



**NEW GRADUATE CONCENTRATION PROPOSALS**  
**ARIZONA STATE UNIVERSITY**  
**GRADUATE COLLEGE**

This form should be used for academic units wishing to propose a new concentration for existing graduate degrees.

A concentration is a subspecialty within a degree and major. It indicates the fulfillment of a designated, specialized course of study, which qualifies the student with skills and training in one highly concentrated area of the major. Concentrations are formally-recognized educational designations (including the assignment of a university plan code for reporting/record-keeping purposes and appearance on the ASU transcript). Concentrations are distinguished from more informal academic distinctions such as “emphases,” “tracks,” “foci,” “options,” etc.

Submit the completed and signed (chairs, unit deans) proposal to the **Office of Graduate Academic Programs**, mail code 1003 and electronic copies to [eric.wertheimer@asu.edu](mailto:eric.wertheimer@asu.edu) or [amanda.morales-calderon@asu.edu](mailto:amanda.morales-calderon@asu.edu).

Please type.

<b>Contact Name(s):</b> Nancy Scherer	<b>Contact Phone(s):</b> 480-965-2905
<b>College/School/Division Name:</b> College of Health Solutions	
<b>Academic Unit Name:</b> Department of Speech & Hearing Science <small>(or proposing faculty group for interdisciplinary proposals)</small>	
<b>Existing Graduate Degree and Major under which this concentration will be established:</b> Doctor of Philosophy (PhD) in Speech and Hearing Science	
<b>Proposed Concentration Name:</b> Auditory and Language Neuroscience	
<b>Requested Effective Term and Year:</b> Fall 2017 <small>(e.g. Fall 2014)</small>	
<b>Do Not Fill in this information: Office Use Only</b> <b>Plan Code:</b>	<b>CIP Code:</b>

**1. Overview**

- A. Provide a brief description (*not to exceed 150 words*) of the new concentration (*including the focus of the new concentration, relationship to other concentrations within this degree program, etc*).**

The proposed Auditory & Language Neuroscience concentration will provide students in the PhD in Speech and Hearing Science with an integrated and intensive training in neuroscience approaches to investigate human communication disorders. Students will receive training in both basic and applied research techniques. Students will have the opportunity to conduct research projects and gain expertise in neuropsychology, neurophysiology, neuroimaging, biological signal processing and/or psychoacoustic approaches to the field of speech, language and hearing science. The Department of Speech and Hearing Science at ASU is in a unique position to provide an integrated training experience because of its focus on innovative approaches to the field of speech, language and hearing science; the faculty’s backgrounds include engineering, neuroscience and psychology in addition to world-class expertise in speech-language pathology and auditory neural prosthetics.

**2. Impact Assessment**

- A. Explain the unit’s need for the new concentration (*e.g., market demand, research base, direction of the discipline, and interdisciplinary considerations*). How will the new concentration complement the existing degree program, including enrollment, national ranking, etc.?**

The need for the new concentration is as follows:

- 1. Direction of the Discipline:** The fields of speech-language pathology and audiology are increasingly recognizing the need to better understand and treat the neurobiological underpinnings of human communication disorders. The field of Auditory and Language Neuroscience also is a critical component

of an integrated approach to more broadly understanding the human brain. Language is widely considered one of the most, if not *the* most, complex and uniquely human brain functions. “Yet, knowledge of the exact neurobiological mechanisms underlying communication disorder remains elusive.” Morgan, A. *International Journal of Speech Language Pathology*, 2013). A recently published article in the newsletter of the national professional credentialing association for speech-language pathology and audiology (ASHA: American Speech-Language-Hearing Association), proposed that the future of treatments for many communication disorders relies heavily upon neuroscience, including biological interventions, neural prosthetics and pharmacological interventions, in addition to behavioral therapies. Traditional educational approaches to the study of auditory and language neuroscience are based on educational experiences in speech or language or hearing, but rarely all three. This concentration is based on an integrated approach in which all three areas are seen as crucial for educating future scholars of the brain.

## 2. Market Demand:

The White House’s recent investment of \$300 million on the Brain Research through Advancing Innovative Technologies (BRAIN) initiative reflects the accelerating need to use an integrated approach to train new speech & hearing scientists in auditory and language neuroscience techniques to accept this Grand Challenge to “revolutionize our understanding of the human brain (White House BRAIN initiative fact sheet 9/30/2014).”

**Enhancement of employment opportunities:** The projected number of PhD-level full-time faculty openings in communication sciences and disorders (another common name for speech and hearing science) in 2012-2017 is 408. However, it is projected that approximately one third (32%) of these faculty positions will remain unfilled because the projected number of PhD graduates seeking academic faculty positions during this same time period is only 279 (ASHA’s 2013 Final Report: Strategic Plan to Increase the Student Pipeline and Workforce for PhD Researchers and Faculty Researchers). Thus, there is a strong need to attract additional PhD students. The speech and hearing science faculty shortage is in sharp contrast to the increasing scarcity of faculty positions in biology, psychology, and engineering. For example, currently there are seven times more students graduating with a Ph.D. in biomedical sciences and engineering each year than available tenure-track positions (2013, *Nature Biotechnology*, 31, p. 938-941). Our department is therefore set to attract a wide range of students from different training backgrounds who are interested in speech and hearing science.

The concentration also would increase PhD in Speech and Hearing Science graduates’ abilities to be more competitive for industry and health-related positions due to the direction of the discipline (see point #1 above). Speech-language pathologists (SLPs) who practice in medical / rehabilitative fields (which require neuroscience knowledge) on average earn significantly higher salaries than those who work in schools or other education settings (ASHA’s 2016 Supply and Demand Resource List for Speech-Language Pathologists).

**Target Audience:** The target audience for this concentration has two main groups: (1) individuals with a bachelor’s or post-secondary clinical degree in speech and hearing science (e.g. speech-language pathologists, audiologists) looking to increase their marketability and/or earning potential and (2) individuals with training in related fields including biology, psychology and engineering looking to increase their marketability for positions in academia and/or to increase their experience with clinical and medical applications of their neuroscience-related expertise, a main focus of the White House BRAIN Initiative.

The new concentration will enhance the existing degree program in the following ways:

- 1. Increase enrollment:** The proposed concentration has the potential to increase enrollment in the existing PhD in Speech and Hearing Science program and attract an increased number of highly qualified applicants. Enrollment can potentially increase amongst students with a background in speech and hearing science as well as attract students from other related disciplines such as psychology, biology, and engineering. It is critical to attract students from related disciplines because nationally there is a PhD-level faculty shortage in communication sciences and disorders due to a decline in PhD graduates in the speech and hearing sciences (American Speech-Language-Hearing Association). The proposed concentration will provide an opportunity for students from related disciplines to fill the high demand for faculty in this area.
- 2. National rankings:** Although there are no national rankings of PhD programs in Speech and Hearing Science, the new concentration has the potential to increase the number of highly qualified applicants to our Master’s program in Communication Disorders (current U.S. News & World Report’s national

ranking = #17) because many students earn their master's degree before beginning their Ph.D. program. This increase in highly qualified applicants has the potential to increase our master's program's national ranking. The concentration should also strengthen the Doctor of Audiology (AuD) program that also has some similar coursework options with the PhD in Speech and Hearing Science program by providing neuroscience-focused opportunities for these students. This should increase the national ranking of our audiology (AuD) program (current U.S. News & World Report's national ranking = #9).

**B. Please identify other related ASU programs and describe how the new concentration will complement these existing ASU programs?** *(If applicable, statements of support from affected academic unit administrators should be included with this proposal submission.)*

The other ASU programs potentially related are the graduate degree programs in the Departments of Psychology in the College of Liberal Arts & Sciences, the College of Integrative Sciences and Arts, and the New College of Interdisciplinary Arts and Sciences, as well as the Interdisciplinary Neuroscience Graduate Program, Biomedical Engineering graduate programs and School of Life Sciences graduate programs. The new concentration will complement these existing ASU programs by providing a PhD program for students who are firmly interested in developing a strong foundation in auditory & language disorders (or typical auditory & language processes) using neuroscience methodologies in addition to more traditional behavioral auditory and language measurements. Please see the appendix for statements of support from the leadership covering each of these programs. We did not receive a response from the Hugh Downs School of Human Communication, despite contacting them multiple times. However, the PhD in Communication offered by this School focuses on interpersonal and organizational communication, rather than the science of speaking, hearing, and understanding language, so we do not feel there would be a conflict with our proposed concentration.

**C. Is this an interdisciplinary concentration?** *If yes, please address the relationship of the proposed concentration to other existing degree programs and any parallel or similar concentrations in those degree programs. (Please include relevant Memoranda of Understanding regarding this interdisciplinary concentration from all applicable academic units.)*

No.

### 3. Academic Requirements and Curriculum

**A. What are the total minimum hours required for the major and degree under which the proposed concentration will be established?**

84 credit hours

**B. Please provide the admissions criteria for the proposed concentration.** *If they are identical to the admission criteria for the existing major and degree program under which this concentration will be established, you may attach a copy of these criteria as they appear on the departmental website, or other source (please indicate source). Please also list all undergraduate and graduate degrees and/or related disciplines that are required for admission to this concentration program.*

Applicants must fulfill the requirements of the Graduate College and the College of Health Solutions.

Applicants are eligible to apply to the program if they have earned a bachelor's degree in a related field and do not wish to earn a clinical master's degree or if they have earned a master's degree or equivalent in speech and hearing science, psychology, linguistics, or a related discipline from a regionally accredited institution.

Applicants must have a minimum of a 3.00 cumulative GPA (scale is 4.00 = "A") in an applicable bachelor's or master's degree program.

All applicants must submit:

1. graduate admission application and application fee
2. official transcripts of undergraduate and graduate study
3. application cover letter and personal statement

4. GRE scores
5. three letters of recommendation
6. resume or curriculum vitae
7. proof of English proficiency

**Additional Application Information**

An applicant whose native language is not English (regardless of current residency) must provide proof of English proficiency.

Typically applicants will have completed a master's or AuD degree or equivalent in speech and hearing science, psychology, linguistics or a related discipline. Applicants with a bachelor's degree in speech and hearing science, psychology, engineering or another related field, strong research interests, and a strong academic record will also be considered.

Students should see the program website for application deadlines.

Professional letters of recommendation must be from three individuals who are familiar with the applicant's academic record and should contain contact information for the recommenders.

- C. If the proposed concentration is part of a larger, interdisciplinary agenda, please provide additional admission information related to students who may enter with various academic backgrounds, including expected entry-level competencies. As applicable, please also address the courses that must be taken to remedy any relevant deficiencies for incoming students.**

N/A

- D. What knowledge, competencies, and skills (learning outcomes) should graduates have when they complete this proposed concentration program? Examples of program learning outcomes can be found at (<https://uoeee.asu.edu/program-outcomes>).**

Students graduating from the PhD in Speech and Hearing Science program with the concentration in Auditory and Language Neuroscience will:

1. Demonstrate the ability to critically analyze and synthesize knowledge from the neuroscience research literature related to language and/or hearing.
2. Demonstrate competence in experimental design, data collection and analysis, interpretation, and communication of neuroscience research related to language and/or hearing.

- E. How will students be assessed and evaluated in achieving the knowledge, competencies, and skills outlined in 3.D. above? Examples of assessment methods can be found at (<http://www.asu.edu/oue/assessment.html>).**

**Outcome 1:** Demonstrate the ability to critically analyze and synthesize knowledge from the neuroscience research literature related to language and/or hearing.

**Measures:**

- At least 80% of students will include a comprehensive and up-to-date literature review on current knowledge of neuroscience research in the area of the auditory or language function of interest in the Introduction section of their dissertations that meets Lovitts' (2007) rating of "Very Good" or "Outstanding" as determined by each student's Dissertation Committee.
- PhD student survey
  - On a 5 point scale of "Excellent", "Good," "Just Adequate," "Low," and "little or none", at least 80% of fourth year students will select "Excellent" or "Good" to the following questions:

- How strong do you think your knowledge is regarding the current trends of interest and controversies in your area of research?
- How strong do you think your knowledge is regarding the current methodologies used in your area of research?

**Outcome 2:** Demonstrate competence in experimental design, data collection and analysis, interpretation, and communication of neuroscience research related to language and/or hearing.

**Measures:**

- At least 80% of graduating students will have a manuscript accepted to a peer-reviewed neuroscience journal on which they are first or second author.
- At least 80% of graduating students will have presented their research at a national or international neuroscience conference.
- PhD student survey
  - On a 5 point scale of “Excellent”, “Good,” “Just Adequate,” “Low,” and “little or none”, at least 80% of fourth year students who respond will select “Excellent” or “Good” to the following questions:
    - How strong do you think your knowledge is regarding responsible conduct of research?
    - How strong do you think your ability is to develop and see an experiment through to completion (i.e. publication) using methods appropriate for your area of research?
    - How well-prepared do you think you are to write successful research articles?
    - How well-prepared do you think you are to develop successful research presentations?

**F. Please provide the curricular structure for the proposed concentration.**

- Additionally, please ensure that all **new** required course proposals have been submitted to the Provost’s office through the Curriculum ChangeMaker online course proposal submission system for approval before this concentration is put on the University Graduate Council and CAPC agendas.

<b>Required Core Courses for the Degree</b>			<b>Credit Hours</b>
<i>(Prefix &amp; Number)</i>	<i>(Course Title)</i>	<i>(New Course?) Yes or No?</i>	<b>(Insert Section Sub-total) 2</b>
SHS 701	Scientific Writing & Presentation in Communication Sciences & Disorders I	Yes	1
SHS 702	Scientific Writing & Presentation in Communication Sciences & Disorders II	Yes	1

<b><u>Required Auditory and Language Neuroscience Concentration Courses</u></b>			<b><u>Credit Hours</u></b>
12 credits of courses that focus on issues related to auditory and/or language neuroscience. These credits may be accomplished in regular graduate level (500+) courses or in special topic seminars and independent studies. A maximum of 6 of these credits can be earned in independent studies. The student's Program Committee will guide selection of these courses, which may be focused on a broad base of areas related to auditory and/or language neuroscience. Choices include:			
<i>(Prefix &amp; Number)</i>	<i>(Course Title)</i>	<i>(New Course?) Yes or No?</i>	<b>(Insert Section Sub-total) 12</b>
NEU 556	Human Systems Neuroscience	No	3
SHS 511	Auditory Perception by the Hearing Impairment	No	3
SHS 513	Neurophysiology of the Auditory System	No	3
SHS 555	Cochlear Implants	No	4
PSY 624	Clinical Neuroscience	No	3
PSY 528	Sensation and Perception	No	3
APM 531	Mathematical Neuroscience I	No	3
APM 532	Mathematical Neuroscience II	No	3
BME 521	Neuromuscular Control Systems	No	3
BME 524	Fundamentals of Applied Neural Control	No	3
BME 568	Medical Imaging	No	3
<b><u>Required Research Courses</u></b> <i>(as deemed necessary by supervisory committee)</i>			<b><u>Credit Hours</u></b>
<i>(Prefix &amp; Number)</i>	<i>(Course Title)</i>	<i>(New Course?) Yes or No?</i>	<b>(Insert Section Sub-total) 21</b>
SHS 792	Research	No	12
Research Methods and Statistics Choices include:			9
PSY 530	Intermed Statistics	No	3
PSY 531	Multiple Regression in Psychological Research	No	3
PSY 532	Analysis of Multivariate Data	No	3
PSY 533	Structural Equation Modeling	No	3
PSY 534	Psychometric Methods	No	3
STP 530	Applied Regression Analysis	No	3
<b><u>Elective or Research Courses</u></b> <i>(as deemed necessary by supervisory committee)</i>			<b><u>Credit Hours</u></b>

(Prefix & Number)	(Course Title)	(New Course?) Yes or No?	(Insert Section Sub-total)  <b>28</b>
Additional research or elective credits approved by the student's committee.			28
<b><u>Culminating Experience</u></b> <i>E.g. - Capstone project, applied project, <b>thesis (masters only)</b> – 6 credit hours) or <b>dissertation (doctoral only)</b> – 12 credit hours) as applicable</i>			<b><u>Credit Hours</u></b> (Insert Section Sub-total) <b>12</b>
SHS 799 Dissertation			12
<b><u>Other Requirements</u></b> <i>E.g. - Internships, clinical requirements, field studies as applicable</i>			<b><u>Credit Hours</u></b> (Insert Section Sub-total) <b>9</b>
SHS 790 Reading and Conference Professional Seminars (9 different course topics (one credit hour each):  Writing Group (1 unit x 6 semesters = 6 total units) Effective Course Development, Teaching and Mentoring (1 unit) Successful Grant Writing Pt 1 (1 unit) Preparing for your Post Doc or Faculty Position (1 unit)			9
<p><b>Preliminary Exam.</b> (Tracked by the academic unit) The preliminary exam research project will be within the field of auditory and/or language neuroscience. Each student will give a formal presentation of their prospectus to their program committee. The defense for the preliminary exam research project includes a written document of the research project and an oral defense.</p>			0
<p><b>Comprehensive Examinations.</b> The comprehensive exams entail a written examination and an oral examination. The written exam will take one of the following formats:</p> <ul style="list-style-type: none"> <li>• Students write responses to questions posed by each committee member</li> <li>• Students complete a written paper for each member of the committee.</li> </ul> <p>For the proposed concentration, at least two of the three questions (or topics for the written papers) posed by the committee members must be focused within the area of auditory and/or language neuroscience. The Comprehensive Examination Committee will evaluate the written paper and the oral defense during a closed meeting with the student.</p>			0
<p><b><u>For doctoral programs</u></b> – as approved by the student's supervisory committee, the program can allow 30 credit hours from a previously awarded master's degree to be used for this program. As applicable, please indicate the total credit hour allowance that will be used for this program.</p>			30*
<b>Total required credit hours</b>			<b>84</b>

**\*Note:** When approved by the student's supervisory committee and the Graduate College, this program allows 30 credit hours from a previously awarded master's degree to be used for this degree. If students do not have a master's degree, the 30 hours will be made up of additional electives and research.

- G. Please describe the primary course delivery mode, (e.g., online, face-to-face, off-site etc.). Please note: If this proposed initiative will be offered completely online, clearly state that in this section, and fill out the applicable section in the Operational Appendix.

Face-to-face.

- H. Please **describe** the culminating experience(s) required for completion of the existing degree and major, and the proposed concentration (e.g., thesis, dissertation, comprehensive exams, capstone course(s), practicum, applied projects, etc.).

#### Doctoral Dissertation

**Dissertation Prospectus.** Prior to conducting dissertation research, each student must submit a written dissertation prospectus that is defended orally and approved by the Dissertation Committee. The written prospectus may be in one of two formats based on approval of the Dissertation Committee:

- The introduction and methods sections of a traditional dissertation or
- The introduction of a traditional dissertation and the introduction and methods for a publishable manuscript.

Dissertation research may not proceed until all committee members approve the research at or following the prospectus meeting. For the proposed concentration, the dissertation research must be on a topic within the area of auditory and/or language neuroscience. In addition, if human subjects will be included in the research, IRB approval must be received before research begins. Dissertation Committee approval indicates that the committee finds the project to be of a suitable scope and depth for dissertation work and that the design, as outlined in the prospectus, is sound and feasible.

**Dissertation Requirements.** The dissertation will consist of a fully documented written product of mature and original scholarship. It must be a significant contribution to knowledge that reflects the student's creativity and competence in independent research. The dissertation may be in one of two formats based on approval of the Dissertation Committee:

- A traditional dissertation or
- The introduction of a traditional dissertation and one or more written manuscripts ready for submission to a peer-reviewed journal. Depending on the scope of dissertation research the Dissertation Committee may approve a single manuscript.

Students must provide members of the Dissertation Committee with copies of the written document at least **10 days** in advance of the oral defense. If the submission is late, any committee member may request a delay in the prospectus meeting. The dissertation must adhere to the specific format outlined by the Graduate College. It is the student's responsibility to ensure that their document meets the Graduate College's formatting requirements.

**Final Oral Defense.** Students must successfully complete a public oral defense of their dissertation, conducted by the Dissertation Committee. Students should be aware that the Graduate College imposes strict deadlines. Early in the semester in which they intend to defend their dissertation students should determine (1) the deadline for applying for graduation, (2) the last day to hold an oral defense, and (3) the last day to obtain final format approval (and to obtain the dean's signature).

- I. Please **describe** any other requirements for completion of the existing degree and major, and the proposed concentration (e.g., internships, foreign language skills, etc.).

none

- J. For interdisciplinary programs, additional sample curricular structures must be included as appendix items to this proposal relating to students with various academic backgrounds who may pursue the proposed concentration, including expected mastery of core competencies (e.g., course work, skills, and/or knowledge).



N/A

#### 4. Administration and Resources

- A. How will the proposed concentration be administered (including recommendations for admissions, student advisement, retention etc.)? Describe the administering body in detail, especially if the proposed concentration is part of a larger interdisciplinary initiative. How will the graduate support staffing needs for this proposed concentration program be met?**

There are no additional administrative needs beyond the procedures and personnel already in place for the existing PhD program. All of the graduate support staffing needs will be met by existing support for the existing PhD program.

- B. How many students will be admitted immediately following final approval of the concentration? What are enrollment projections for the next three years?**

The Fall 2016 incoming class of our existing PhD program was 4 students, and the Fall 2015 class also was 4 students. There are currently 18 PhD students in the department. Our department's enrollment of PhD students is currently limited by the PhD student funding available (in part due to the small number of academic faculty compared to other larger departments, e.g. Psychology in CLAS) and marketability of our program. This concentration will help alleviate these concerns via greater potential for training grants and a highly marketable concentration.

We expect that the concentration, once it is approved and advertised, will enroll more new students than our entire PhD program has enrolled in recent years. It is one of the first Speech and Hearing PhD programs in the US to have an explicit neuroscience-focused concentration.

We anticipate admitting 4 students into this concentration following final approval. Enrollment projections for the concentration for the next three years are:

Year 1: SHS PhD 8 students, 4 of which will be Auditory and Language Neuroscience concentration students

Year 2: SHS PhD 9 students, 5 of which will be Auditory and Language Neuroscience concentration students

Year 3: SHS PhD 10 students, 6 of which will be Auditory and Language Neuroscience concentration students

- C. What are the resource implications for the proposed concentration, including any projected budget needs? Will new books, library holdings, equipment, laboratory space and/or personnel be required now or in the future? If multiple units/programs will collaborate in offering this concentration, please discuss the resource contribution of each participating program. Letters of support must be included from all academic units that will commit resources to this concentration.**

There are no resource or budgetary implications for the proposed concentration. There are no new books, equipment, space, or personnel required, nor will anything of this kind be required in the future.

- D. Please list the primary faculty participants in this proposed concentration.**

Name	Title	Area(s) of Specialization as they relate to proposed concentration
------	-------	--

Tamiko Azuma	Associate Professor	Neuropsychology of Language, Learning & Memory, Traumatic Brain Injury
Visar Berisha	Assistant Professor	Biological Signal Processing
Michael Dorman	Research Professor	Neural Prosthetics & Psychoacoustics
B. Blair Braden	Assistant Professor	Autism, Aging, Neuroimaging
Ayoub Daliri	Assistant Professor	Neural Mechanisms of Speech & Stuttering
Shelley Gray	Professor	Language, Learning & Memory, Developmental Language & Reading Disorders
Julie Liss	Professor	Neurogenic Speech Disorders
Xin Luo	Assistant Professor	Neural Prosthetics & Psychoacoustics
Beate Peter	Assistant Professor	Genetics & Neural Bases of Developmental Speech and Language Disorders
Corianne Rogalsky	Assistant Professor	Neuroimaging & Neurogenic Language Disorders
Nancy Scherer	Chair & Professor	Genetic Speech & Craniofacial Disorders, Early Intervention
Bill Yost	Research Professor	Auditory Perception & Psychoacoustics
Yi Zhou	Assistant Professor	Auditory Neurophysiology & Psychoacoustics
Maria Adelaida Restrepo	Professor	Bilingual language development and disorders

**Dissertation Committees:**

The Program Committee consists of the chair (typically the student's mentor) and at least two other members of the Speech and Hearing Graduate Faculty. For the proposed concentration, at least two members of the committee will be faculty associated with auditory and/or language neuroscience. The purpose of this committee is to guide the student through the completion of the individual program of study, the initiation of programmatic research, the preliminary examination, and the comprehensive examination. Faculty from other departments and schools may be approved as Speech and Hearing Graduate faculty for the purpose of serving on student committees. The composition of the Program Committee should reflect both the range and depth of the student's academic focus areas and will often include members from other academic disciplines. The Program Committee will constitute the Preliminary Exam Committee. Upon completion of the preliminary exam the committee may continue and serve as the Comprehensive Examination Committee or different faculty may be selected to serve on the Comprehensive Examination Committee. Upon completion of the comprehensive examination a Dissertation Committee will be formed that may include some or all of the members of Comprehensive Examination Committee.

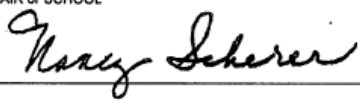
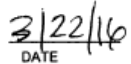

- E. Is there a graduate faculty structure for this concentration program that will differ from the original degree program graduate faculty structure (for PhD programs only)? If yes, please include the name of the graduate faculty group and whether they will participate in offering this concentration.**

No. The graduate faculty structure is the same as for the standalone degree program.

**5. Additional Material** — Please attach any additional information that you feel relates to the proposed concentration.

**(Please label accordingly, i.e., Appendix or Attachment A, B, etc.)**

**Please see attached support memos.**

<b>Approvals</b> (if the proposal submission involves multiple units, please include letters of support from those units)	
DEPARTMENT CHAIR or SCHOOL DIRECTOR 	
SIGNATURE	DATE
DEAN (Please print or type)  Julie Liss	
SIGNATURE	DATE

**The following section will be completed by Graduate College following the recommendations of faculty governance bodies.**

DEAN OF GRADUATE COLLEGE	
	
SIGNATURE	DATE

**Please note:** Proposals for new concentrations also require the review and recommendation of approval from the University Graduate Council, Curriculum and Academic Programs Committee (CAPC), the Academic Senate (Information item only), and the Office of the Provost before they can be put into operation.

**The final approval notification will come from the Office of the Provost.**

GF1112E-92

## APPENDIX I OPERATIONAL INFORMATION FOR GRADUATE PROGRAMS

(This information is used to populate the [Graduate Programs Search](#)/catalog website.)

### 1. **Provide a brief** (catalog type - no more than 150 words) **program description.**

The auditory and language neuroscience concentration within the PhD program in speech and hearing science trains scholars in basic and applied research in the fields of auditory and language neuroscience. Students will develop a strong foundation to conduct impactful neuroscience research related to healthy auditory and language abilities as well as the neural bases of communication disorders.

#### **Breakdown of requirements for the academic catalog:**

84 credit hours, a written comprehensive exam, an oral comprehensive exam, a prospectus and a dissertation

#### **Required Core (2 credit hours)**

SHS 701 Scientific Writing & Presentation in Communication Sciences & Disorders I (1)

SHS 702 Scientific Writing & Presentation in Communication Sciences & Disorders II (1)

#### **Concentration (12 credit hours)**

#### **Research (21 credit hours)**

SHS 792 Research (12)

Research Methods and Statistics (9)

#### **Electives or Additional Research (28 credit hours)**

#### **Other Requirements (9 credit hours)**

SHS 790 Reading and Conference Professional Seminars (9)

Preliminary Exam (0)

Comprehensive Exams (0)

#### **Culminating Experience (12)**

SHS 799 Dissertation (12)

#### **Additional Curriculum Information**

The concentration courses focus on issues related to auditory and/or language neuroscience. These credits may be accomplished in regular graduate level (500+) courses or in special topic seminars and independent studies. The student's program committee will guide selection of these courses, which may be focused on a broad base of areas related to auditory and/or language neuroscience.

Please see the academic unit for approved concentration courses, professional seminars for SHS 790, research and electives. Other research and electives courses may be used with approval of the academic unit.

The preliminary exam research project will be within the field of auditory and/or language neuroscience. Each student will give a formal presentation of their prospectus to their program committee. The defense for the preliminary exam research project includes a written document of the research project and an oral defense.

The comprehensive exams entail a written examination and an oral examination. The written exam will take one of the following formats:

- Students write responses to questions posed by each committee member
- Students complete a written paper for each member of the committee.

For the proposed concentration, at least two of the three questions (or topics for the written papers) posed by the committee members must be focused within the area of auditory and/or language neuroscience. The comprehensive examination committee will evaluate the written paper and the oral defense during a closed meeting with the student.

When approved by the student's supervisory committee and the Graduate College, this program allows 30 credit hours from a previously awarded master's degree to be used for this degree. If students do not have a previously awarded master's degree, the 30 hours of coursework will be made up of electives and research.

**2. Contact and Support Information:**

Office Location (Building & Room): <b>Coor Hall 2211</b>	Campus mail code: <b>0102</b>
Campus Telephone Number: <b>480-965-2374</b>	Program Director (Name <b>and</b> *ASU ID): <b>Dr. Nancy Scherer (nscherer)</b>
Program email address: <b>shsgrad@asu.edu</b>	Program Support Staff (Name <b>and</b> *ASU ID): <b>Jenna Roelle (jroelle)</b>
Program website address: <b>https://chs.asu.edu/shs/phd-speech-hearing-science</b>	Admissions Contact (Name <b>and</b> *ASU ID): <b>Jenna Roelle (jroelle)</b>

\* **ASU ID** (e.g. *SHJONES*)

**3. Campus(es) where program will be offered:**

\* **To select desired box**, place cursor on the left side of the box, right click mouse, select **Properties**, under **Default Value** select **Checked**, press **OK** and the desired box will be checked.

**ASU Online only (all courses online)** – (Office of the Provost and ASU Online approval is needed)

**All other campus options (please select all that apply):**

Downtown                       Polytechnic

Tempe                                 West

**Both on-campus and**  **ASU Online (\*)** – Office of the Provost and ASU Online approval is needed for this option. (Check applicable campus from options listed).

**4. Application and iPOS Recommendations:** List the Faculty and Staff that will input admission/POS recommendations to Gportal **and** indicate their approval for Admissions and/or POS:

Name	ADMSN	POS
Nancy Scherer	X	X
Shelley Gray	X	X
Jenna Roelle	X	X

**5. Keywords:** (List all keywords that could be used to search for this program. Keywords should be specific to the proposed program.)

Speech and Hearing Science, Auditory Neuroscience, Cognitive Neuroscience, Neuropsychology, Communication Disorders, Language, Hearing, Speech-Language Pathology, Audiology

**6. Area(s) of Interest:**

\* **To select desired box**, place cursor on the left side of the box, right click mouse, select **Properties**, under **Default Value** select **Checked**, press **OK** and the desired box will be checked

A. Select **one (1)** primary area of interest from the list below that applies to this program.

- |  |   |
|--|---|
| <input type="checkbox"/> <a href="#">Architecture &amp; Construction</a> | <input type="checkbox"/> <a href="#">Interdisciplinary Studies</a>      |
| <input type="checkbox"/> <a href="#">Arts</a>                            | <input type="checkbox"/> <a href="#">Law &amp; Justice</a>              |
| <input type="checkbox"/> <a href="#">Business</a>                        | <input type="checkbox"/> <a href="#">Mathematics</a>                    |
| <input type="checkbox"/> <a href="#">Communication &amp; Media</a>       | <input type="checkbox"/> <a href="#">Psychology</a>                     |
| <input type="checkbox"/> <a href="#">Education &amp; Teaching</a>        | <input type="checkbox"/> <a href="#">STEM</a>                           |
| <input type="checkbox"/> <a href="#">Engineering &amp; Technology</a>    | <input checked="" type="checkbox"/> <a href="#">Science</a>             |
| <input type="checkbox"/> <a href="#">Entrepreneurship</a>                | <input type="checkbox"/> <a href="#">Social and Behavioral Sciences</a> |
| <input type="checkbox"/> <a href="#">Health &amp; Wellness</a>           | <input type="checkbox"/> <a href="#">Sustainability</a>                 |
| <input type="checkbox"/> <a href="#">Humanities</a>                      |   |

B. Select **one (1)** secondary area of interest from the list below that applies to this program.

- |   |   |
|---|---|
| <input type="checkbox"/> <a href="#">Architecture &amp; Construction</a>  | <input type="checkbox"/> <a href="#">Interdisciplinary Studies</a>      |
| <input type="checkbox"/> <a href="#">Arts</a>                             | <input type="checkbox"/> <a href="#">Law &amp; Justice</a>              |
| <input type="checkbox"/> <a href="#">Business</a>                         | <input type="checkbox"/> <a href="#">Mathematics</a>                    |
| <input type="checkbox"/> <a href="#">Communications &amp; Media</a>       | <input type="checkbox"/> <a href="#">Psychology</a>                     |
| <input type="checkbox"/> <a href="#">Education &amp; Teaching</a>         | <input type="checkbox"/> <a href="#">STEM</a>                           |
| <input type="checkbox"/> <a href="#">Engineering &amp; Technology</a>     | <input type="checkbox"/> <a href="#">Science</a>                        |
| <input type="checkbox"/> <a href="#">Entrepreneurship</a>                 | <input type="checkbox"/> <a href="#">Social and Behavioral Sciences</a> |
| <input checked="" type="checkbox"/> <a href="#">Health &amp; Wellness</a> | <input type="checkbox"/> <a href="#">Sustainability</a>                 |
| <input type="checkbox"/> <a href="#">Humanities</a>                       |   |

**APPENDIX II**  
**Support Letters**

**College of Health Solutions**  
**Official Submission**

**From:** Kate Lehman  
**Sent:** Thursday, January 26, 2017 11:02 AM  
**To:** Curriculum Planning  
**Cc:** Nancy Scherer  
**Subject:** concentrations for SHS PhD

Hello:

Here are the proposals for the concentrations to the PhD in SHS that were just approved for planning (The PDF includes impact statements).

Thanks,

**Kate Lehman**

Senior Director, Academic Initiatives

ARIZONA STATE UNIVERSITY

550 North 3rd Street, Ste. 511 | Phoenix, AZ 85004-9020

Work: 602.496.0241 | Fax: 602.496.0544 | [Kate.Lehman@asu.edu](mailto:Kate.Lehman@asu.edu)

<https://chs.asu.edu>



School of Life Sciences - Support

**From:** Susanne Neuer  
**Sent:** Wednesday, March 09, 2016 10:22 PM  
**To:** Nancy Scherer  
**Subject:** Re: Request for Support - New Speech & Hearing PhD Concentration

Dear Nancy

Thank you for contacting me and sending me the proposal of your new concentration in auditory and language neuroscience within the PhD degree in Speech and Hearing Science. After consulting with Janet Neisewander, program director of the IGPN, there are no concerns regarding any overlap with our Neuroscience program. Thus I support your new concentration, and I wish you much success.

FW: Request for Support - New Speech & Hearing PhD Concentration 3/19/16 5:38 PM

Let me know if you need anything else from me.

Best, Susanne

Susanne Neuer, PhD

Professor and Associate Director,  
Graduate Programs

School of Life Sciences  
Arizona State University  
Tempe, AZ 85287G4501  
USA

Graduate office LSA 181: 480 965 1768  
Office LSE 421: 480 727 7254  
Lab LSE 440: 480 965 2950

<http://www.neuer.lab.asu.edu/>

**From:** Jenna Roelle <[Jenna.Roelle@asu.edu](mailto:Jenna.Roelle@asu.edu)> on behalf of Nancy Scherer <[Nancy.Scherer@asu.edu](mailto:Nancy.Scherer@asu.edu)>  
**Date:** Monday, March 7, 2016 at 3:01 PM  
**To:** Susanne Neuer <[susanne.neuer@asu.edu](mailto:susanne.neuer@asu.edu)>  
**Cc:** Nancy Scherer <[Nancy.Scherer@asu.edu](mailto:Nancy.Scherer@asu.edu)>, Corianne Rogalsky <[Corianne.Rogalsky@asu.edu](mailto:Corianne.Rogalsky@asu.edu)>, Jenna Roelle <[Jenna.Roelle@asu.edu](mailto:Jenna.Roelle@asu.edu)>  
**Subject:** Request for Support G New Speech & Hearing PhD

Concentration Dear Dr. Neuer,

I am emailing to request a support statement from you regarding our department's proposal for a new concentration in auditory and language neuroscience within our PhD degree in Speech and Hearing Science.

In the past few years, our department has expanded our faculty to include more interdisciplinary speech and language researchers. This concentration will allow us to more effectively advertise our strength in these areas to potential graduate students who are interested in pursuing speech and language research to our PhD program in Speech and Hearing Science (SHS). This concentration within the SHS PhD program will be focused on human

speech and language processing and the neural correlates associated with those processes. A complete draft of our proposal is attached. We have received preliminary feedback on the proposal from Graduate Education so we do not anticipate any substantive changes, but we will allow you to re-review it if there are any major changes.

If possible, please respond with a brief email stating your support—we do not need a formal letter, a short email will suffice.

Thank you for your time and help.

Kind regards,

**Nancy J Scherer, Ph.D., CCC, ASHA Fellow**  
Professor and Chair  
Speech and Hearing Science  
Coor Hall, 975 S. Myrtle Ave. | Tempe, AZ 85287  
Work: 480.965.2905 | Fax: 480.965.8516  
[Nancy.Scherer@asu.edu](mailto:Nancy.Scherer@asu.edu)

School of Biological and Health Systems Engineering - Support

**RE: Request for Support - New Speech & Hearing PhD Concentration**

Marco Santello

Sent: Thursday, February 25, 2016 9:52 PM

To: Nancy Scherer

Cc: Corianne Rogalsky

Dear Nancy,

I'm supportive of your proposal for a new concentration in auditory and language neuroscience.

Best,

Marco

---

**From:** Jenna Roelle **On Behalf Of** Nancy Scherer

**Sent:** Thursday, February 25, 2016 2:34 PM

**To:** Marco Santello

**Cc:** Nancy Scherer; Corianne Rogalsky

**Subject:** Request for Support - New Speech & Hearing PhD Concentration

Dear Dr. Santello,

I am emailing to request a support statement from you regarding our department's proposal for a new concentration in auditory and language neuroscience within our PhD degree in Speech and Hearing Science. I previously contacted Dr. Buneo, but he suggested I contact you instead; please see his email below.

In the past few years, our department has expanded our faculty to include more interdisciplinary speech and language researchers. This concentration will allow us to more effectively advertise our strength in these areas to potential graduate students who are interested in pursuing speech and language research to our PhD program in Speech and Hearing Science (SHS). This concentration within the SHS PhD program will be focused on human speech and language processing and the neural correlates associated with those processes. A complete draft of our proposal is attached. We have received preliminary feedback on the proposal from Graduate Education so we do not anticipate any substantive changes, but we will allow you to re-review it if there are any major changes.

If possible, please respond with a brief email stating your support by March 1<sup>st</sup>.

Thank you for your time and help.

Kind regards,

**Nancy J Scherer, Ph.D., CCC, ASHA Fellow**

Professor and Chair

Speech and Hearing Science



ARIZONA STATE UNIVERSITY

College of Liberal Arts and Sciences – Support



February 29, 2016

Nancy J Scherer, Ph.D., CCC, ASHA Fellow,  
Professor and Chair,  
School of Speech and Hearing Science  
College of Health Solutions  
Arizona State University

Dear Dr. Scherer,

As requested and on behalf of the College of Liberal Arts & Sciences, I have reviewed the proposal provided for a new Concentration in Auditory & Language Neuroscience in the Doctor of Philosophy (PhD) in Speech and Hearing Science program within the College of Health Solutions. I have also consulted with the Graduate Programs in Quantitative Psychology and Cognitive Psychology in the Department of Psychology and the School of Life Sciences. The proposed new Concentration in Auditory & Language Neuroscience in the Doctor of Philosophy (PhD) in Speech and Hearing Science complements the graduate offerings in the College of Liberal Arts & Sciences, and we support the approval of this proposal.

Sincerely,

A handwritten signature in blue ink that reads "Kenro Kusumi". The signature is written in a cursive style and is followed by a horizontal line.

Kenro Kusumi,  
Associate Dean of Graduate Programs,  
College of Liberal Arts and Sciences

cc: Kyle Rader, Graduate Programs, CLAS

**Office of the Dean**  
Fulton Center, Suite 145, 300 East University Drive  
PO Box 876505, Tempe, AZ 85287-6505  
(480) 727-1048 FAX: (480) 965-1003  
<http://www.asu.edu/clas/>

Department of English – Support

Jenna Roelle

---

**From:** Nancy Scherer  
**Sent:** Monday, February 06, 2017 8:03 PM  
**To:** Aaron Baker  
**Cc:** Jenna Roelle; Tamiko Azuma; Beate Peter  
**Subject:** Re: PhD Concentrations

Thanks Aaron.

---

**From:** Aaron Baker <AARON.BAKER@asu.edu>  
**Date:** Tuesday, February 7, 2017 at 1:39 AM  
**To:** Nancy Scherer <Nancy.Scherer@asu.edu>, Karen Adams <KLAdams@asu.edu>  
**Subject:** Re: PhD Concentrations

Dear Dr. Scherer,

We are writing to express our support for the two proposed new concentrations within your PhD in Speech and Hearing Science degree. These new concentrations are important changes to your degree and promise to enhance the presence and focus at ASU on important language, speech and hearing processes. They will have no negative impact on the PhD in Linguistics and Applied Linguistics in our Department, and some courses might even be useful for a few of our students. We reviewed these proposals, as did Dr. Mark James who is the head of the Linguistics and Applied Linguistics area in our department, and we are all in agreement in our support.

Sincerely,

Aaron Baker

Aaron Baker  
Chair and Professor  
Department of English  
Arizona State University  
Tempe AZ 85287-0302

College of Integrative Sciences and Arts – Support

**From:** Duane Roen  
**Sent:** Wednesday, February 01, 2017 2:27 PM  
**To:** Nancy Scherer <Nancy.Scherer@asu.edu>  
**Subject:** RE: PhD Concentrations

Nancy,

I have checked with the faculty heads in CISA. We all agree that your proposed PhD concentrations in auditory and language neuroscience and in translational genetics of communication abilities are exciting, and we are delighted to support them.

Please let me know if you need anything else.

Best,  
Duane

**Duane Roen**  
Vice Provost, Polytechnic campus  
Dean, College of Integrative Sciences and Arts  
Dean, University College  
**Arizona State University**  
College of Integrative Sciences and Arts | [cisa.asu.edu](http://cisa.asu.edu)  
University College | [universitycollege.asu.edu](http://universitycollege.asu.edu)  
Mail Code: 2780  
7271 E. Sonoran Arroyo Mall  
Mesa, AZ 85212-6415

College of Nursing and Health Innovation – Support

From: Craig Thatcher  
Sent: Wednesday, February 01, 2017 2:47 PM  
To: Nancy Scherer <Nancy.Scherer@asu.edu>  
Cc: Teri Pipe <Teri.Pipe@asu.edu>  
Subject: Re: PhD Concentration

Dear Nancy-

Dean Pipe has asked me to respond to your request on her behalf. The College of Nursing and Health Innovation (CONHI) supports your department's two proposed new concentrations within your Ph.D. Program in Speech and Hearing Science. In fact, students in CONHI's Ph.D. Program may be interested in taking some of the genetic classes that you have outlined in your proposal!

Thank you for allowing us to review these excellent concentrations! We wish you the very best in launching these new concentrations.

Best wishes,  
Craig

Craig D. Thatcher, DVM, MS, PhD, Diplomate ACVN

Senior Associate Dean and Professor

Honors Faculty

College of Nursing and Health Innovation

Arizona State University



From: Nancy Scherer <[Nancy.Scherer@asu.edu](mailto:Nancy.Scherer@asu.edu)>  
Date: February 1, 2017 at 12:45:32 PM MST  
To: Teri Pipe <[Teri.Pipe@asu.edu](mailto:Teri.Pipe@asu.edu)>  
Subject: PhD Concentration

Dear Teri,

I am emailing to request a support statement from you regarding our department's two proposed new concentrations within our PhD degree in Speech and Hearing Science: one in auditory and language neuroscience, and the other in translational genetics of communication abilities.

In the past few years, our department has expanded our faculty to include more interdisciplinary speech and language researchers. These concentrations will allow us to more effectively advertise our strength in these areas to potential graduate students who are interested in pursuing speech and language research to our PhD program in Speech and Hearing Science (SHS). These concentrations within the SHS PhD program will be focused on human speech and language processing and the neural correlates associated with these processes. Complete drafts of the proposals are attached. We have received preliminary feedback on the proposal from Graduate Education so we do not anticipate any substantive changes, but we will allow you to re-review it if there are any major changes.

If possible, please respond with a brief email stating your support by Friday, February 3rd.

Kind regards,  
Nancy

Nancy J Scherer, Ph.D., CCC, ASHA Fellow  
Professor and Chair  
Speech and Hearing Science  
Barrett Honors Faculty

School of Mathematical and Statistical Sciences – Support

From: Hal Smith [mailto:halsmith@asu.edu]  
Sent: Thursday, February 02, 2017 2:36 PM  
To: Nancy Scherer <Nancy.Scherer@asu.edu>  
Cc: Al Boggess <abogges1@mainex1.asu.edu>  
Subject: Re: Approval to include math courses in PhD concentrations

Dear Nancy Scherer

We support your plan, expecting of course, that students are aware of any pre-requisites for the math courses.

Hal Smith  
Director for Graduate Programs  
Professor of Mathematics  
School of Mathematical & Statistical Sciences  
Arizona State University  
Tempe, AZ 85287-1804  
<http://math.asu.edu/~halsmith/>  
Office: WXLR 216  
Phone: (480) 965-3793

On 1 February 2017 at 12:55, Nancy Scherer <[Nancy.Scherer@asu.edu](mailto:Nancy.Scherer@asu.edu)> wrote:

Dear Drs. Boggess and Smith,

I am emailing to request a support statement from you regarding our department's two proposed new concentrations within our PhD degree in Speech and Hearing Science: one in auditory and language neuroscience, and the other in translational genetics of communication abilities. We're seeking your support to include three math classes (APM 531, APM 532, and STP 530) as options to fulfill the requirements of these concentrations.

In the past few years, our department has expanded our faculty to include more interdisciplinary speech and language researchers. These concentrations will allow us to more effectively advertise our strength in these areas to potential graduate students who are interested in pursuing speech and language research to our PhD program in Speech and Hearing Science (SHS). These concentrations within the SHS PhD program will be focused on human speech and language processing and the neural correlates associated with these processes. Complete drafts of the proposals are attached. We have received preliminary feedback on the proposals from Graduate Education so we do not anticipate any substantive changes, but we will allow you to re-review them if there are any major changes.

If possible, please respond with a brief email stating your support by Friday, February 3rd.

Kind regards,

Nancy



## New College of Interdisciplinary Arts and Sciences – Impact Statement

---

From: Todd Sandrin <Todd.Sandrin@asu.edu>  
Date: Thursday, February 9, 2017 at 3:49 AM  
To: Nancy Scherer <Nancy.Scherer@asu.edu>  
Subject: Subject: PhD Concentrations

Dear Nancy,

Thanks for your note. We anticipate no negative impacts of these two PhD concentrations on our programs in New College.

Best regards,  
Todd

---

**Todd R. Sandrin, Ph.D.**  
Professor, School of Mathematical and Natural Sciences  
Senior Sustainability Scientist - Julie Ann Wrigley Global Institute of Sustainability  
Senior Associate Dean, ASU New College | Director, NCUIRE



**Arizona State University**  
4701 W. Thunderbird Rd. | Glendale, AZ 85308  
602.543.6834 | Todd.Sandrin@asu.edu

---

> <[Nancy.Scherer@asu.edu](mailto:Nancy.Scherer@asu.edu)<mailto:Nancy.Scherer@asu.edu>>  
> Date: Wednesday, February 1, 2017 at 12:51 PM  
> To: Marlene Tromp  
> <[Marlene.Tromp@asu.edu](mailto:Marlene.Tromp@asu.edu)<mailto:Marlene.Tromp@asu.edu>>, Greg Wise  
> <[Greg.Wise@asu.edu](mailto:Greg.Wise@asu.edu)<mailto:Greg.Wise@asu.edu>>

> Subject: PhD Concentrations

>

> Dear Drs. Tromp and Wise,

>

> I am emailing to request a support statement from you regarding our department's two proposed new concentrations within our PhD degree in Speech and Hearing Science: one in auditory and language neuroscience, and the other in translational genetics of communication abilities.

>

> In the past few years, our department has expanded our faculty to include more interdisciplinary speech and language researchers. These concentrations will allow us to more effectively advertise our strength in these areas to potential graduate students who are interested in pursuing speech and language research to our PhD program in Speech and

Hearing Science (SHS). These concentrations within the SHS PhD program will be focused on human speech and language processing and the neural correlates associated with these processes. Complete drafts of the proposals are attached. We have received preliminary feedback on the proposals from Graduate Education so we do not anticipate any substantive changes, but we will allow you to re-review them if there are any major changes.

>

> If possible, please respond with a brief email stating your support by Friday, February 3rd.

>

> Kind regards,

> Nancy

**(NEW GRADUATE INITIATIVES)**

**PROPOSAL PROCEDURES CHECKLIST**

Academic units should adhere to the following procedures when requesting new curricular initiatives (degrees, concentrations or certificates).

**Obtain the required approval from the Office of the Provost to move the initiative forward for internal ASU governance reviews/approvals.**

- Establishment of new curricular initiative requests; degrees, concentrations, or certificates
- Rename requests; existing degrees, concentrations or certificates
- Disestablishment requests; existing degrees, concentrations or certificates

**Submit any new courses that will be required for the new curricular program to the Curriculum ChangeMaker online course approval system for review and approval.**

- Additional information can be found at the Provost's Office Curriculum Development website: [Courses link](#)
- For questions regarding proposing new courses, send an email to: [courses@asu.edu](mailto:courses@asu.edu)

**Prepare the applicable proposal template and operational appendix for the proposed initiative.**

- New degree, concentration and certificate templates (contain proposal template and operational appendix) can be found at the Provost's Office Curriculum Development website: [Academic Programs link](#)

**Obtain letters or memos of support or collaboration. (if applicable)**

- When resources (faculty or courses) from another academic unit will be utilized
- When other academic units may be impacted by the proposed program request

**Obtain the internal reviews/approvals of the academic unit.**

- Internal faculty governance review committee(s)
- Academic unit head (e.g. Department Chair or School Director)
- Academic unit Dean (will submit approved proposal to the [curriculumplanning@asu.edu](mailto:curriculumplanning@asu.edu) email account for further ASU internal governance reviews (as applicable, University Graduate Council, CAPC and Senate)

**Additional Recommendations** - All new graduate programs require specific processes and procedures to maintain a successful degree program. Below are items that the Graduate College strongly recommends that academic units establish after the program is approved for implementation.

**Set-up a Graduate Faculty Roster for new PhD Programs** – This roster will include the faculty eligible to mentor, co-chair or chair dissertations. For more information, please go to [http://graduate.asu.edu/graduate\\_faculty\\_initiative](http://graduate.asu.edu/graduate_faculty_initiative).

**Establish Satisfactory Academic Progress Policies, Processes and Guidelines** – Check within the proposing academic unit and/or college to see if there are existing academic progress policies and processes in place. If none have been established, please go to [http://graduate.asu.edu/faculty\\_staff/policies](http://graduate.asu.edu/faculty_staff/policies) and scroll down to the **academic progress review and remediation processes** (for faculty and staff) section to locate the reference tool and samples for establishing these procedures.

**Establish a Graduate Student Handbook for the New Degree Program** – Students need to know the specific requirements and milestones they must meet throughout their degree program. A Graduate Student Handbook provided to students when they are admitted to the degree program and published on the website for the new degree gives students this information. Include in the handbook the unit/college satisfactory academic progress policies, current degree program requirements (outlined in the approved proposal) and provide a link to the Graduate Policies and Procedures website. Please go to [http://graduate.asu.edu/faculty\\_staff/policies](http://graduate.asu.edu/faculty_staff/policies) to access Graduate Policies and Procedures.