

## New Minor, Track or Certificate Template

**Steps to the approval process:**

1. Complete the applicable template(s) and email them to the departmental or program curriculum committee chair.
2. The curriculum chair emails the proposal to the curriculum committee, then to the department/program faculty for a vote and finally to the department/program chair.
3. The department/program chair emails the proposal to [curriculum-approval@iup.edu](mailto:curriculum-approval@iup.edu); this email will also serve as an electronic signature.
4. Curriculum committee staff will log the proposal, forward it to the appropriate dean's office(s) for review within 14 days and post it on the X Drive for review by all IUP faculty and administrators. Following the dean's review the proposal goes to the UWUCC/UWGC and the Senate.
5. Questions? Email [curriculum-approval@iup.edu](mailto:curriculum-approval@iup.edu).

Contact Person:	Lawrence Kupchella (chemistry) Cynthia M. Richburg (communication disorders) Paul M. Nealen (biology)	Email Address:	lawrence.kupchella@iup.edu <a href="mailto:cynthia.richburg@iup.edu">cynthia.richburg@iup.edu</a> paul.nealen@iup.edu
Proposing Depart/Unit:	Natural Science B.S. Program	Phone:	X-7-2363 X-7-5680 X-7-2352

Minor or Track Title	Pre-Audiology									
Narrative Catalog Description:	The program leading to the BS degree in Natural Science is designed to prepare students for admission to professional schools – chiropractic, dentistry, optometry, physical therapy, pharmacy, podiatry, physician assistant, and audiology. If they qualify, the BS degree in natural science can be earned by students who are accepted for early admission to professional schools that have an articulation agreement with IUP. In some cases, students interested in obtaining a four-year degree before entering a medical or professional school should enroll in a program leading to a BA or BS degree in the departments of Biology or Chemistry. Students considering a professional career in a high-technology business or health-oriented businesses or industries may wish to obtain a foundation in the natural sciences while using their free electives to pursue additional work in areas such as molecular biology, biochemistry, psychology, economics, pre-law, or athletic training. The BS program in natural science may not be used for a second major or a second degree by majors in the College of Natural Sciences and Mathematics. For further information, contact the Natural Science program coordinator.									
List of Program Requirements in catalog layout – including course numbers, titles, credits and any footnotes. <i>(Note that PASSHE requires a minimum of 6 credits in a minor be advanced standing (300 and above).</i>	<p><b>Bachelor of Science – Natural Science/Pre-Audiology Track (*)</b></p> <p><b>Liberal Studies:</b> As outlined in the Liberal Studies section 45 with the following specifications:  <b>Mathematics:</b> MATH 121  <b>Natural Science:</b> CHEM 111-112  <b>Social Science:</b> PSYC 101 and ECON 101 (or ECON 121)  <b>Writing Intensive:</b> ENGL 222 (this second writing-intensive course is not required for three-year students who transfer to a professional school with an articulation agreement.  <b>Liberal Studies Electives:</b> BTED/COSC/IFMG 101; no courses with SCI prefix.</p> <p><b>Major:</b> 45  <b>Required Courses:</b></p> <table style="width: 100%; border: none;"> <tr> <td>BIOL 150</td> <td>Human Anatomy</td> <td style="text-align: right;">4cr</td> </tr> <tr> <td>BIOL 151 or 240</td> <td>Human Physiology</td> <td style="text-align: right;">4cr</td> </tr> <tr> <td>BIOL 201</td> <td>Principles of Ecology and Evolution</td> <td style="text-align: right;">4cr</td> </tr> </table>	BIOL 150	Human Anatomy	4cr	BIOL 151 or 240	Human Physiology	4cr	BIOL 201	Principles of Ecology and Evolution	4cr
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<p>Student Learning Outcomes for Minor or Track</p>	<p>Learning Goal:</p> <p>(1). By graduation, students will meet course requirements targeted for admission into doctoral programs in audiology (Au.D. and Ph.D.) throughout the United States.</p> <p>(1.a). This learning goal will be accomplished by the student's successful completion of both the Natural Science/Pre-Audiology Track program requirements and their judiciously selected free electives.</p> <p>(1.b.). The direct measures that will be used to assess this learning outcome will be (i) through monitoring the acceptance rates of our students into post-graduate Au.D. programs, (ii) through the successful completion of Au.D. programs by our students, (iii) through feedback from alums, and (iv) through input from Au.D./Ph.D. programs.</p> <p>(1.c.). The means and frequency of administering these assessments will be (i) to each year survey (or interview) the students in the track just prior to their graduation in order to gauge the effectiveness of the Natural Science/Pre-Audiology track curriculum in meeting the course requirements for their particular targeted schools, (ii) to, also during the administration of the surveys (or interviews), request that the track graduates maintain contact after graduation with the program coordinator so that they could provide future feedback as they progress through their professional school program and then beyond as a practicing audiologist or hearing scientist, and (iii) to establish articulation agreements with selected post-graduate Doctor of Audiology programs.</p> <p>(2). Upon successful completion of coursework, students will have a solid foundation for pre-requisite knowledge and skills relevant to students interested in pursuing a doctoral degree in audiology or graduate degree in hearing science.</p>																																																

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	<p>(2.a.). This learning goal will be accomplished by the student’s successful completion of coursework in basic and advanced audiology, neurobiology, business, anatomy and physiology, statistics, child development, and psychology.</p> <p>(2.b.). This learning goal will be tracked with survey questions directed at graduates who maintain contact after graduation with the program coordinator, with (i) questions asking what courses provided useful (helpful) information for graduate coursework, (ii) questions asking what courses were not necessary (not helpful) for graduate coursework, (iii) questions asking what courses should be required at the undergraduate level to better meet the needs of graduate school.</p>
<p><b>Rationale for Proposal</b></p>	
<p>Why is this track/minor being proposed?</p>	<p>Having a named undergraduate Pre-Audiology track will have the effect of drawing attention to the program by students who are interested in a career as an audiologist. Prospective students will correctly view the track as one that is pre-designed to allow them to meet the requirements for admission to Au.D. programs after graduation. The Natural Science/Pre-Audiology track name may well have the effect of drawing the interest of prospective students who might not otherwise have considered IUP and the basic Natural Science program as a means of achieving their career goals.</p>
<p>What role, if any, does it serve the college/university above and beyond the role it serves in the department?</p>	<p>The proposed Natural Science/Pre-Audiology track will serve the university because it will attract more students to IUP. A significant fraction of high school students are interested in careers in the health care field. Those students have an innate desire to pursue a career in which they can help people, and they view careers in the health care field as being particularly attractive. Such careers have a track record of being in high demand, of producing good wages, and of being largely recession-proof occupations. Indeed, the US Bureau of Labor Statistics predicts that the employment outlook for Audiologists (Au.D.) is expected to increase in the ten-year period starting in 2012 by 34 percent, or “much faster than average for all occupations”. Again, according to the US Bureau of Labor Statistics, about 13,000 audiologists are currently employed in the United States. In the coming years, as more US citizens become insured through the recently enacted “Affordable Care Act”, the demand for access to health care and the services provided by audiologists will only increase. Also, data shows that the US population is aging. Since hearing problems increase with a person’s age, this trend also points to an increasing demand for audiologists. The bottom line is that all indicators and projections point to the need for increasing numbers of audiologists in the coming years. The median pay for audiologists in the US was in 2012 (again, according to the US Bureau of Labor Statistics) \$69,720 per year. According to the American Academy of Audiology’s website (2012), the median calendar year salary was \$71,000 for clinical service providers, \$80,000 for university faculty, and \$90,906 for administrators.</p>



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3-11-15

Aleksandra Kaniasty  
Assistant Dean, College of Natural Sciences and Mathematics  
305 Weyandt Hall

Dear Ms. Kaniasty and Members of the UW Undergraduate Curriculum Committee,

I am writing this letter in support of the proposal for the Pre-Audiology & Hearing Science Track, which is meant to be a new Bachelor of Science degree offering consistent with the Natural Sciences pre-professional tracks already offered in pre-pharmacy, pre-physical therapy, pre-optometry, etc. I worked with Dr. David Stein and Dr. Annah Hill in the Department of Communication Disorders, Special Education, and Disabilities Services to bundle a courseload based on the pre-existing Natural Science pre-professional tracks, yet applicable to students interested in pursuing a doctoral degree in Audiology or a graduate degree in Hearing Science. The SPLP and EDHL course offerings for this track are currently offered as courses in the Speech-Language Pathology and Audiology Program and the Audiology Minor. The remainder of the courses are offered through other departments throughout the university and adhere to the Liberal Studies requirements established by the university. I am hoping that this new pre-professional track will attract undergraduate students to IUP who want to become audiologists, but who may also want a more rigorous science background as opposed to the more traditional Communication Disorders curriculum offered at most universities.

A handwritten signature in cursive script that reads 'Cynthia M. Richburg'. The signature is written in black ink and is positioned above the typed name and title.

Cynthia M. Richburg, PhD, CCC-A, FAAA  
Professor/Audiologist  
Communication Disorders, Special Education, and Disability Services  
225 Davis Hall  
[richburg@iup.edu](mailto:richburg@iup.edu) / 7-5680

**Subject:** Re: Proposal for new tracks in the Natural Science Program (AUDIOLOGY and PYSICIAN ASSISTANT)

**From:** "Dr. N. Bharathan" <bharathn@iup.edu>

**Date:** 4/1/2015 10:14 AM

**To:** <lkup@iup.edu>

**CC:** "N. Bharathan" <bharathn@iup.edu>

April 1, 2015, 2015

Dear Dr. Kupchella

Coordinator Pre-Professional Program

College of Natural Sciences and Mathematics

Thank you very much for taking the lead to initiate the two programs Pre-Audiology and Pre-Physician Assistant within the College of Natural Sciences and Mathematics. The Chair of the Undergraduate Curriculum Committee (DR. Megan Knoch) and the Committee carefully reviewed the proposals. Yes, you have our support from the Biology Department for both the minors. Consistent with our support with these initiatives, we have already introduced and piloted "Medical Terminology" course last fall for the Pre-Physician Assistant minor. The biology department anticipates that a number of our students would be interested Pre-Audiology and Pre-Physician Assistant program.

If you need any additional information, please do not hesitate to contact me.

Sincerely,

N.Bharathan

\*\*\*\*\*

N. Bharathan PhD  
Professor and Chair  
Department of Biology  
Indiana University of Pennsylvania  
Indiana, Pennsylvania 15705  
USA  
724.357.2584  
bharathn@iup.edu

**From:** [lkup@iup.edu](mailto:lkup@iup.edu)

**Sent:** Thursday, March 26, 2015 6:18 PM

**To:** [Narayanaswamy, Bharathan](#)

**Subject:** Proposal for new tracks in the Natural Science Program (AUDIOLOGY and PYSICIAN ASSISTANT)

Hi Bharathan,

Consistent with the initiative promoted by the Dean for us to submit proposals for new programs in the CNS&M, I have been involved with creating proposals for two Natural Science Tracks (Pre-Audiology

and Pre-Physician Assistant – ATTACHED). If you open the two documents, you will find that Biology courses are an integral part of the proposed new tracks. Since the new tracks, should they be approved, will require courses from the Biology Department, and since you are the Department Chairperson, it is appropriate for me to request for any comments that you might have. The “comments” can be as simple as a reply to this message, or they may be in the form of a letter. Whichever format you would like to use, I would like to submit your remarks along with the proposals. I would greatly appreciate any comments that you might have.

Thank you,  
Larry