Date Submitted: 04/29/19 5:33 pm

Viewing: **10KY1494BS : Speech & Hearing Science: Neuroscience, BS**

Last approved: 02/06/19 10:24 am
Last edit: 10/23/19 9:18 am
Changes proposed by: Pasquale Bottalico

In Workflow

1. 1679 Committee Chair
2. 1679 Head
3. KY Committee Chair
4. KY Dean
5. University Librarian
6. Provost
7. Registrar
8. Senate EPC
9. Senate
10. U Senate Conf
11. Board of Trustees
12. IBHE
13. DMI

Approval Path

1. 05/01/19 11:48 am
   Pamela Hadley (phadley): Approved for 1679 Committee Chair
2. 05/01/19 12:38 pm
   Karen Kirk (kikirk): Approved for 1679 Head
3. 08/27/19 1:56 pm
   Reggie Alston (alston): Rollback to 1679 Committee Chair for KY Committee Chair
4. 10/03/19 2:04 pm
   Pamela Hadley (phadley): Approved for 1679 Committee Chair

https://nextcourses.illinois.edu/programadmin/
5. 10/03/19 2:45 pm
Karen Kirk (kikirk): Approved for 1679 Head

6. 10/04/19 3:45 pm
Reggie Alston (alston): Approved for KY Committee Chair

7. 10/04/19 3:47 pm
Reggie Alston (alston): Approved for KY Dean

8. 10/05/19 5:00 am
John Wilkin (jpwilkin): Approved for University Librarian

9. 10/07/19 8:29 am
Kathy Martensen (kmartens): Rollback to KY Dean for Provost

10. 10/07/19 8:33 am
Kathy Martensen (kmartens): Rollback to KY Committee Chair for KY Dean

11. 10/07/19 9:15 am
Reggie Alston (alston): Rollback to 1679 Committee Chair for KY Committee Chair

12. 10/10/19 3:17 pm
Pamela Hadley (phadley): Approved for 1679 Committee Chair

13. 10/11/19 9:59 am
Karen Kirk (kikirk): Approved for 1679 Head
Proposal Type

Proposal Type: Concentration (ex. Dietetics)

This proposal is for a:

**Revision**

Proposal Title

**Revision of the Speech and Hearing Science (SHS) Undergraduate Major and Concentrations.** This is one element of a larger proposal from the Department of Speech and Hearing Sciences. Other related proposals are: 1) EP.20.23, revision to the BS in SHS; 2) revision to the Audiology Concentration in the BS
in SHS; 3) revision to the Speech-Language Pathology Concentration in the BS in SHS; 4) revision to the Cultural-Linguistic Diversity Concentration in the BS in SHS.

Is this program available on campus and online? No

Official Program Name
Speech & Hearing Science: Neuroscience, BS

Banner/Codebook Name
BS: SPHS: Neuroscience

Program Code: 10KY1494BS

Major Code: 0354 Minor Code: 
Conc Code: 1494 Degree Code:

BS

EP Control Number: EP.20.30

Senate Approval Date

Senate Conference Approval Date

BOT Approval Date

IBHE Approval Date

Effective Date:

Effective Catalog Term: Spring 2020

Sponsor College: Applied Health Sciences

Sponsor Department: Speech & Hearing Science

Sponsor Name: Pamela A. Hadley; Fatima Husain, phadley@illinois.edu; husainf@illinois.edu

Sponsor Email

College Contact: Reginald Alston

College Contact Email
alston@illinois.edu

Is this program interdisciplinary?

No

Corresponding Program(s):

<table>
<thead>
<tr>
<th>Corresponding Program(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Speech &amp; Hearing Science, BS</td>
</tr>
</tbody>
</table>

Academic Level Undergraduate

Additional concentration notes (e.g., estimated enrollment, advising plans, etc.)

CIP Code

Program Description and Justification

Justification for proposal change:

To earn a BS in Speech and Hearing Science, all undergraduates must complete a set of Core Requirements as well as a set of concentration requirements. Students select from four concentrations: Audiology, Cultural-Linguistic Diversity, Neuroscience of Communication, and Speech-Language Pathology.

The Neuroscience of Communication concentration provides and interdisciplinary understanding of the neurological systems that underline human communication. Students will study the biological basis of communication in order to understand brain-behavior correlates of typical and disordered speech, language, and hearing function. In addition, students will benefit from faculty research that utilizes innovative technologies to study the structure and function of the sensory-motor systems that underlie human communication abilities. This concentration is intended to help prepare students for health and science-related careers, including medicine and neuroscience. In addition, undergraduates interested in pursuing careers as an audiologist or speech-language pathologist can combine this concentration with pre-certification requirements.

This proposal focuses on revisions to the concentration requirements in the Neuroscience of Communication concentration. For proposed revisions to core requirements shared by all four concentrations, see proposals (459).

1. Remove SHS 285 Quantitative Bases in SHS from Neuroscience of Communication concentration. SHS 285 Quantitative Bases in SHS has been eliminated as a concentration requirement for Neuroscience of...
eliminated as a concentration requirement for Neuroscience or Communication. This content is now addressed in the general education requirements added to the core requirements for the BS in Speech and Hearing Science (see proposal 459)

2. Add the following specified electives to the Neuroscience of Communication concentration
   a. SHS 333 Children with Neurodevelopmental Disorders Across Communication Contexts
   b. SHS 390 Individual Study
   c. SHS 395 Honors Individual Study

SHS 333 was recently approved as a new SHS course and it is being added as a specified elective to the Neuroscience of Communication concentration. SHS 390 and 395 are independent study courses typically used for James Scholar projects. These courses are being added as specified electives. This will allow students to use mentored research project experiences toward their specified electives in the Neuroscience of Communication concentration.

3. Add SHS 271 Communication and Aging as a specified elective to the Neuroscience of Communication concentration. This course includes content on degenerative neurological conditions, and as such, the content is highly relevant to this concentration.

4. Add SHS 475 Prepracticum in SHS as a specified elective to the Neuroscience of Communication concentration. SHS 475 has been added as a specified elective to the Neuroscience of Communication concentration. Most students in this non-clinical concentration desire pre-practicum experiences and are enrolling in this course without it counting toward their degree requirement. By adding SHS 475 as a specified elective, students in the Neuroscience of Communication concentration will have the foundational experiences needed for transitioning to clinical graduate programs, if they so desire.

Is This a Teacher Certification Program?
No

Will specialized accreditation be sought for this program?
No

Enrollment
Describe how this revision will impact enrollment and degrees awarded.

No changes in enrollment are foreseen.
Delivery Method

This program is available:
Face-to-Face

Budget

Are there budgetary implications for this revision? No

Will the program or revision require staffing (faculty, advisors, etc.) beyond what is currently available? No

Additional Budget Information

Attach File(s)

Resource Implications

Facilities

Will the program require new or additional facilities or significant improvements to already existing facilities? No

Technology

Will the program need additional technology beyond what is currently available for the unit? No

Non-Technical Resources

Will the program require additional supplies, services or equipment (non-technical)? No

Resources

Faculty Resources
Please address the impact on faculty resources including any changes in numbers of faculty, class size, teaching loads, student-faculty ratios, etc. Describe how the unit will support student advising, including job placement and/or admission to advanced studies.

Given that this curriculum revision will formalize our existing advising practices and the need for course substitutions for SHS 285 (the course we are eliminating), we do not anticipate impact on faculty numbers, class size, teaching loads.

The added opportunity for students in the Neuroscience of Communication concentration to take SHS 271 and SHS 475 as electives may have some impact on class size.

To accommodate increasing demand for SHS 271, we have already increased the enrollment capacity of this course from 55 to 85 and we have already made the necessary adjustments for TA support to accommodate increasing class size.

SHS 475 is offered every semester (Fall, Spring, Summer), with sufficient space for a minor increase in enrollments. Most students in the Neuroscience of Communication are already enrolling in this course so very little impact is anticipated.

Finally, we do not anticipate that this revision will alter the number of students entering into the Neuroscience of Communication concentration. Therefore, we do not anticipate this proposal will require additional resources in the future.

Library Resources

Describe your proposal's impact on the University Library's resources, collections, and services. If necessary please consult with the appropriate disciplinary specialist within the University Library.

The revised undergraduate curriculum does not create any new courses. As such, there are no changes in library utilization or resource utilization related to this revision.

Instructional Resources

Will there be any reduction in other course offerings, programs or concentrations by your department as a result of this new program/proposed change?

No

Does this new program/proposed change result in the replacement of another program?

No
Does the program include other courses/subjects impacted by the creation/revision of this program?

No

Financial Resources

How does the unit intend to financially support this proposal?

No additional financial support is required. admin:migration

Will the unit need to seek campus or other external resources?

No

Attach letters of support

Program Regulation

Describe how the program is aligned with or meets licensure, certification, and/or entitlement requirements, if applicable.

Briefly describe the plan to assess and improve student learning, including the program’s learning objectives; when, how, and where these learning objectives will be assessed; what metrics will be used to signify student’s achievement of the stated learning objectives; and the process to ensure assessment results are used to improve student learning.

NA admin:migration

Is the career/profession for graduates of this program regulated by the State of Illinois?

No

Program of Study

“Baccalaureate degree requires at least 120 semester credit hours or 180 quarter credit hours and at least 40 semester credit hours (60 quarter credit hours) in upper division courses” (source: https://www.ibhe.org/assets/files/PrivateAdminRules2017.pdf). For proposals for new bachelor’s degrees, if this minimum is not explicitly met by specifically-required 300- and/or 400-level courses, please provide information on how the upper-division hours requirement will be satisfied.

All proposals must attach the new or revised version of the Academic Catalog program of study entry. Contact your college office if you have questions.

Revised programs Neuroscience.docx

Attach a side-by-side comparison with the existing program AND, if the revision references or adds “chose-from” lists of courses students can select from to fulfill requirements, a listing of these courses, including the course rubric, number, title, and number of credit hours.
Neuroscience of Communication Concentration

The Neuroscience of Communication concentration provides an interdisciplinary understanding of the neurological systems that underlie human communication. Students will study the biological basis of communication in order to understand brain-behavior correlates of typical and disordered speech, language, and hearing function. In addition, students will benefit from faculty research that utilizes innovative technologies to study the structure and function of the sensory-motor systems that underlie human communication abilities. This concentration is intended to help prepare students for health and science-related careers, including medicine and neuroscience. In addition, undergraduates interested in pursuing careers as an audiologist or speech-language pathologist can combine this concentration with pre-certification requirements.

Statement for Programs of Study Catalog

Course List

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SHS 280</td>
<td>Communication Neuroscience</td>
<td>3</td>
</tr>
<tr>
<td>SHS 389</td>
<td>Neuroplasticity and Communication</td>
<td>3</td>
</tr>
<tr>
<td>SHS 427</td>
<td>Language and the Brain</td>
<td>3</td>
</tr>
<tr>
<td>SHS 470</td>
<td>Neural Bases Spch Lang</td>
<td>4</td>
</tr>
</tbody>
</table>

Students must also take 6 hours from the following specified electives:

- Any Chemistry or Physics 100-level class
- IB 100  | Biology in Today's World                                             | 3     |
- PSYC 204 | Intro to Brain and Cognition                                         | 3     |
- PSYC 216 | Child Psych                                                          | 3     |
- PSYC 236 | Child Development in Education                                       | 3     |
- PSYC 240 | Perception & Sensory Processes                                       | 3     |
- PSYC 248 | Cognitive Psych                                                      | 3     |
- PSYC 248 | Learning and Memory                                                  | 3     |
- **SHS 271** | **Communication and Aging**                                         | 3     |
- SHS 291  | Research Lab Experience in SHS 1                                     | 3     |
- **SHS 333** | **Children with Neurodevelopmental Disorders Across Communication Contexts** | 3     |
- SHS 375  | Comm Partners & Health                                               | 3     |
- **SHS 390** | **Individual Study 1**                                              | 3     |
- **SHS 395** | **Honors Individual Study 1**                                       | 3     |
- SHS 473  | Augmentative & Alt Comm                                              | 3     |
- **SHS 475** | **Prepracticum in SHS**                                              | 3     |

Course SHS 285 Not Found (Title of course is: Quantitative Bases in SHS)
EP Documentation

Attach
Rollback/Approval Notices

DMI Documentation

Attach Final
Approval Notices

Attached Document

Justification for this request

Program Reviewer Comments

Laura J. Hahn (ljhahn) (08/21/19 10:21 am): Overall this revision to the curriculum makes sense and does not require additional resources on the part of the department. It will be helpful for students to not have to continue to substitute a course for SHS 285. Further, additional elective options are beneficial for the students. In the attached word document for the concentration, SHS 385 has not been added to the course requirements (there is a blank row where it probably should be). This should be added before the proposal moves forward.

Laura Payne (lpayne) (08/23/19 9:27 am): I have nothing further to add. It looks good to me.

Robyn Gobin (rgobin) (08/23/19 11:19 am): This revision to the curriculum is well-justified. The potential benefits on student learning appear to outweigh any potential negative impacts.

Reggie Alston (alston) (08/27/19 1:50 pm): Hi Pasquale, I am rolling back the five proposals from SHS. Please see the comments from reviewers. Most importantly, consult with Laura Hahn and Justin Aronoff about specifics edits that need to be made. Of course, I’m available for consultation if necessary.

Reggie Alston (alston) (08/27/19 1:56 pm): Rollback: See the comments from

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td>19</td>
</tr>
</tbody>
</table>

1. **No more than 3 credits from SHS 291, SHS 390 and SHS 395 may be counted toward the 6 credits of specified electives.**

1. Approved substitutions include: CHEM 101, CHEM 102 & 103, CHEM 108, PHYS 101, PHYS 140, PHYS 150, or PHYS 193 provided this is not being used to satisfy a university General Education requirement.

2. Provided courses are not used to satisfy a university General Education requirement.

3. Approved for S/U grading only. Must be arranged with individual faculty member.

4. Prerequisite: Senior level in the SHS program or consent of instructor.
the reviewers. Please speak with Laura and Justin about specific edits suggested by the Ed Pol Cmte. Feel free to contact me if necessary.

Kathy Martensen (kmartens) (10/07/19 8:29 am): Rollback: Statement for Programs of Study Catalog is not updated to reflect the changes requested in the text of the proposal. E.g., text states SHS 285 to be removed; it is not removed from POS. Please review and update this listing as appropriate. Thanks! --Kathy

Kathy Martensen (kmartens) (10/07/19 8:33 am): Rollback: Rollback: Statement for Programs of Study Catalog is not updated to reflect the changes requested in the text of the proposal. E.g., text states SHS 385 to be moved from a concentration to a core requirement; it is not removed from POS. Please review and update this listing as appropriate. Thanks! --Kathy

Reggie Alston (alston) (10/07/19 9:15 am): Rollback: Hi Pam, Please address the change requested by Kathy Martensen. Thanks.
Neuroscience of Communication Concentration

The **Neuroscience of Communication** concentration provides an interdisciplinary understanding of the neurological systems that underline human communication. Students will study the biological basis of communication in order to understand brain-behavior correlates of typical and disordered speech, language, and hearing function. In addition, students will benefit from faculty research that utilizes innovative technologies to study the structure and function of the sensory-motor systems that underlie human communication abilities. This concentration is intended to help prepare students for health and science-related careers, including medicine and neuroscience. In addition, undergraduates interested in pursuing careers as an audiologist or speech-language pathologist can combine this concentration with pre-certification requirements.

<table>
<thead>
<tr>
<th>Current Requirements:</th>
<th>Current</th>
<th>Revised Requirements:</th>
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<td>Students must also take 6 hours from the following specified electives:</td>
<td>Students must also take 7 hours from the following specified electives:</td>
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<tr>
<td></td>
<td>6</td>
<td></td>
<td>7</td>
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<tr>
<td>Any Chemistry or Physics 100-level class²</td>
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<td>IB 100</td>
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<td>PSYC 216 or EPSY 236</td>
<td>Child Psych or Child Dev in Education</td>
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<td>Perception &amp; Sensory Processes</td>
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<td>PSYC 224</td>
<td>Cognitive Psych</td>
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<tr>
<td>PSYC 248</td>
<td>Learning and Memory</td>
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<tr>
<td>SHS 291</td>
<td>Research Lab Experience in SHS³</td>
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<td>SHS 375</td>
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<td>Individual Study²</td>
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<td>Honors Individual Study²</td>
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<td>SHS 473</td>
<td>Augmentative &amp; Alt Comm³</td>
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<td>Total Hours</td>
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Footnotes

1 Approved substitutions include: CHEM 101, CHEM 102 & 103, CHEM 108, PHYS 101, PHYS 140, PHYS 150, or PHYS 193 provided this is not being used to satisfy a university General Education requirement.

Footnotes

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2 Provided courses are not used to satisfy a university General Education requirement

3 Approved for S/U grading only. Must be arranged with individual faculty member.

4 Prerequisite: Senior level in the SHS program or consent of instructor.

2 No more than 3 credits from SHS 291, SHS 390 and SHS 395 may be counted toward the 7 credits of specified electives.

3 Prerequisite: Senior level in the SHS program or consent of instructor.