults.

HESP 636. Geriatric Audiology (3).

Physical effects of aging on the auditory periphery and central nervous system, as well as the consequences of aging on behavioral and electrophysiologic measures of auditory function.

HESP 639. Special Topics in Hearing and Speech Sciences (1-3).

Prerequisite: permission of department. Repeatable to 6 credits if content differs. Intensive coverage of selected topics of current interest.

HESP 645. Pediatric Audiology (3).

Prerequisite: HESP 606 or permission of department.

Evaluation and treatment of hearing-impaired children.

HESP 649A and B. Clinical Practice in Audiology (1-3).

Prerequisite: permission of instructor. Repeatable to 15 credits.

Supervised training in the application of clinical methods in the diagnosis and treatment of hearing disorders.

HESP 700. Hearing Aids I (3).

Principles, methods and procedures for selection, fitting, calibration and management of amplification systems for hearing-impaired adults.

HESP 701. Hearing Aids II (3).

Advanced issues in amplification for hearing-impaired individuals, including hearing aid selection using digital signal processing algorithms, hearing aid selection for children, and implantable amplification devices.

HESP 704. Audiology Practice Management (3).

Basics of clinical business management both in the context of private practice in Audiology and as a department in a healthcare corporation and review of ethical and legal issues governing the practice of audiology.

HESP 706. Advanced Clinical Audiology (3).

Prerequisite: HESP 606 or equivalent.

Advanced clinical and experimental methods of evaluating the peripheral and central auditory system using acoustic stimuli. Procedural consideration and interpretation of test results.

HESP 708. Independent Study (1-6).

Prerequisite: permission of instructor. Repeatable to 6 credits.

Individual research projects under guidance of a faculty member.

HESP 710. Industrial and Environmental Noise Problems (3).

Prerequisite: permission of instructor.

Evaluation and control of noise hazards. Effects of noise on humans. Medico-legal aspects of noise-induced hearing impairment.

HESP 712. Cochlear Implants and Other Implantable Technologies (3).

Comprehensive presentation of cochlear implant design and processing, medical/surgical aspects, evaluation, programming, outcomes in children and adults, and post stimulation care. The role of the audiologist as a member of the cochlear implant team will be emphasized. Current and emerging trends in other implantable technologies also will be covered.

HESP 722. Psychoacoustics (3).

Auditory perception and auditory processing in normal and impaired hearing

HESP 724. Research Design (3).

Prerequisite: a course in basic statistics.

Evaluations of research designs, critique of published articles and student involvement in designing experiments on assigned topics.

HESP 729. Advanced Clinical Practice in Audiology (1-8).

Prerequisite: HESP 649 and permission of instructor. Repeatable to 8 credits.

Clinical internship in selected off-campus facilities.

HESP 730. Vestibular-ocular Function and Assessment (Electrophysiologic Measures II) (3)

Advanced principles and methods of evaluating vestibular-ocular function using electrophysiologic measures. Includes rehabilitative issues pertaining to balance disorders and advanced electrophysiologic measures of auditory system function.

HESP 788. Research Externship (1-3).

Prerequisite: permission of instructor. Repeatable to 6 credits.

Off-campus research experience with departmental affiliates at National Institutes of Health and other regional institutions.

HESP 808. Current Research in Hearing, Speech, and Language Services.**HESP 828. Seminar in Hearing Sciences.****HESP 829. Clinical Internship Residency (9).**

Prerequisite: permission of instructor. Repeatable to 18 credits.

Off-campus, full-time research internship at regional and national institutions.

HESP 848. Seminar in Audiology (3).

(Topics of recent Seminars: Cochlear Implants, Tinnitus, Signal Processing)

Prerequisite: permission of instructor. Repeatable to 6 credits.

HESP 849. Capstone Research I (2).

Prerequisite: HESP 724

HESP 859. Capstone Research II (2).

Prerequisite: HESP 849. Repeatable to 6 credits.

HESP 889. Doctoral Candidacy Research (1-6).

HESP 898. Pre-Candidacy Research (1-8).**HESP 899. Doctoral Dissertation Research (1-8).****Required/Elective Courses Offered at the University of Maryland, College Park**

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|-----------|--|
| BIOL 600. | Scientific Ethics (2) (Ph.D. track only) |
| BIOL 646/ | Hearing (3) |
| NACS 728A | |
| EDMS 645 | Quantitative Research Methods I (3) (Au.D. and Ph.D. tracks) |
| EDMS 646 | Quantitative Research Methods II (3) (Ph.D. track only) |
| NACS 618 | The Classics in Neuroscience and Cognitive Science (3) |
| NACS 640 | Foundational Readings Seminar (2) |
| NACS 641 | Introduction to Neuroscience (4) |
| NACS 645 | Cognitive Science (4) |
| NACS 651 | The Neuroscience of Cognition (3) |
| NACS 728F | Seminar: Introduction to Functional MRI |
| PSYC 764 | Comparative Neuroanatomy (3) |
| PSYC 798G | Neuroplasticity |

Sample Electives Courses Offered at the University of Maryland, Baltimore

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|----------------|--|
| CIPP 909: | Responsible Conduct of Research (2) |
| GERO 672 | Issues in Aging Policy (3) |
| GERO 711 | Biology of Aging (3) |
| GERO/PSYC 786: | Psychology of Aging (3) |
| GERO/PREV 681: | Epidemiology of Aging (3) |
| GPLS 604 | Neuropharmacology (3) |
| GPLS 615 | Biological Signal Analysis (3) |
| GPLS 620 | Synaptic Physiology (3) |
| GPLS 621 | Biostatistics (3) |
| GPLS 633 | Pathways in Neuroscience (3) |
| GPLS 641 | Systems and Cognitive Neuroscience (3) |
| GPLS 705 | Basic Human Genetics (3) |
| GPLS 708 | Clinical Genetics I (3) |
| GPLS 711 | Genetic Epidemiology (3) |
| GPLS 778 | Recording Neural Activity: Modern Methods (3) |
| GPLS 780 | Neurobiology of CNS Disease (3) |
| MANA 633: | Pathways in Neuroscience (3) |
| MPET 603: | Fundamentals of Pharmacology (2) |
| MPHY 606: | Physiology of the Central Nervous System (3) |
| MPHY 615: | Biological Signal Analysis (3) |
| PREV 600: | Principles of Epidemiology (3) |
| PREV 619 | Biostatistical Computing |
| PREV 620: | Principles of Biostatistics (3) |
| PREV 648: | Health Care Administration and Evaluation (2) |
| PREV 650: | Principles of Health Education and Promotion (3) |
| PREV 668: | Environmental and Occupational Health (3) |
| PREV 711 | Genetic Epidemiology (3) |

Appendix I: American Board of Audiology Certification Requirements

Applicant Categories

Individuals seeking Board Certification in Audiology must demonstrate, through submission of appropriate documentation, evidence of initial mastery of core elements of audiologic practice. This evidence is presented through one of the following applicant categories: Board Certification, Board Certification through Reciprocal Eligibility, and Provisional Board Certification. All applicants must attest that they will abide by the ABA Code of Ethics. They must also attest that any licensure/registration that they hold is in good standing and that they will abide by the regulations applicable to such licensure/registration.

Board Certification

For applicants who have completed all requirements for Board Certification but do not hold a current state license/registration in audiology.

- A. All applicants must have earned a doctoral level degree in audiology from a regionally accredited college or university. ABA requires submission of an official transcript confirming an applicant's graduate degree in audiology as part of the application process. Transcripts must be submitted directly from the institution to ABA. The transcript must include the date that the graduate degree was posted.
- B. Applicants must document achievement of a passing score on a national examination in audiology as required by the ABA.
- C. Applicants must document completion of a minimum of 2000 hours of mentored professional practice within a 3-year time period after completion of both their academic coursework and 375 supervised hours of direct patient care. Applicants applying in this category must document their professional practice experience. The mentor must verify this experience and make a recommendation for the granting of Board Certification. The mentor must possess a current state license/registration to practice audiology or hold current ABA certification.
- D. Applicants must submit appropriate documentation, fees and signed affirmations regarding the truthfulness of information, adherence to the ABA Code of Ethics, and adherence to state licensure/registration regulations for the practice of audiology (where applicable) or other regulatory agency through which you are authorized to practice audiology.

Appendix II: Outside Placement Sites for HESP Graduate Students in Audiology

Please note: The following list is subject to change.

I. Hospitals

Baltimore VA Hospital, Baltimore
 Children's Hospital, Washington, DC
 Department of Otolaryngology - Georgetown University Medical Center, Washington, D.C.
 Fort Belvoir Army Medical Center, Alexandria, VA
 Johns Hopkins Medical Institutel, Baltimore
 Kennedy/Krieger Institute, Baltimore
 National Institutes of Health, Bethesda
 National Naval Medical Center, Bethesda
 St. Agnes Hospital, Baltimore
 University of Maryland Hospital, Baltimore
 VA Hospital, Washington D.C.
 Walter Reed Army Medical Center, Washington D.C.
 Washington Hospital Center, Washington D.C.

II. Community-based Public and Private Clinics

Anne Arundel County Health Department, Annapolis, MD
 Baltimore Hearing and Speech Agency, Baltimore, MD
 ENTAA Care, various sites in Maryland
 Greater Baltimore Medical Center, Baltimore, MD
 Hearing Assessment Center, Baltimore, MD
 Howard County Diagnostic Center, Columbia, MD
 Physicians Hearing Center, Falls Church, VA
 Treatment and Learning Centers, Rockville
 Washington Hearing and Speech Society, Washington, D.C.

III. Schools

Anne Arundel County Public Schools, MD
 Charles County Public Schools, MD
 Fairfax County Public Schools, VA
 Kendall Demonstration Elementary School - Gallaudet University, Washington, D.C.
 P.G. County Parent Infant Program, MD
 River School, Washington, D.C.