PT 432 Orthopaedics (3). Covers common disorders of the musculoskeletal system; surgical and conservative methods of treatment, and the theory and rationale of evaluation and treatment in joint disorders.

PT 439 Pulmonary Physical Therapy (2). The evaluation and treatment of pulmonary disorders, with emphasis on acute management. 1 hr. lecture, 3 hrs. lab.

PT 440 Electrophysiological Measurements (2). Principles of electromyography including sensory and motor nerve stimulation studies. 1 hr. lecture, 3 hrs. lab.

PT 452 Neurodevelopmental Techniques (2). Assessment and treatment of cerebral palsy and other developmental disorders. 1 hr. lecture and 3 hrs. lab.

PT 462 Sensory Techniques (2). Neuropsychological rationale for therapeutic sensory stimulation as related to normal sensory motor development and the acquisition of motor skill. 1 hr. lecture and 3 hrs. lab.

PT 466 Physical Therapy Organization and Administration (2). Designing, equipping, and staffing a Physical Therapy Clinical Department. Budget development, cost accounting, supervisory functions, evaluation techniques, and methods of quality assurance are covered.

PT 472 Cardio Pulmonary Rehabilitation (2). Exercise rehabilitation following myocardial infarction, and in chronic cardiac and pulmonary disease. Includes electrocardiography arrhythmia recognition and CPR. 1 hr. lecture and 3 hrs lab.

PT 485 Undergraduate Research (0-6). Design and implementation of a research project under faculty supervision. (May be repeated for a total of 6 hours.)

SPEECH PATHOLOGY AND AUDIOLOGY

Faculty: C. Nye, Departmental Chair; M. Gartland, M. Jensen, J. Stubblefield, D. Tanner, L. Weems.

Objectives

The primary objective of the program in Speech Pathology and Audiology is to guide the student in critical study of the basic principles of communication disorders. Students will develop the ability to think critically and creatively, understand the multifaceted character of communication processes and disorders, and develop the ability to function as a responsible member of a diagnostic and therapeutic team. The undergraduate program is a preprofessional program designed to train students for entry into a graduate program. The curriculum includes courses in the normal development of speech, hearing and language and prepares students for indepth, advanced, graduate study in specific areas of communication disorders.

At the conclusion of the preprofessional program, students receive a bachelor of science degree in speech pathology and audiology. Since certification and employment with this degree are possible in only certain states, it is strongly recommended that students who complete the preprofessional program enroll in a graduate program for full professional preparation and certification by the American Speech Language Hearing Association.

Admission

Applicants for admission must fulfill the general university admission requirements. Admission to the University does not constitute admission to the undergraduate preprofessional speech pathology and audiology program. All students majoring in speech pathology and audiology will be assigned a faculty advisor to assist in planning their academic programs. To begin the junior year sequence of courses, the student must have a minimum overall cumulative grade point average of 2.75. To enroll in the
clinical practicum for either speech pathology or audiology, the student must have a minimum grade point average of 3.0 in all speech pathology audiology courses or a departmental waiver.

Students not fulfilling the listed minimal requirements may be granted provisional status by departmental approval for a period of one semester.

The student is reminded that professional certification in speech pathology audiology, as granted through the American Speech Language Hearing Association, requires the completion of a master's degree. The American Speech Language Hearing Association Guide to Graduate Education lists a minimum grade point average of 3.0 as an admission requirement for most graduate level programs.

Bachelor of Science

Only an extended major of 54 hours is available in the Speech Pathology and Audiology Program: 12 hours in the normal development of speech, hearing and language, 24 hours in speech pathology, 12 hours in audiology and 6 hours selected from ENG 328, PSY 201, PSY 350, PSY 355, PS 300 or departmentally offered seminars on these or related subjects.

Speech Pathology and Audiology courses are planned sequentially: SPH 190, 202, 251, and 352 are to be taken in the second year of study; SPH 350, 355, 356, 357, 440, 450, and 452 are third year courses; SPH 354, 451, 453, 454, and 498 are fourth year classes. Students are discouraged from taking courses out of sequence to avoid inadequate preparation problems and scheduling difficulties. Transfer students will need to work closely with their advisor to minimize difficulties.

SPH: SPEECH PATHOLOGY AND AUDIOLOGY COURSES

SPH 101: Beginning Sign Language (3). Acquisition of basic sign language skills according to the Signing Exact English method with emphasis on development of vocabulary/grammar. Cannot be counted toward filling 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 upon the multidisciplinary aspects of the profession.


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 speechreading techniques. Cannot be counted toward filling 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 355 Speech Disorders (3). An introduction to the nature of and therapy procedures for disorders of articulation, fluency, and adult language; emphasis on treatment programs.
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 course of speech, language, and hearing problems that a teacher may encounter in children in the classroom. Emphasis is on the practical aspects of how the disorder exhibits, how to recognize the disorders, what they mean to the educational/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.

SPH 450 Childhood Language Disorders (3). Concepts and issues of the cognitive, linguistic and communicative aspects of language development and their relationships to language delayed and language disordered children. Prerequisites: SPH 190, 202, 251, 350.

SPH 451 Clinical Practice in Speech Pathology (1-3). Supervised experience in speech rehabilitation; observation and participation in therapy procedures in various clinical settings including public schools; administration of diagnostic tests and application of principles of speech correction in clinical settings. May be repeated for a maximum of 6 hours credit. Prerequisites: SPH 190, 202, 251.

SPH 452 Clinical Practice in Audiology (3). Supervised experience in clinical assessment of auditory disorders from basic screening/identification procedures. (Concurrent registration in SPH 356 or SPH 357 required). May be repeated for a maximum of 6 hours 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. Prerequisite: SPH 350, 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, 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 554 Advanced Evaluation (3).

SPH 555 Organic Speech Disorders (3).

SPH 556 Communication Processes and Acquisition (3).

SPH 557 Phonological Disorders (3).

SPH 558 Speech Correction for the Classroom Teacher (3).

SPH 559 Speech and Hearing Problems of the Aged (3).

SPH 602 Practicum (1-8).

SPH 651 Stuttering: Diagnosis Therapy (3).

SPH 652 Yoke Disorders: Assessment and Treatment (3).

SPH 653 Psycholinguistic Disorders (3).

SPH 654 Seminar in Case Studies and Management (3).
School of Hotel and Restaurant Management

Peter VanKleek, Dean
William E. Miller, Associate Dean


Mission
The broad objective of the School of Hotel and Restaurant Management at Northern Arizona University is to develop the students' professional and technical competence in preparation for leadership responsibility in the hospitality field. The students' intellectual growth, communication skills, ethics, integrity and appreciation for the society that they live in is of prime importance. The students are encouraged to explore the problems faced by supervisors and executives in managing the human element within the hospitality field.

Professional Experience and Graduation Requirements
In addition to the course requirements, students must also complete and document 500 hours of practical work experience in a hospitality operation for the technical, hands on portion of the degree program.

To be eligible for graduation, a student must have a grade point average of 2.00 or better on all work attempted at the university and 2.25 in all Hospitality Administration (HA) courses.

Degree Program
The Bachelor of Science degree in Hotel and Restaurant Management requires a total of 125 semester hours including the following:

46 hours of Liberal Studies.

Foundations: ENG 101 and 102, MAT 110 and SC 367.

Natural Science: 8 hours, including at least one laboratory science course.

Creative Arts: 6 hours.

Letters: 11 hours, including 8 hours of one foreign language.

Social and Behavioral Sciences: 9 hours, including at least one geography course.
(12 hours of Liberal Studies must be upper division courses).

18 hours of required support courses, BA 201, ACC 255 and 256, ECO 285 and 286 and RLS 383.

48 hours of required HA courses, HA 100, 120, 210, 240, 241, 270, 320, 335, 350, 355, 360, 370, 390, 420, 460, 499.

13 hours of approved elective HA courses.