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UWUCC Use Only Proposal No: 13-1646 UWUCC Action-Date: AP-3/11/14 Senate Action Date: APP-3/25/14

## Curriculum Proposal Cover Sheet - University-Wide Undergraduate Curriculum Committee

Contact Person(s)	Cynthia M. Richburg	Email Address richburg@iu	p.edu	
Proposing Department/Unit Special Education and Clinical Services Phone 724-357-5680				
Check all appropriate lines and complete all information. Use a separate cover sheet for each course proposal and/or program proposal.				
Course Proposals (check all that apply)				
	Course Prefix Change Course Number and/or Title Change	Course Deletion  Catalog Description Cha	ange	
Current course prefix, number and full title: SPLP 312 - Advanced Audiology and Hearing Disorders				
<u>Proposed</u> course prefix, number and full title, if cha	anging:			
2. Liberal Studies Course Designations, as app		t		
This course is also proposed as a Liberal Studies	Course (please mark the appropriate	categories below)		
Learning Skills Knowledge Area	Global and Multicultural Awarene	SS Writing Across the Curriculum	ım (W Course)	
Liberal Studies Elective (please mark the designation(s) that applies – must meet at least one)				
Global Citizenship	Information Literacy	Oral Communication		
Quantitative Reasoning	Scientific Literacy	Technological Literacy		
3. Other Designations, as appropriate				
Honors College Course Other: (e.g. Women's Studies, Pan African)				
4. Program Proposals				
		m Title Change	New Track Other	
Current program name:				
Proposed program name, if changing:				
5. Approvals	Sia	nature	Date	
Department Curriculum Committee Chair(s)	James Bett	۸.	24/1/1	
Department Chairperson(s)	Dance Barr		213/14	
College Curriculum Committee Chair	Dan Dunio	2	3/2/11	
College Dean	Jan Justinke	w	3/4/1/	
Director of Liberal Studies (as needed)	<del></del>	· · · · · · · · · · · · · · · · · · ·	97/17	
Director of Honors College (as needed)				
Provost (as needed)				
Additional signature (with title) as appropriate	0.10			
UWUCC Co-Chairs	Gail Sechris	7	3/13/14	

Liberal Studies

Received

MAR I 3 2014

MAR 4 2014

#### **SYLLABUS OF RECORD**

## I. Catalog Description

SPLP 312 Advanced Audiology and Hearing Disorders 3 class hours

Prerequisites: SPLP 222 0 lab hours 3 credits

(3c-01-3cr)

Contains advanced audiological topics concerning auditory function, types and causes of hearing disorders, advanced evaluation procedures and techniques for hearing, and social, emotional, and educational impacts of various auditory disorders on adults and children.

#### II. Course Outcomes:

Students will be able to:

- 1. demonstrate sufficient knowledge of basic audiometric testing, its uses, it limitations, and its clinical functionality.
- 2. show evidence of a deeper understanding of special testing techniques, such as masking, acoustic reflexes, electrophysiology, electroacoustics, etc.
- 3. explain the various disorders of the auditory mechanism at the levels of the outer ear, middle ear, inner ear, and central/auditory cortex.
- 4. explain the rationale for classifying persons as hearing aid users, cochlear implant users, or manual communicators.
- 5. explain the rationale for selecting various amplification systems in various settings.
- 6. show evidence of a deeper understanding of the educational and psychosocial impacts of auditory disorders on adults and children.
- 7. utilize problem solving strategies for audiological cases using case history, testing, psychosocial, and environmental information.

#### III. Course Outline

## Weeks One and Two:

- ■Review of Anatomy and Physiology
  - -Outer and Middle Ears
  - -Inner Ear
  - -Central Auditory Pathway

#### Weeks Three and Four:

(6 hours)

(6 hours)

- ■Basic Audiologic Evaluation Review Case History to Results and Recommendations
- ■Case History Questions
- ■Review of Otoscopy, Immittance Measurements, and Basic Audiologic Evaluation
- ■Review of Interpreting Audiograms and Tympanograms

## Weeks Five and Six:

(5 hours)

- ■Medical Aspects of Hearing Loss/ Genetics and Development In-Utero
- ■Disorders of the Outer Ear
- ■Audiological testing for these disorders
- ■Social, emotional, and educational impacts of these disorders/losses

**EXAM ONE** (1 hour)

## **Weeks Seven and Eight:**

(6 hours)

- ■Disorders of the Middle Ear
- ■Audiological testing for these disorders
- ■Social, emotional, and educational impacts of these disorders/losses

## Weeks Nine and Ten:

(6 hours)

- ■Disorders of the Inner Ear
- ■Audiological testing for these disorders
- ■Social, emotional, and educational impacts of these losses

## Weeks Eleven and Twelve:

(5 hours)

- ■Disorders of the Brain and Central Auditory Mechanism
- ■Audiological testing for these disorders
- ■Social, emotional, and educational impacts of these losses

**EXAM TWO** (1 hour)

## Week Thirteen:

(3 hours)

- ■Syndromes/Complexes with etiologies of hearing impairment not discussed to date
- ■Cases/ Hands-on experience with equipment

#### Week Fourteen:

■Thanksgiving Break - no class

#### Week Fifteen:

■Student disorder presentations and course wrap up (3 hours)

**FINAL EXAM** 

(2 hours)

#### IV. Evaluation Methods

The final grade will be determined as follow:

(600 - 625 possible points)

•Three exams (100 points each): Two exams spread throughout the semester and the third exam being the final exam given during exam week will be administered. Exams contain a combination of multiple-choice, matching, listing, fill-in-the-blank, drawing audiograms, and short essays. The final exam is cumulative and contains information obtained throughout the entire semester.

- •Pop quizzes (100 125 points total): Unannounced quizzes spread throughout the semester containing questions from the readings and lectures will be administered. Quizzes will primarily be multiple choice, although some fill-in-the-blank questions will be given.
- •Interpretation of audiograms (30 points): A packet of audiograms will be handed out for students to interpret and answer several questions. Textbooks, notes, the Internet, and other written sources are allowed as references to help students obtain answers. Students will be required to draw on knowledge from lecture notes, textbooks, and undergrad coursework in audiology for this assignment.
- Interpretation of tympanograms (20 points): A packet of tympanograms will be handed out for students to interpret and answer several questions. Textbooks, notes, the Internet, and other written sources are allowed as references to help students obtain answers. Students will be required to draw on knowledge from lecture notes, textbooks, and undergrad coursework in audiology for this assignment.
- Reports and Oral Participation on Two Journal Articles (50 points): Two articles will be posted on the P drive or D2L during the course of the semester containing information on topics that have been covered in the course. Students are to read and answer questions on the articles and be ready to fully discuss the content and implications of the articles in class on the assigned dates.
- •Presentation on Individual Hearing Disorder (100 points): Each student will be given a disorder of the auditory system to present to the class. Students will collect information on that disorder, develop a PowerPoint presentation and handout(s) and present the topic to classmates in an oral presentation during class. Students will be required to present accurate, concise, updated, and clear information.

#### V. Example Grading Scale

This course is graded on straight percentages based on the total number of points earned on each assignment or quiz/test. The earned points will be divided by the total points to obtain the grade.

540-600  pts = A	90 - 100% = A
480-539 pts = B	80 - 89% = B
420-479 pts = C	70 - 79% = C
360- 419 pts = D	60 - 69% = D
$\leq$ 359 pts = F	= 59% = F</td

#### VI. Attendance Policy

Consult your student handbook for official IUP attendance policies.

## VII. Required Textbook(s), Supplemental Books and Readings

#### Required Text:

Hall, J.W.III (2013). *Introduction to Audiology Today*. Allyn & Bacon. (ISBN-10: 0205569234)

## Supplemental Texts:

Roeser, R. & Downs, M. (2004). Auditory Disorders in School Children. (4<sup>th</sup> ed.). Thieme Medical Publishers. (ISBN 1-58890-228-5)

Northern, J. (1996). Hearing Disorders. (3rd ed.). Allyn & Bacon. (ISBN 0-205-15226-0)

## VIII. Special Resource Requirements

There are no lab fees, materials, or supplies required for this course.

## IX. Bibliography (\*Note: Older documents were used to prepare for the course because these are the documents still used by the profession. Students are not being assigned outdated documents.)

- American Academy of Audiology. (2003) Infection control guidelines. *Audiology Today* 15(5):12–19.
- American Academy of Audiology. (2004) Scope of practice. Audiology Today 15(3):44-45.
- American Speech-Language-Hearing Association. (2004). *Scope of practice in audiology* [Scope of Practice]. Available from www.asha.org/policy.
- American Speech-Language-Hearing Association. (1978). Guidelines for manual pure-tone threshold audiometry. *Asha*, *20*, 297–301.
- American Speech-Language-Hearing Association. (1998). *Hearing loss: terminology and classification* [Technical Report]. Available from www.asha.org/policy.
- American Speech-Language-Hearing Association. (1988, March). Guidelines for determining threshold level for speech. *Asha*, 85–89.
- American Speech-Language-Hearing Association. (1988, November). Tutorial: Tympanometry. Journal of Speech and Hearing Disorders, 53, 354–377.
- American Speech-Language-Hearing Association. (1990). Guidelines for audiometric symbols. *Asha*, 32 (Suppl. 2), 25–30.
- American Speech-Language-Hearing Association. (1991). Acoustic-immittance measures: A bibliography. *Asha*, *33*(Suppl. 4), 1–44.
- American Speech-Language-Hearing Association. (1992, March). External auditory canal examination and cerumen management. *Asha*, 34(Suppl. 7), 22–24.
- Bess, F.H., Dodd-Murphy, J., & Parker, R.A. (1998). Children with minimal sensorineural hearing loss: Prevalence, educational performance, and functional status. *Ear and Hearing*, 19, 339-354.

- Gates, G.A., Cooper, J.C., Kannel, W.B., Miller, N. (1990). Hearing in the elderly: The Framingham cohort, 1983-1985. Part I. Basic Audiometric Test Results. *Ear Hear*, 11:247-256.
- Goebel JA. (2001). *Practical management of the dizzy patient*. Philadelphia: Lippincott Williams & Wilkins.
- Herdman SJ. (2000) . Vestibular rehabilitation: Contemporary perspectives in rehabilitation (2<sup>nd</sup> ed). Philadelphia: F.A. Davis.
- Jacobson GP, Newman CW, Kartush JM. (1997). *Handbook of balance function testing*. San Diego: Singular Publishing Group.
- Mulrow, C.D., Endicott, J.E., Tuley, M.R., Velez, R., Charlip, W.S., Rhodes, M.C., Hill, J.A., DeNino, LA. (1990a). Quality-of-life changes and hearing impairment: A randomized trial. *Ann Intern Med*, 113: 188-194.
- Roberts, J.E. & Zeisel, S.A. (2000). Ear infections and language development. Jessup, MD: U.S. Department of Education.
- Weber, P.C. (2002). An auditory brainstem implant system. *American Journal of Audiology*, 128-133.
- Weber. P.C. (2002). Medical and surgical considerations for implantable hearing prosthetic devices. *American Journal of Audiology*, 134-138.

#### Web Sites of Importance:

http://www.audiology.org American Academy of Audiology http://www.asha.org American Speech-Language-Hearing Association http://www.nidcd.nih.gov/directory. National Institute on Deafness and Other Communication Disorders (NIDCD)

#### Links of Interest:

http://www.audiology.org/news/Pages/20090723a.aspx http://www.cdc.gov/ncbddd/bd/macdp.htm http://www.cdc.gov/ncbddd/autism/glossary.htm#HearingLoss

#### Links for Hearing Disorders and/or Syndromes:

Apert Syndrome: http://ghr.nlm.nih.gov/condition/apert-syndrome

Alport Syndrome: http://ghr.nlm.nih.gov/condition/alportsyndrome

Pendred Syndrome: https://www.counsyl.com/diseases/pendred-syndrome/?gclid=CJ\_85cXzrbwCFURnOgod9yIACA

Sturge-Weber Syndrome: http://www.kennedykrieger.org/patient-care/diagnoses-disorders/sturge-weber-syndrome-sws?gclid=CJrh-t7zrbwCFWUOOgodUhcA2A

Usher Syndrome: http://www.nidcd.nih.gov/health/hearing/pages/usher.aspx

Waarderburg Syndrome: http://www.nih.gov/condition/waardenburg-syndrome

# Course Analysis Questionnaire SPLP 312 – Advanced Audiology and Hearing Disorders

## Section A: Details of the Course

A1 How does this course fit into the programs of the department?

This course is a higher-level content course that provides information to students who will be screening, evaluating, and/or treating clients with these diagnoses or to students who are interested in obtaining more in-depth information on audiological disorders.'

For what students is the course designed? Speech-Language Pathology and Audiology majors, students in other majors, and for future Pre-Audiology Track students.

Explain why this content cannot be incorporated into an existing course. The information and experiences contained in this course are more advanced than those obtained in the SPLP 222 (Introduction to Audiology) or SPLP 311 (Aural Rehabilitation) courses. This advanced information regarding testing procedures and congenital and acquired forms of hearing loss take an entire semester to teach and learn.

- A2 Does this course require changes in the content of existing courses or requirements for a program? No.
- A3 Has this course ever been offered at IUP on a trial basis (e.g. as a special topic)? Yes, this course was offered during the Fall 2013 semester as SPLP 481 (Special Topics: Hearing Disorders and Advanced Audiologic Assessment) to 11 students in the Speech-Language Pathology and Audiology undergraduate program.
- A4 Is this course to be a dual-level course? No
- A5 If this course may be taken for variable credit, what criteria will be used to relate the credits to the learning experience of each student? Who will make this determination and by what procedures? NA
- A6 Do other higher education institutions currently offer this course? Yes, a few other higher education institutions offer these topics in either one or two courses at the undergraduate level. Many universities with a Communication Sciences and Disorders Major, or an Audiology and Speech-Language Pathology Major have 2 to 4 undergraduate courses pertaining to audiology: (1) Hearing Science, (2) Introduction to Audiology, (3) Aural Rehabilitation and/or (4) Clinical experience.
- Such universities that require 3-4 undergrad courses with basic and advanced audiology topics include:

Towson University: SPPA 303 (Hearing Science), SPPA 321 (Intro to Audiology), and 325 (Aural Rehabilitation) and SPPA 341 (Clinical Audiology)

- University of Pittsburgh: CSD 1232 (Intro to Audiology), CSD 1024/1029 (Anat & Phys of Hearing w/lab), CSD 1025/1028 (Hearing Science w/lab)
- James Madison University: CSD 301 (Audiology), CSD 318 (Aural Rehabilitation), CSD 471 (Methods and Observation in Audiology)

However, most universities with a graduate program in audiology (Au.D. program) offer the advanced audiology courses at the graduate level.

A7 Is the content, or are the skills, of the proposed course recommended or required by a professional society, accrediting authority, law or other external agency?

Students interested in the fields of audiology and speech-language pathology are expected to know about audiological concepts (e.g., assessments and evaluation procedures, implications of findings, treatment, etc.) and causes of hearing impairment, as detailed in several documents of the American Speech-Language-Hearing Association and the American Academy of Audiology (i.e., Scopes of Practice, Codes of Ethics). These documents can be found on the organizations' web sites, <a href="www.asha.org">www.asha.org</a> and <a href="www.audiology.org">www.asha.org</a> and <a href="www.audiology.org">www.asha.org</a> and <a href="www.audiology.org">www.asha.org</a> and <a href="www.audiology.org">www.asha.org</a> and <a href="www.audiology.org">www.audiology.org</a>, respectively. Students at the graduate level have to prove competencies and abilities on the KASA evaluation (Knowledge and Skills Assessment) and the Praxis II exam.

## Section B: Interdisciplinary Implications

- B1 Will this course be taught by instructors from more than one department? No.
- B2 What is the relationship between the content of this course and the content of courses offered by other departments? This course is independent of other departments and is restricted to this program's majors, minors, and any Pre-Audiology track offered in the future.
- B3 Will this course be cross-listed with other departments? No, this course will not be cross listed with other departments

#### Section C: Implementation

- C1 Are faculty resources adequate? Yes. As stated in the Audiology Minor documentation, no additional faculty lines are required for offering this course. Dr. Cynthia Richburg currently teaches the audiology courses and will teach SPLP 312 (taught as SPLP 481- Special Topics)) in the Speech-Language Pathology and Audiology program. This course fits into her teaching schedule because she no longer has responsibilities to teach courses for Bloomsburg University's Doctor of Audiology program.
- C2 What other resources will be needed to teach this course and how adequate are the current resources? The resources for this course are adequate. No additional space, equipment, supplies or funds are needed.
- C3 Are any of the resources for this course funded by a grant? No.
- C4 How frequently do you expect this course to be offered? This course will be offered one time per academic year, usually during the fall semester. Is this course particularly designed for or restricted to certain seasonal semesters? No.
- C5 How many sections of this course do you anticipate offering in any single semester? One.
- C6 How many students do you plan to accommodate in a section of this course? This course is offered with 30 seats.

What is the justification for this planned number of students? Courses in SPLP are limited by the classroom size and the fact that there are typically 25 to 30 majors in any category (freshmen, sophomores, etc.) needing to enroll in classes.

- C7 Does any professional society recommend enrollment limits or parameters for a course of this nature? No.
- C8 If this course is a distance education course, see the Implementation of Distance Education Agreement and the Undergraduate Distance Education Review Form in Appendix D and respond to the questions listed. NA

## **Section D: Miscellaneous**

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Include any additional information valuable to those reviewing this new course proposal. No additional information is required.