MEMORANDUM

TO: Edward Montgomery
    Dean, College of Behavioral and Social Sciences

FROM: Phyllis Peres
    Associate Provost for Academic Planning and Programs

SUBJECT: Proposal to modify the doctoral program in Clinical Audiology (PCC log no. 08015)

At its meeting on December 5, 2008, the Senate Committee on Programs, Curricula and Courses approved your proposal to replace the dissertation requirement in the Au.D. degree program with a capstone requirement, and to offer the option of a combined Au.D./Ph.D. degree program. A copy of the approved proposal is attached.

The changes are effective Spring 2009. The College should ensure that the changes are fully described in the Graduate Catalog and in all relevant descriptive materials, and that all advisors are informed.

CWR/

Enclosure

cc: Carmen Balthrop, Chair, Senate PCC Committee
    Sarah Bauder, Office of Student Financial Aid
    Reka Montfort, University Senate
    Barbara Hope, Data Administration
    Denise Nadasen, Institutional Research & Planning
    Anne Turkos, Archives
    Linda Yokoi, Office of the Registrar
    Thomas Castonguay, Graduate School
    Robert Schwab, College of Behavioral and Social Sciences
    Nan Ratner, Department of Hearing and Speech Sciences
    Sandra Gordon-Salant, Department of Hearing & Speech Sciences
THE UNIVERSITY OF MARYLAND, COLLEGE PARK
PROGRAM/CURRICULUM PROPOSAL

DIRECTIONS:
- Provide one form with original approval signatures in lines 1 - 4 for each proposed action. Keep this form to one page in length.
- Early consultation with the Office of the Associate Provost for Academic Planning & Programs is strongly recommended if there are questions or concerns, particularly with new programs.
- Please submit the signed form to Claudia Rector, Office of the Associate Provost for Academic Planning and Programs, 1119 Mair Administration Building, Campus.
- Please email the rest of the proposal as an MSWord attachment to pcc-submissions@umd.edu.

DATE SUBMITTED 8/13/08

COLLEGE/SCHOOL BSOS

DEPARTMENT/PROGRAM Department of Hearing and Speech Sciences, Program in Clinical Audiology

PROPOSED ACTION (A separate form for each) ADD _______ DELETE _______ CHANGE ______

DESCRIPTION (Provide a succinct account of the proposed action. Details should be provided in an attachment. Provide old and new sample programs for curriculum changes.)
1. Eliminate the requirement of a dissertation for students earning the Doctor of Audiology (Au.D.) degree, which is a professional degree required for the practice of clinical audiology. Replace this requirement with a Capstone Research Project (4 credits).
2. Offer the option of a combined Au.D./Ph.D. degree for students in the program, rather than the current Clinical/Ph.D. option.

JUSTIFICATION/REASONS/RESOURCES (Briefly explain the reason for the proposed action. Identify the source of new resources that may be required. Details should be provided in an attachment.)
1. UMD is the only program in the U.S. that requires a dissertation for the Au.D. degree. As a result, the application rate to the program is declining and it is difficult to attract the top applicants to the program. Students are not graduating from the program within the expected four-year time frame because of the dissertation requirement. The dissertation requirement is a significant drain on the department’s resources.
2. The current Clinical Ph.D. option provides students with all of the coursework and clinical practicum experiences of the Au.D. degree with additional research experience. Other programs in the U.S. that offer this type of training award students the Au.D. degree on the way to earning a Ph.D. This would permit students who seek the Ph.D. to more easily obtain clinical certification and licensure for the practice of Audiology.

APPROVAL SIGNATURES - Please print name, sign, and date

1. Department Committee Chair Yasmeen Siah
   Signature: [Signature]
   Date: 8/13/08

2. Department Chair Nan Bernstein Ratsn
   Signature: [Signature]

3. College/School PCC Chair Martha E. Geores Martha E. Geores
   Signature: [Signature]
   Date: 10/2/08

4. Dean Katherine Pedro Bearssky Katherine Pedro Bearssky
   Signature: [Signature]
   Date: 10/2/08

5. Dean of the Graduate School (if required)
   Signature: [Signature]
   Date: 12/19/08

6. Chair, Senate PCC
   Signature: [Signature]

7. Chair of Senate
   Signature: [Signature]
   Date: 12/19/08

8. Vice President for Academic Affairs & Provost
   Signature: [Signature]
   Date: 12/19/08

VPAAP 8-65

835 09-01
Summary of requirements for current Au.D. program (with dissertation) and for proposed Au.D. program (without dissertation).

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Coursework in basic sciences, research design, and statistics</td>
<td>12 credits</td>
<td>12 credits</td>
</tr>
<tr>
<td>Coursework in clinical audiology (hearing assessment, aural rehabilitation, hearing aids, cochlear implants, geriatric audiology, pediatric audiology, etc.)</td>
<td>39 credits</td>
<td>39 credits</td>
</tr>
<tr>
<td>Elective coursework (doctoral seminars, NACS courses, etc.)</td>
<td>6 credits</td>
<td>6 credits</td>
</tr>
<tr>
<td>Clinical Practicum on-campus (HESP 648A and B)</td>
<td>3 semesters (7 credits)</td>
<td>3 semesters (7 credits)</td>
</tr>
<tr>
<td>Clinical Practicum at off-campus sites (HESP 729; 2 cr/semester)</td>
<td>2-3 semesters, 3-4 days/week</td>
<td>2-3 semesters, 3-4 days/week</td>
</tr>
<tr>
<td>Clinical Externship (HESP 829; total of 18 credits)</td>
<td>9-12 months full-time equivalent (5 days/week) totals 2,000 hours of clinical practice</td>
<td>9-12 months full-time equivalent (5 days/week) totals 2,000 hours of clinical practice</td>
</tr>
<tr>
<td>Comprehensive Examinations</td>
<td>10.5 hrs, covering diagnostic audiology, rehabilitative audiology, hearing science, and research methods</td>
<td>10.5 hrs, covering diagnostic audiology, rehabilitative audiology, hearing science, and research methods</td>
</tr>
<tr>
<td>Dissertation Research (HESP 899)</td>
<td>6 cr. dissertation research (original research project or scholarly review of literature), consistent with Graduate School rules; often involves submission of IRB proposal</td>
<td>not applicable</td>
</tr>
<tr>
<td>Capstone Project</td>
<td>not applicable</td>
<td>2 cr. for Capstone Research I and 2 cr. for Capstone Research II; an original research-based prospective investigation, a scholarly review of literature with applications to clinical problem solving, an evidence-based position paper, a grant proposal, a clinical protocol developed based on published research findings, a clinical trial, or an investigation based on retrospective data analysis</td>
</tr>
<tr>
<td>Total number of credits</td>
<td>96</td>
<td>94</td>
</tr>
</tbody>
</table>
Background

The Doctoral Program in Clinical Audiology (CAUD) began in Fall 2002, in response to national trends calling for a doctoral degree as the entry level degree for the profession of Audiology. Audiologists are clinicians who provide hearing health care for children and adults with hearing loss and/or vestibular problems. They work in hospitals, community-based clinics, schools, and private practice. The CAUD program replaced the Master’s degree program in Audiology, which had been in existence for about 50 years. The current program, like its predecessor, is accredited by the Council on Academic Accreditation for Audiology and Speech-Language Pathology (CAA). The program was last accredited in 2002 for an eight-year period. The graduate program for the Doctor of Audiology degree (Au.D.), as currently configured, requires three years of graduate coursework and clinical practicum, as well as a 4th-year full-time clinical externship. Additionally, students are required to pass comprehensive examinations and complete a doctoral dissertation that meets all Graduate School requirements. Students accrue a minimum of 96 credit hours for this degree (57 credits for academic coursework, 14 credits for clinical practicum, 18 credits for the 4th year clinical externship, and 6 credits for doctoral dissertation research).

The program has now been in existence for six years, and by all accounts it has been quite successful. However, in annual reviews by our continuing students and exit interviews by program graduates, students repeatedly indicate that the dissertation requirement is the primary negative aspect of our program and represents an undue hardship for students. Typically, the students proceed smoothly through their coursework and clinical practicum requirements, but the process of conducting a major research project, constituting a dissertation, is clearly a major obstacle. The three faculty members who comprise the primary faculty for the program have observed that some of the students are not adequately prepared to conduct a scholarly research project of this magnitude. Because the students trained in this program have a career path that involves delivery of clinical services, rather than research, it seems prudent to consider alternatives to the dissertation requirement. This proposal is a request to eliminate the dissertation requirement for students who seek the Au.D. degree and replace it with a “capstone” research project, comparable to those required in the top-ranked Audiology training programs in the US. Specific details of the rationale for this request and the recommendations are presented below.

Detailed Rationale for Request

• The dissertation requirement is inconsistent with national educational standards for the Doctor of Audiology (Au.D.) degree.
  
  o National accrediting boards in this discipline, CAA and the American Board of Audiology (ABA), do not require a dissertation for the practice of Audiology.

  o A survey of all Au.D. programs nationwide indicates that the vast majority do not have a doctoral dissertation requirement for the degree. The following programs have confirmed
that they do not require a dissertation: Vanderbilt University, Washington University in St. Louis, University of Iowa, University of Illinois, Ohio State University, Purdue University, University of Florida, University of Massachusetts, University of Arizona, Ohio University, University of Washington, University of Memphis, Northwestern University, and University of Wisconsin. The only other program (besides UMD) in the entire U.S. that requires a dissertation is Louisiana Tech University.

- The application rate to the Au.D. program has declined dramatically. It appears that applicants may not be applying to UMD because of the dissertation requirement (four students and/or their parents have mentioned this reason to Dr. Gordon-Salant in the past year). Two years ago, the number of applications to the Au.D. program was 75; this year, it was 35. This statistic registers significant concerns, since national trends indicate an increase in the application rate for Au.D. programs (e.g., data from peer institutions, obtained from training grant submissions).

- The acceptance rate is declining. Several years ago, we were able to recruit our top applicants to the program. During the last two years, however, the Admissions Committee has had to offer admission to applicants ranked in the second and third tier, in order to fill an incoming class. Anecdotal responses from individuals who decline an offer of admission consistently cite the dissertation as the major factor mitigating against accepting the offer.

- Although the Au.D. program enjoys a relatively high national ranking (U.S. News and World Report, 2008), the faculty are concerned that the program’s reputation will decline because the dissertation requirement is out of step with national trends.

- The dissertation requirement has a significant, negative impact on our students, faculty and resources.

- Students are not graduating within the expected 4-year time-frame for the program.

<table>
<thead>
<tr>
<th>Entering Class</th>
<th># entered</th>
<th># graduated on time</th>
<th># graduated to date</th>
<th># dropped out</th>
<th># switched to Ph.D.</th>
<th># in progress*</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002 - 2003</td>
<td>9</td>
<td>1 (May, 06)</td>
<td>5</td>
<td>1</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>2003 – 2004</td>
<td>7</td>
<td>0 (May, 07)</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>2004 – 2005</td>
<td>7</td>
<td>1 (May, 08)</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

*only remaining requirement for these students is completion of the dissertation

- Students are unable to compete successfully for jobs in a timely manner. Frequently, students complete their 4th year clinical externship and the employer seeks to hire them. However, without the degree completed, these students are not eligible for certification and licensure, and hence, the employer cannot hire them. Dr. Lucille Beck, Director of Audiology for the entire Veterans Administration (VA) system, has expressed her extreme displeasure with the delay in these trainees completing their degree (conversation with S. Gordon-Salant, 12/16/07).
VA is the biggest employer of audiologists in the US. Dr. Beck indicates that because of the difficulty in hiring UMD students, she no longer plans to accept them in clinical placements.

- The dissertation requirement is a significant drain on faculty and department resources. There has been a heavy toll on our faculty in mentoring students for the dissertation. To date, Assistant Professor Monita Chatterjee has worked with 4 CAUD students as dissertation mentor, Assistant Professor Tracy Fitzgerald has worked with 8 as mentor or co-mentor, and Professor Sandra Gordon-Salant has worked with 22 as mentor or co-mentor (she also has 3 Ph.D. students). This is an exceptionally heavy burden on faculty time and restricts the faculty members’ ability to conduct their own research (including writing grants). In particular, this time commitment has impeded junior faculty from making significant progress toward fulfilling scholarly requirements for promotion and tenure. We are specifically concerned that the heavy burden may result in problems with retention of junior faculty. It should be noted that we have reduced the number of students admitted to the program to reduce the burden of mentorship on faculty.

- Student research projects require use of lab space, lab equipment, and financing to reimburse participants. Departmental resources are inadequate to fund these research projects.

Recommendations

1. Eliminate the requirement for the doctoral dissertation for currently enrolled Au.D. students immediately.

2. Replace the dissertation requirement with a capstone project. The capstone project is a standard requirement in the majority of the highest quality Au.D. programs (e.g., Vanderbilt University, University of Iowa, University of Washington, Washington University of St. Louis). Among these universities, the capstone project entails research-based investigations, evidence-based position papers, critical literature reviews, grant proposals, development of clinical protocols based on published research findings, etc. Table 1 presents a detailed analysis of the capstone research requirements at 7 of the top 10 academic training programs in the U.S. The proposed Capstone Research Project would involve registration of 4 credits in total, rather than the 6 credits currently required for the Au.D. dissertation, because the Capstone Research Project is not expected to be as extensive as the dissertation. The 4 credits for the proposed Capstone Research Project will be distributed in two, 2-credit courses: Capstone Research Project I in which students identify the project and develop a brief written proposal, and Capstone Research Project II in which students complete the project and either present the results at a public forum or submit a written paper to the Capstone Research Committee. The Capstone Research Project is comparable to the content and process of capstone projects conducted at other major universities. A detailed description of the proposed Capstone Research Project is presented in Appendix I. Table II presents a comparison of the current degree requirements for the Au.D. program at UMCP and the proposed degree requirements. Table III presents a comparison of learner outcomes for the current and proposed Au.D. program.

3. Permit students who wish to obtain clinical training and earn a Ph.D. to earn an Au.D. degree on the way to earning the Ph.D. The Au.D. degree would be awarded after the student
completes the requirements for the Au.D. degree (courses, comprehensive examinations, 4th-year externship, and capstone project), and then the student would proceed to the Ph.D. research that encompasses the dissertation and any additional coursework or comps needed for this process (such as a course in Research Ethics). This model parallels the option available for students in the Speech-Language Pathology program to earn their clinical degree (MA) on the way to earning the Ph.D. A number of prestigious programs offer the dual degree (Au.D./Ph.D.) option, including the University of Iowa (ranked #2), the University of Arizona (ranked #9), the University of Pittsburgh (ranked #16), and Ohio State University (ranked #19). The NIH has recently demonstrated a strong commitment to dual degree programs offering the Au.D./Ph.D. by announcing a new funding mechanism (F30) that will provide up to 6 years of funding for students enrolled in this type of dual degree program.

4. Permit students who wish to obtain clinical training and research training to apply directly to the combined Au.D./Ph.D. program. These students would essentially follow the model outlined in #4 above.

5. The changes recommended above will require some changes to the Graduate Catalog.

No new resources are requested for this proposal.
<table>
<thead>
<tr>
<th>Institution</th>
<th># credits</th>
<th>Nature of capstone</th>
<th>Completion requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vanderbilt U.</td>
<td>6 cr.</td>
<td>research-based investigations, evidence-based position papers, business plans, critical literature reviews, grant proposals, development of clinical proposals, etc.</td>
<td>oral defense of a formal manuscript which has been submitted to the student’s Capstone Committee</td>
</tr>
<tr>
<td>University of Iowa</td>
<td>1 cr.</td>
<td>research project or write a paper on an assigned topic related to clinical practice; can be a volunteer humanitarian service experience</td>
<td>oral exam</td>
</tr>
<tr>
<td>U. of Washington (Seattle)</td>
<td>12 cr.</td>
<td>students participate in a research project with advice and approval of academic advisor and research mentor; topics can be basic or clinical research; student submits a brief proposal (3-5 pages) to committee, and submits a final summary paper (intro with lit review, description of methods and results to the committee).</td>
<td>student presents final research results to an open forum and submits a summary paper to the committee for final approval.</td>
</tr>
<tr>
<td>Washington U. (St. Louis)</td>
<td>3-6 cr.</td>
<td>research project, carried out in entirety; student develops original questions, writes a document in the form of a publishable article, including intro, lit review, statement of purpose, research questions, methodologies, results, discussion, conclusions, directions for future research, and references; students obtain IRB approval, collect data, conduct data analyses, etc.</td>
<td>student presents the project at a student research colloquium and is graded by primary mentor and a second reader</td>
</tr>
<tr>
<td>University of Memphis</td>
<td>4 cr.</td>
<td>research project, with IRB approval, lit review, methods section, data collection and analysis, presentation</td>
<td>presentation to faculty, staff and students; student is graded by their faculty mentor</td>
</tr>
<tr>
<td>Northwestern U.</td>
<td>8 cr.</td>
<td>research project, with lit review, IRB approval, data collection and analysis, manuscript preparation</td>
<td>manuscript in publishable format approved by capstone committee</td>
</tr>
<tr>
<td>Purdue University</td>
<td>4 cr.</td>
<td>projects take variety of forms, including in-depth lit review, data analysis of existing clinical data, prospective small N studies (all with a clinical focus)</td>
<td>committee of two faculty members (at least one is tenure-track), committee meets for an oral</td>
</tr>
</tbody>
</table>
exam; each student presents their research project at a symposium

note: University of Texas – Dallas (ranked #4), University of Florida (tied for ranking of #6), and University of Arizona (tied for ranking of #9) were contacted but no replies received to date.

Table II. Requirements for current Au.D. program (with dissertation) and for proposed Au.D. program (without dissertation).

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Coursework in basic sciences, research design, and statistics</td>
<td>12 credits</td>
<td>12 credits</td>
</tr>
<tr>
<td>Coursework in clinical audiology (hearing assessment, aural rehabilitation, hearing aids, cochlear implants, geriatric audiology, pediatric audiology, etc.)</td>
<td>39 credits</td>
<td>39 credits</td>
</tr>
<tr>
<td>Elective coursework (doctoral seminars, NACS courses, etc.)</td>
<td>6 credits</td>
<td>6 credits</td>
</tr>
<tr>
<td>Clinical Practicum on-campus (HESP 648A and B)</td>
<td>3 semesters (7 credits)</td>
<td>3 semesters (7 credits)</td>
</tr>
<tr>
<td>Clinical Practicum at off-campus sites (HESP 729; 2 cr/semester)</td>
<td>2-3 semesters, 3-4 days/week</td>
<td>2-3 semesters, 3-4 days/week</td>
</tr>
<tr>
<td>Clinical Externship (HESP 829; total of 18 credits)</td>
<td>9-12 months full-time equivalent (5 days/week) totals 2,000 hours of clinical practice</td>
<td>9-12 months full-time equivalent (5 days/week) totals 2,000 hours of clinical practice</td>
</tr>
<tr>
<td>Comprehensive Examinations</td>
<td>10.5 hrs, covering diagnostic audiology, rehabilitative audiology, hearing science, and research methods</td>
<td>10.5 hrs, covering diagnostic audiology, rehabilitative audiology, hearing science, and research methods</td>
</tr>
<tr>
<td>Dissertation Research (HESP 899)</td>
<td>6 cr. dissertation research (original research project or scholarly review of literature), consistent with Graduate School rules; often involves submission of IRB proposal</td>
<td>not applicable</td>
</tr>
<tr>
<td>Capstone Project</td>
<td>not applicable</td>
<td>2 cr. for Capstone Research I and 2 cr. for Capstone Research II; an original research-based prospective investigation, a scholarly review of literature with applications to clinical problem solving, an evidence-based position paper, a grant proposal, a clinical protocol developed based on published research findings, a clinical trial, or an investigation based on retrospective data analysis</td>
</tr>
<tr>
<td>Total number of credits</td>
<td>96</td>
<td>94</td>
</tr>
<tr>
<td>---------------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
</tbody>
</table>
| Students will demonstrate knowledge of research methods and experimental design applicable to the hearing and speech sciences | a. method of assessment: doctoral comprehensive examination  
b. assessment criteria: 70% of the students admitted to the HESP doctoral program will attain Proficient/Good performance on doctoral comprehensive examinations. | a. method of assessment: doctoral comprehensive examination  
b. assessment criteria: 70% of the students admitted to the HESP doctoral program will attain Proficient/Good performance on doctoral comprehensive examinations. |
| Students will demonstrate the ability to successfully complete a final project germane to their sub-discipline | a. method of assessment: dissertation proposal preparation and hearing; final dissertation preparation and defense  
b. assessment criteria: 70% of cohort will attain Proficient/Good performance on dissertation proposal hearing (defined as approval of proposal), and 70% of cohort will attain Proficient/Good performance on dissertation preparation and oral defense (defined as “pass”). | a. method of assessment: capstone project proposal preparation; final capstone project preparation and presentation or paper submission  
b. assessment criteria: 70% of cohort will attain Proficient/Good performance on capstone project proposal (defined as approval of proposal), and 70% of cohort will attain Proficient/Good performance on capstone project preparation and oral presentation or defense (defined as “pass”). |
| Students will secure employment in field of graduate study                       | a. method of assessment: track employment following graduation;  
b. assessment criteria: 80% of graduates who seek employment will obtain positions in their field of expertise immediately following graduation. | a. method of assessment: track employment following graduation;  
b. assessment criteria: 80% of graduates who seek employment will obtain positions in their field of expertise immediately following graduation. |
Appendix I

Proposed Capstone Research Projects
Doctor of Audiology Degree

Rationale: The Capstone Research Project is a requirement intended to provide students with a meaningful research experience of clinical relevance. The specific purposes of the capstone project are:

1) to create an opportunity for students to engage in an in-depth study of a specific topic in audiology
2) to foster the student's appreciation for evidence-based practice
3) to enhance the student's capacity to be a critical consumer of research
4) to provide a forum conducive for the student to demonstrate critical thinking

There is considerable flexibility in the nature of the Capstone Research Project, and in the manner in which the student completes this requirement, as described below.

Course registration: Students would register for two courses: Capstone Research Project I (HESP 849, or equivalent number) and Capstone Research Project II (HESP 859, or equivalent), each offered for two credits (total of 4 credits for the Capstone Research courses). Each of these courses would be offered for a letter grade or the pass/fail option (to be determined by the student in consultation with their advisor).

Capstone Research Project I would require:
   1. mandatory attendance at a Capstone Research Project workshop (1 day)
   2. identification of an Initial Capstone Committee (one CAUD or HESP tenure-track faculty member + 1 additional member), and a Final Capstone Committee (the Initial Capstone Committee + 1 additional faculty member).
   3. preparation of a written proposal (3-5 pages)
   4. preparation of a time-line for completion of the project
   5. IRB approval, if the project involves collection of data from human participants
   6. Approval of #2 and 3 above, by the Initial Capstone Committee

Capstone Research Project II would require:
   1. completion of the proposed project
   2. final presentation (poster or short talk) at a Capstone Research Day held in mid-May*, or submission of a written paper (10-20 pages), grant application, or manuscript submission
   3. approval of the final project (presentation or written document) by the student’s Final Capstone Committee

Nature of Capstone Projects. The Capstone Research Project itself can take one of many different forms. These forms may include an original research-based prospective investigation, a scholarly review of literature on an unfamiliar topic with applications to clinical problem solving, an evidence-based position paper, a grant proposal, a clinical protocol developed based on published research findings, a clinical trial, or an investigation based on retrospective data analysis. If the project entails data collection, the data may be collected in one of the HESP laboratories or at an off-campus site, subject to University of Maryland IRB approval.
Composition of Advisory Capstone Committees. The Initial Capstone Committee, as noted above, is composed of at least one tenure-track faculty member from HESP and one additional committee member. The additional committee member could be a researcher from an off-campus site (such as an Adjunct faculty member at a local institution, or a researcher at another institution at a distance), a clinical faculty member, etc. The Final Capstone Committee will include the Initial Capstone Committee plus one additional member, chosen from the HESP faculty, UMCP faculty, HESP Adjunct Faculty, HESP or HESP-affiliated clinical faculty, etc.

Completion of Capstone Requirements. Each student must either give a presentation of their Capstone Research or submit a written document to the members of the Final Capstone Committee, and receive a passing grade by the Committee in order to complete the requirement. Au.D. students will be encouraged to present their Capstone Project at a conference, but this is not a requirement. It is expected that students would complete Capstone Research Project I during the second year of the program, and Capstone Research Project II during the spring semester of the third year of the program. Thus, all Capstone requirements would be completed before the student begins the 4th year Clinical Externship.

Transition of Current Au.D. Students to the Capstone Research Requirement. Current Au.D. students who have already been admitted to Doctoral Candidacy and have been registered for HESP 899 (Doctoral Dissertation Research) would have the option of completing the dissertation or converting the dissertation research to the Capstone Research Project. If the latter course is chosen, the HESP 899 credits would be converted to Capstone Research Project I and II credits; any remaining credits will be dropped from the student’s record.

Degree Completion. The proposed plan for the Capstone Research Project for Au.D. students would not entail admission to Doctoral Candidacy. Students would complete all coursework and clinical practicum requirements, successfully pass the comprehensive examinations, successfully pass the Capstone Research requirement, and complete the 4th year clinical externship to receive the Doctor of Audiology degree.

Capstone Research Requirement for Students enrolled in the Combined Au.D./Ph.D. Program. For students who are currently enrolled in the Clinical Ph.D. option, or for those who in the future wish to pursue the combined Au.D./Ph.D. program (assuming approval of this dual degree program), the current Candidacy Research (HESP 898) would be used to fulfill the Capstone Research Project requirement. Students would be awarded the Au.D. degree (on the way to the Ph.D.) at the point in the program when they have completed the following requirements: coursework, comprehensive examinations, Candidacy Research, and 4th-year Clinical Externship.

* Other HESP-sponsored seminars or workshops can be substituted for the Capstone Research Day
The Department of Hearing and Speech Sciences appreciates the careful consideration of the Graduate Council PCC to the Proposal to Change the Dissertation Requirement for Au.D. students (hereafter called the proposal). The questions the Graduate Council raised have been discussed at length by the faculty who train the Audiology students. Below, we present our vision for transitioning current students to the new requirements, ensuring rigor in the quality of the Capstone Research requirement, and the plan for students who wish to pursue a Ph.D. following completion of the requirements for the Au.D. degree in a dual-degree program.

Transition Plan

There are three types of students currently enrolled in the Doctoral Program in Clinical Audiology, and the transition plan is somewhat different for each of them. The first group consists of those students who have been enrolled in the program for less than three years. There are 25 students in this group. These students have been engaged in coursework and clinical practicum to date, but have not completed all requirements for admission to Doctoral Candidacy. These students are the simplest case; they would enroll in the Capstone Research Project I and II courses during the third year of the program and complete the Capstone Research Project instead of the dissertation.

The second student group includes those students pursing the Au.D. who have already been admitted to Doctoral Candidacy. There are currently 8 students in this group. These students would be offered the choice of completing their dissertation (four of them have already had a proposal meeting and two of these have completed data collection) or switching to the Capstone Research Project. We would need permission from the Graduate School to direct the Registrar’s Office to retroactively drop any credits for HESP 899 (Doctoral Dissertation Research) and replace those credits with the equivalent number of HESP XXX (Capstone Research Project I and II). Students who opt for the Capstone Research Project would be encouraged to complete their current dissertation research project for the Capstone requirement, but present the final project as a poster or a formal talk to members of the Department during a “Capstone Research Day” in the spring. Alternatively, students could submit a written paper of their research. These Capstone Research Projects would be graded (Pass/Fail) by two members of the faculty.

There are three students in the third group, and they have been formally admitted to the “Clinical Ph.D.” path within the Doctoral Program in Clinical Audiology. This path requires students to complete essentially all of the coursework required of Au.D. students, all of the clinical practicum hours, comprehensive examinations, and an initial research project (“Candidacy Research”), as well as additional courses and comprehensive examinations, prior to being
admitted to Doctoral Candidacy. After being admitted to Doctoral Candidacy, these students complete the 4th-year full-time Clinical Externship and a 12-credit Doctoral Dissertation. The transition plan for these students is to award the Au.D degree to those who have completed the equivalent requirements for this degree (currently, this pertains to one student). Upon completion of the 12-credit dissertation, these students would be awarded the Ph.D.

One specific question of the Graduate Council PCC is “At what stage would students either be grandfathered into the new requirements or remain in the Au.D with a dissertation requirement?” The plan outlined above indicates that all currently enrolled students would be grandfathered into the new requirements if they so choose. This appears to be the most equitable course of action, and it would help those students who have been struggling to complete the dissertation requirement for a number of years. We anticipate that all students, except perhaps one or two, would choose the new requirements. Students would be required to make their choice as soon as possible, but no later than the end of the semester in which the new requirements are approved.

Quality Assurances for Capstone Research Project

As described in the original proposal, the Capstone Research Project would consist of two registrations: Capstone Research I (2 credits) and Capstone Research II (2 credits). In Capstone Research I, students will identify a project and prepare a brief written proposal (approximately 3-5 pages in length) that presents a rationale for the project, specifies aims for the project, and outlines the method to be used in the project. If data are to be collected, then the student should provide pilot data from one or two participants in the proposal. Appropriate literature should also be cited in the proposal. If the project involves data collection from human subjects, either prospectively or retrospectively, the student investigator will need to obtain approval from the IRB during the Capstone Research I course. The detailed nature of the proposals will vary, depending upon the type of project the student plans to conduct. Nevertheless, each proposal will be approved by the student’s mentor and one additional faculty member, and the student will receive a grade for the course registration. Successful completion of this proposal is the first major benchmark of progress in the Capstone Research Project.

In a subsequent semester, students will register for Capstone Research II. During this course, students will collect and analyze their data (if a prospective research study, retrospective research study, or clinical trial), or prepare their written document (if a scholarly review of literature, evidence-based position paper, grant proposal, or development of a clinical protocol). The research mentor will work with the student throughout the semester to ensure that the project conforms to rigorous standards in the discipline. The final project will either be presented at a research forum to students and faculty in the department or will be submitted in written form to members of the student’s committee. The research mentor and a second member of the faculty comprise the student’s committee, and they will grade the student on the Capstone Research Project. This process is comparable to that described for the top-ranked programs in the U.S. The second benchmark to assure quality of the Capstone Research is successful completion of the project, as evidenced by a passing grade by the student’s committee.

One question asked by the Graduate Council PCC is whether the proposed changes would make a signification reduction in the time to degree completion. The HESP faculty is convinced that
these changes will substantially improve the time-to-completion of the degree for Au.D. students, for several reasons. First, the Capstone Project can take one of many different forms, and students will find some of these types of projects easier to approach and finish than the data-driven types of dissertations completed as part of this degree in the past. Second, there will be a more defined structure for benchmarks to be completed during each semester of the Capstone Research registrations. The proposal associated with the Capstone Research Project I is considerably shorter than current Au.D. proposals (which average 30-50 pages), and requires approval of two faculty members rather than the current dissertation committee (4 or more faculty members who are often difficult to assemble). Third, the final form of the Capstone Research Project (a poster, talk, or paper submission) will be far less time-consuming to complete than the current dissertation. All of the Au.D. dissertations completed to date have included six chapters and exceeded 100 pages. Additionally, students will no longer have to convene individual dissertation defenses with 4+ faculty members, including a Dean’s Representative. This has been quite challenging to accomplish toward the end of each semester, and particularly during the summer months. It is expected that the majority of students will complete the Au.D. degree within a four-year period, which is the intended duration of the Au.D. program and consistent with the duration of these programs nationally.

Dual Degree (Au.D./Ph.D.) Plan

The current Doctoral Program in Clinical Audiology offers students the option of requesting to switch from a terminal Au.D. degree to a Clinical Ph.D. The requirements for the Clinical Ph.D. are extensive, and include nearly all of the requirements of the Au.D. plus an added layer of research-based courses and research experiences. The proposal is to retain the exact same requirements for the combined Au.D./Ph.D. that currently constitute the Clinical Ph.D. program. Appendix I presents the coursework for the proposed Au.D. program and for the combined Au.D./Ph.D. program. The total number of credits for the dual degree program is 108, as compared to 93 for the proposed Au.D. program. Students currently enrolled in the Clinical Ph.D. program require 6-7 years for completion, which is significantly longer than the Au.D. program (expected program duration is 4 years). These students are extremely well trained to conduct research and are eligible to function as independent investigators in academic positions. Both of the current students admitted to Doctoral Candidacy within the existing Clinical Ph.D. program have been lead authors on peer-reviewed publications, based on research conducted while in the doctoral program.

The proposed plan for dual-degree students is for them to complete all courses (those required for the AuD and the Ph.D.), clinical practicum, comprehensive examinations, and the initial research project (Doctoral Candidacy Research, 6 credits of HESP 898, would substitute for the Capstone Research Project) during the first few years of the program. After students complete these requirements, they would be admitted to Ph.D. Doctoral Candidacy. The Au.D. would be awarded after students complete all of these requirements and the 4th-year Clinical Externship. Students may choose to complete the 4th-year Clinical Externship before being admitted to Doctoral Candidacy. In these cases, students would earn the Au.D. at the same time they are admitted to Doctoral Candidacy (i.e., the courses, clinic, comprehensive examinations, candidacy research, and 4th-year externship are completed). After students are admitted to Ph.D. Doctoral
Candidacy, they would commence work on their dissertation, which would require 12 credits of HESP 899.

There are two major advantages of the dual-degree program. One is that after earning the Au.D., students will be eligible for licensure to practice as audiologists in all states that have licensure. Some states require students to have an Au.D. degree, specifically, to be eligible for licensure. Current students earning the Clinical Ph.D. are not eligible to work as clinical audiologists in these states. The State of Maryland requires a doctoral degree in Audiology (degree unspecified) to obtain licensure, but national professional organizations (e.g., the American Academy of Audiology) have attempted during the last three years to change this law in Maryland to specify an Au.D. degree only. The second advantage for students with this proposed change is that they can work professionally to support themselves while they are completing the final stages of their dissertation. Most students run out of options for financial support during this lengthy program; the opportunity to work professionally will enable them to complete the desired degree.

The only remaining issue addressed by the Graduate Council PCC is the campus policy requiring dissertations of all Doctoral degrees. There was some concern regarding the floodgates opening for other similar doctoral degree programs on this campus. It is our understanding that the Graduate School is considering changes to the dissertation requirements for the Doctor of Audiology degree only, at this time. A broad consideration of a generic change to this policy and its impact on quality is beyond the scope of the current request.

Once again, we appreciate the support of the Graduate Council PCC and for the committee’s careful consideration of the proposal for audiology doctoral students. We welcome the opportunity to discuss these issues with the PCC at any time.
Appendix I:

Detailed Curricula for the Doctoral Program in Clinical Audiology

Au.D. Curriculum (proposed)

**Undergraduate Pre-Requisite Courses (12 credits)**
- HESP 300 Introduction to Psycholinguistics (3)
- 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)

**Core Courses**

a. **Basic Science (9 credits)**
- HESP 600 Instrumentation (3) OR HESP 604 Acoustic and Perceptual Phonetics (3)
- HESP 722 Experimental Audiology (Psychoacoustics) (3)
- HESP 724 Research Design (3)

b. **Audiology (39 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 646 Educational Audiology (3)
- HESP 658A Ethics and Professional Issues in Clinical Audiology (2)
- HESP 658B Supervision (1)
- HESP 700 Hearing Aids I (3)
- HESP 701 Hearing Aids II (3)
- HESP 706 Advanced Clinical Audiology (3)
- HESP 710 Industrial and Environmental Noise (3)
- HESP 730 Vestibular-ocular Function and Assessment (Electrophysiologic Measures II) (3)

**Additional Course Requirements: (3 credits)**
- EDMS 645 Quantitative Research Methods I (3)

**Electives (6 credits), some examples include:**
- HESP 848 HESP seminars (3 credits/each) including Cochlear Implant Seminar, Counseling Seminar, Tinnitus Seminar, Private Practice Seminar
- EDMS 646 Quantitative Research Methods II
Research: (4 credits)

HESP xxx  Capstone Research (4)

Clinical Practicum (32 credits):

HESP 648A and B:  Audiology Clinical Practicum (on-site) (10)
HESP 728A  Audiology Clinical Practicum (off-site) (4)
HESP 829  4th-year Clinical Externship (18)

Summary of Graduate Credits:
Academic Coursework:  57 graduate credits
Research:  4 graduate credits
Clinical Practicum (inc. 4th year externship):  32 graduate credits

TOTAL:  93 graduate credits
Dual Track Au.D./Ph.D. Curriculum

Undergraduate Pre-Requisite Courses (12 credits)
HESP 300 Introduction to Psycholinguistics (3)
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)

Core Courses
a. Basic Science (9 credits)
HESP 600 Instrumentation (3) OR
HESP 604 Acoustic and Perceptual Phonetics (3)
HESP 722 Experimental Audiology (Psychoacoustics) (3)
HESP 724 Research Design (3)

b. Audiology (34 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 658B Supervision (1)
HESP 700 Hearing Aids I (3)
HESP 701 Hearing Aids II (3)
HESP 706 Advanced Clinical Audiology (3)
HESP 710 Industrial and Environmental Noise (3)
HESP 730 Vestibular-ocular Function and Assessment (Electrophysiologic Measures II) (3)

c. Additional Course Requirements: (8 credits)
BIOL 600 Scientific Ethics (2)
EDMS 645 Quantitative Research Methods I (3)
EDMS 646 Quantitative Research Methods II (3)

Electives (9 credits)
(selected from HESP doctoral seminars, NACS graduate courses, EDMS advanced courses, or other graduate courses from the UM system or Washington Area Consortium).

Pre-Dissertation and Dissertation Research: (18 credits)
HESP 898 Doctoral Candidacy Research (6) (*note: substitutes for Capstone Research)
HESP 899 Doctoral Dissertation Research (12)

Clinical Practicum (30 credits):
HESP 648A and B: Audiology Clinical Practicum (on-site) (8)
HESP 728A Audiology Clinical Practicum (off-site) (4)
Summary of Graduate Credits:

Academic Coursework: 60 graduate credits
Research: 18 graduate credits
Clinic: 30 graduate credits
TOTAL: 108 graduate credits