**Introduction**

The mission of our undergraduate preprofessional program in speech pathology and audiology is to:

- offer coursework in the basic principles of communication disorders
- prepare you to function as an ethical, responsible professional
- prepare you to enter graduate programs

Our program is accredited in speech-language pathology by the American Speech-Language-Hearing Association.

**Admission to Program**

Any student admitted to NAU may enroll in lower-division courses in speech pathology and audiology.

To begin our junior-year sequence of courses, you must have a minimum overall cumulative grade point average of 2.75.

To enroll in the clinical practicum for either speech pathology or audiology, you must have a minimum grade point average of 3.0 in all speech pathology and audiology courses.

**Degree Offered—Extended B.S. in Speech Pathology and Audiology**

To earn this degree, you must complete the three components described in the following paragraphs. This degree does not require a minor.

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<tr>
<th>Major Requirements</th>
<th>54 hours</th>
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<tbody>
<tr>
<td>Liberal Studies Requirements</td>
<td>43 hours</td>
</tr>
<tr>
<td>General Electives</td>
<td>28 hours</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>125 hours</strong></td>
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</table>

*Be aware that some courses required for your degree may have prerequisites that you must also take. Check all course descriptions to find out.*

**Major Requirements**

You must complete the following 54 hours of coursework:

- 12 hours in basic communication processes and normal development, including SPH 190, 202, 251, and 350
- 30 hours in speech pathology, including SPH 355, 440, 450, 451, 453, 475, and 476
- 6 hours in audiology, including SPH 356 and 357
- 6 hours of departmentally approved courses including but not limited to PSY 230, 240, 350, and 355; ENG 321; and POS 220
Speech pathology and audiology courses are planned sequentially. You should work closely with your adviser to develop a plan of study.

**Liberal Studies Requirements**

See the General Academic Requirements chapter of this catalog for information about the 43 hours of liberal studies credit that we require.

**General Electives**

You may take the remaining 28 hours from any area you choose for a total of 125 hours.

**Speech Pathology and Audiology Courses (SPH)**

Be aware that you should check with the department office or the current Class Schedule for information about the particular semester in which a course may be offered.

**SPH 101 Beginning Sign Language** (3). Acquisition of basic sign language skills according to the American Sign Language method, with emphasis on developing vocabulary and grammar. Cannot be counted toward major requirements.

**SPH 190 Introductory Speech Pathology** (3). Introduction to the profession of speech pathology, including fields of study, places of employment, history of the discipline, national organizations, and types of disorders encountered; emphasis placed on the multidisciplinary aspects of the profession.

**SPH 202 Phonetics** (3). Sounds of the American language, emphasizing acoustic and physiologic aspects of articulation development and assessment.

**SPH 251 Speech and Language Anatomy and Physiology** (3). Structure and function of the mechanisms used in speech and language.

**SPH 301 Intermediate Sign Language** (3). An intermediate course in the practical use of sign language designed to improve sign vocabulary, speed, and associated speech reading techniques. Cannot be counted toward major requirements.

**SPH 350 Childhood Language Development** (3). The normal development of speech and language including the relationship of perceptual, intellectual, social-emotional, and motor factors; emphasis on language systems and language acquisition.

**SPH 352 Articulation Development and Disorders** (3). A study of normal phonetic development and related functional disorders; emphasis on developing systems, evaluation, and treatment methods. 

**SPH 355 Speech Disorders** (3). An introduction to the nature of and therapy procedures for disorders of dysarthria, fluency, and adult language; emphasis on treatment programs. Prerequisite: SPH 190.

**SPH 356 Introduction to Audiology** (3). Anatomy and physiology of the auditory system; acoustics and psychoacoustics of hearing; hearing conservation. Concurrent registration in SPH 452 required. 

**SPH 357 Advanced Audiology** (3). Clinical hearing evaluation procedures: air conduction, bone conduction, speech audiometry; masking procedures; and pathologies of the auditory system. Prerequisite. SPH 356. Concurrent registration in SPH 452 required.

**SPH 358 Speech and Hearing Disorders of School-Age Children** (3). A survey of speech, language, and hearing problems that a teacher may encounter in children in the classroom. Emphasis is on the practical aspects: how the disorder exhibits, how to recognize disorders, what they mean to the educational and social development of the child, and how and where to get professional help.

**SPH 440 Clinical Methods** (3). Selected materials, techniques, and procedures used in the evaluation and treatment of speech and language disorders. Prerequisites: SPH 190, 202, 251, 350, and 352.

**SPH 451 Clinical Practice in Speech Pathology** (3). Observation of therapy procedures in various clinical settings including public schools; introduction to clinic policies and procedures through participation in a variety of clinical activities. May be repeated for up to 6 hours of credit. Prerequisites: SPH 190, 202, 251, 350, and 352. Corequisite: SPH 440 first enrollment.

**SPH 452 Clinical Practice in Audiology** (3). Supervised experience in clinical assessment of auditory disorders from basic screening and identification procedures. Concurrent registration in SPH 356 or 357 required. May be repeated for up to 6 hours of credit.

**SPH 453 Speech Language Assessment** (3). Practical application of the cognitive, linguistic, and communicative theories of language development to the assessment and intervention of language-delayed and language-disordered populations. Prerequisites: SPH 350, 352, and 450.

**SPH 454 Administration of School Speech Language Programs** (3). Administration and job-related responsibilities are taught through literature exploration and classroom experiences in making referrals, screening scheduling, and conferencing. Prerequisites: SPH 352 and 450.

**SPH 475 Perspectives in Speech and Hearing Sciences** (3). Scientific foundations of speech pathology and audiology are explored with emphasis on dynamics of normal respiratory, phonatory, and articulatory interactions. Prerequisites: SPH 190, 202, and 251.
SPH 476 Communication Disorders in Multicultural and Multilingual Populations (3).
Applied knowledge of multicultural and multilingual issues as it pertains to the work of speech and language pathologists and audiologists. Prerequisites: SPH 350 and 450.

Graduate Courses

SPH 550 Seminar in Speech and Hearing Sciences (3)
SPH 551 Neuropathologies of Speech (3)
SPH 552 Aphasia and Related Language Disorders in Adults (3)
SPH 553 Limited English Proficient Language Assessment and Remediation (3)
SPH 554 Advanced Evaluation (3)
SPH 555 Organic Speech Disorders (3)
SPH 556 Communication Processes and Acquisition (3)
SPH 557 Phonological Disorders (3)
SPH 559 Speech and Hearing Problems of the Aging (3)
SPH 599 Contemporary Developments (1-3)
SPH 602 Clinical Practicum (1-8)
SPH 608 Fieldwork Experience in Speech Pathology Externship (1-12)
SPH 651 Stuttering: Diagnosis Therapy (3)
SPH 652 Voice Disorders: Assessment and Treatment (3)
SPH 653 Psycholinguistic Disorders (3)
SPH 654 Seminar in Case Studies and Management (3)
SPH 655 Administration of Speech and Hearing Agencies (3)
SPH 656 Diagnostic Audiology (3)
SPH 657 Aural Rehabilitation (3)
SPH 685 Graduate Research (1-6)
SPH 697 Independent Study (1-3)
SPH 698 Graduate Seminar (1-3)

Faculty

William Culbertson, Ph.D., Assistant Professor of Speech Pathology and Audiology
B.A., University of Richmond; M.S., Old Dominion University; Ph.D., Michigan State University; NAU 1993

Judith B. King, Ph.D., Associate Professor of Speech Pathology and Audiology
B.S., M.S., Humboldt State University; Ph.D., University of Colorado-Boulder; NAU 1989

D. Elise Lindstedt, Ph.D., Assistant Professor of Speech Pathology and Audiology
Ph.D., University of Denver; NAU 1994

Dennis C. Tanner, Ph.D., Professor of Speech Pathology
B.S., M.S., Idaho State University; Ph.D., Michigan State University; NAU 1976

Linda Weems Ph.D., Associate Professor of Speech Pathology; Chair, Department of Speech Pathology and Audiology
B.S., Eastern New Mexico University; M.S., Ph.D., University of Oklahoma; NAU 1986

Clinical Faculty

Marilyn Jensen, M.S., Clinical Director, Speech Pathology
B.A., University of Oklahoma; M.S., Northern Arizona University; NAU 1981

Adjunct Faculty

Terri R. Adams, M.S., Adjunct Clinical Instructor of Speech Pathology and Audiology
A.A., Chipola Junior College; M.S., University of South Florida; NAU 1983

Elizabeth E. Graham, M.S., Adjunct Clinical Instructor of Speech Pathology and Audiology
B.A., M.S., Northern Arizona University; NAU 1988

Edarita Long, Ph.D., Adjunct Clinical Associate Professor of Speech Pathology and Audiology
B.S., M.A., University of Oklahoma; Ph.D., Southern Illinois University; NAU 1983

Susan J. McGary, M.S., Adjunct Clinical Instructor of Speech Pathology and Audiology
B.A., M.S., University of Illinois; NAU 1983

William J. Palchich, M.S., Adjunct Clinical Instructor of Speech Pathology and Audiology
B.A., College of Saint Thomas; M.A., M.S., Northern Arizona University; NAU 1984

Karyn A. Reid, M.A., Adjunct Clinical Instructor of Speech Pathology and Audiology
B.A., M.A., University of New Mexico; NAU 1983

Emeritus Faculty

James H. Stubblefield, Ph.D., Professor of Speech Pathology and Audiology, Emeritus
B.B.A., University of Texas; M.S., Oregon College of Education; Ph.D., Purdue University; NAU 1974