

ing of foreign language proficiency, and curriculum development sessions which address issues of articulation in foreign language curricula. (Not applicable toward a major or graduate degree in Spanish.) (Same as FREN 681 and GERM 681.) LEC

- SPAN 717 History of the Spanish Language (3).
- SPAN 720 Syntax and Composition (3).
- SPAN 722 Special Topics in Spanish Literature: ____ (2-3).
- SPAN 730 Literature of Thirteenth- and Fourteenth-century Spain (3).
- SPAN 733 Print Culture in Early Modern Spain (3).
- SPAN 735 Poetry and Sentimental Romance in Fifteenth-Century Castile (3).
- SPAN 739 Spanish Drama of the Golden Age (3).
- SPAN 740 Lope de Vega and His School (3).
- SPAN 741 Calderon and His School (3).
- SPAN 742 The Spanish Novel in the Renaissance and Golden Age (3).
- SPAN 744 Spanish Lyric Poetry of the Golden Age (3).
- SPAN 745 Don Quixote (3).
- SPAN 747 The Spanish Theatre Before Lope de Vega (3).
- SPAN 752 Spanish Literature of the 18th Century (3).
- SPAN 754 Romanticism (3).
- SPAN 755 19th-century Spanish Novel (3).
- SPAN 760 19th-century Spanish Drama (3).
- SPAN 761 20th-century Spanish Drama (3).
- SPAN 762 The Spanish Novel Since the Civil War (3).
- SPAN 764 Modern Spanish Poetry (3).
- SPAN 765 Contemporary Spanish Poetry (3).
- SPAN 766 The Spanish Modernist Novel (3).
- SPAN 770 Spanish-American Drama (3).
- SPAN 771 Spanish-American Literature: ____ (3).
- SPAN 772 The Modern Spanish-American Novel, 1900-1950 (3).
- SPAN 773 The Modern Spanish-American Novel Since 1950 (3).
- SPAN 774 Spanish-American Poetry (3).
- SPAN 776 Spanish-American Short Story (3).
- SPAN 781 Spanish-American Colonial Studies (3).
- SPAN 782 Spanish-American Prose Fiction: ____ (3).
- SPAN 784 Spanish-American Modernism and Vanguards (3).
- SPAN 785 Special Topics in Spanish-American Literature: ____ (2-3).
- SPAN 790 Spanish Linguistics: Theory and Application to Teaching (3).
- SPAN 792 The Picaresque Novel (3).
- SPAN 795 Literary Theory and Criticism (3).

Speech-Language-Hearing: Sciences and Disorders

Chair: Hugh W. Catts, catts@ku.edu
 Dole Human Development Center, 1000 Sunnyside Ave., Room 3001
 Lawrence, KS 66045-7555, www2.ku.edu/~splh, (785) 864-0630

Degrees offered: B.A. or B.G.S. in Speech-Language-Hearing,
 M.A. in Audiology or Speech-Language Pathology, Au.D. in
 Audiology, Ph.D. in Audiology or Speech-Language Pathology.

Why study speech, language, and hearing? Because communication is central to human behavior, and the treatment of communication disorders requires specialized knowledge and skills.

Basic study in speech, language, and hearing is provided through B.A. and B.G.S. programs. Programs are designed for the student who seeks a career in speech, language, or hearing or is interested in normal communication development and communication disorders. Graduate study at KU is offered through the Intercampus Program in Communicative Disorders

with classes, research, and clinical work in Lawrence and at KU Medical Center in Kansas City.

Majors

First- and Second-year Preparation. Both the B.A. and the B.G.S. aspirant should fulfill the College general education requirements. Students also should complete SPLH 120, SPLH 261, SPLH 466, and elective courses in human physiology, psychology, and linguistics during their first two years. Faculty members can help students select appropriate course work.

Requirements for the B.A. or B.G.S. Major. A minimum of 34 hours in SPLH courses is required. Consult the department for current information. Required courses are

SPLH 120 The Physics of Speech	4
SPLH 261 Survey of Communication Disorders	3
SPLH 320 Introduction to the Neuroscience of Human Communication	2
SPLH 465 Fundamentals of Clinical Phonetics	1
SPLH 466 Language Science	3
SPLH 565 Language Sample Analysis Laboratory	1
SPLH 566 Language Development	3
SPLH 660 Research Methods in Speech-Language-Hearing	3
SPLH 662 Principles of Speech Science	3
SPLH 663 Principles of Hearing Science	3
SPLH 668 Introduction to Audiological Assessment and Rehabilitation	4
SPLH 671 Introduction to Speech-Language Pathology	4

An introductory statistics course (PSYC 300, MATH 365) is recommended.

After completing the requirements, students with grade-point averages of 3.0 or higher may enroll in SPLH 670, SPLH 672, or AUD 550.

Requirements for the Minor. Students must take SPLH 261 plus 15 hours of SPLH courses. Twelve of the 15 hours should be at the junior/senior level and exclude clinical courses (e.g., SPLH 668, SPLH 670, SPLH 671, and SPLH 672). Courses with clinical content can be taken as directed study with the permission and support of a faculty mentor. Electives for the minor include the following:

SPLH 120 The Physics of Speech (4)
SPLH 320 Introduction to the Neuroscience of Human Communication (2)
SPLH 464 Undergraduate Seminar in: ____ (3)
SPLH 465 Fundamentals of Clinical Phonetics (1)
SPLH 466 Language Science (3)
SPLH 499 Directed Study in Speech-Language-Hearing (1-3)
SPLH 565 Language Sample Analysis Laboratory (1)
SPLH 566 Language Development (3)
SPLH 660 Research Methods in Speech-Language-Hearing (3)
SPLH 662 Principles of Speech Science (3)
SPLH 663 Principles of Hearing Science (3)

Honors. The honors program offers exceptional students the opportunity to work closely with individual faculty members on scholarly projects over an extended period of time. Confer with the honors coordinator. The following are required:

1. A grade-point average at the time of declaration and at graduation of at least 3.25 overall and of 3.5 in the major.
2. Completion of 6 to 8 credit hours in SPLH 498 Honors Seminar. Students work under the direction of a faculty member. Students may change areas of interest or faculty supervisors at the beginning of a semester with the consent of the honors coordinator. Students also must attend a monthly honors seminar meeting. Academic credit but no honors designation is given to students who meet the requirements for any semester but do not complete the requirements for departmental honors.

Career Preparation

Most states have laws mandating that speech-language pathologists and audiologists be licensed to practice their profession. The minimum requirement for licensure in most states is a master's degree for speech-language pathology and the Au.D. for audiology.

Students interested in speech-language pathology and audiology should consult faculty members in the department during their first two years.

The CLAS Dean's Scholars Program offers scholarships to academically talented juniors and seniors interested in graduate study who would contribute to the diversity of graduate education programs and of future faculty.

■ **Speech-Language-Hearing: Sciences and Disorders Courses**

SPLH 120 The Physics of Speech (4). N An introduction to the acoustic structure of speech intended for non-science majors. Emphasis will be placed on the methods and standards by which scientists measure and evaluate the physical characteristics of speech. Topics will include: simple harmonic motion, the propagation of sound waves, aerodynamic aspects of vocal fold vibration, resonance, digital speech processing, frequency analysis, and speech synthesis. Three class hours and one laboratory per week. (Same as LING 120.) Prerequisite: MATH 101 or 104 or equivalent. LEC

SPLH 261 Survey of Communication Disorders (3). S/S Provides a general understanding of normal and deviant speech, language, and hearing in adults and children. This course considers the normal development of communication behavior, the nature of communication disorders, and the interaction of speech pathology and audiology with allied fields (e.g., education, medicine, psychology, special education). LEC

SPLH 320 Introduction to the Neuroscience of Human Communication (2). U The neural bases of human communication are introduced. Basic neuroanatomy and neurophysiology are discussed, with particular emphasis on how they relate to the study of speech, language, and hearing. Methodologies used to investigate the functional neuroanatomy of human communication are also introduced. LEC

SPLH 418 Introduction to Cognitive Science (3). S Examines the data and methodologies of the disciplines that comprise Cognitive Science, an interdisciplinary approach to studying the mind and brain. Topics may include: consciousness, artificial intelligence, linguistics, education and instruction, neural networks, philosophy, psychology, anthropology, evolutionary theory, cognitive neuroscience, human-computer interaction, and robotics. (Same as LING 418, PHIL 418, and PSYC 418.) Prerequisite: Consent of instructor. LEC

SPLH 432 Human Behavioral Genetics (3). S A survey of human behavioral genetics for upper division undergraduates. Emphasis is on how the methods and theories of quantitative, population, medical, and molecular genetics can be applied to individual and group differences in humans. Both normal and abnormal behaviors are covered, including intelligence, mental retardation, language and language disorders, communication, learning, personality, and psychopathology. (Same as ANTH 447, BIOL 432, PSYC 432.) Prerequisite: Introductory courses in biology/genetics or biological anthropology and psychology are recommended. LEC

SPLH 449 Laboratory/Field Work in Human Biology (1-3). N Faculty supervised laboratory or field research for Human Biology majors. Students design and complete a research project in collaboration with a Human Biology faculty member. (Same as ANTH 449, BIOL 449, and PSYC 449.) Prerequisite: Consent of instructor and Human Biology major. FLD

SPLH 464 Undergraduate Seminar in: _____ (1-3). S Course organized any given semester to study particular subject matter or to take advantage of special competence by an individual faculty member. Topics change as needs and resources develop. Class discussion, readings, and individual projects. (Distribution credit given for two-three hours only.) LEC

SPLH 465 Fundamentals of Clinical Phonetics (1). S Introduction to classification of American English speech sounds based on articulatory phonetics. Practice in phonetic transcription and analysis of normal and abnormal speech. Laboratory exercises to give students hands-on experience with selected topics from lecture. Prerequisite or Corequisite: SPLH 120. LEC

SPLH 466 Language Science (3). S Introduction to structure/function of human languages as it relates to language development and disorders; processes involved in the expression and reception of language and the methodologies employed to study these processes. LEC

SPLH 498 Honors Seminar (2-8). S (Eight hours maximum credit, which may be distributed through four semesters. No student may enroll for less than two hours credit.) Study may be directed toward either reading for integration of knowledge and insight in Speech-Language-Hearing: Sciences and Disorders, or original research, i.e., a specific problem in the field. Student must complete a written report at the end of each semester detailing the work on their project during the semester. Prerequisite: Consent of Departmental Honors Coordinator. IND

SPLH 499 Directed Study in Speech-Language-Hearing (1-3). S (A maximum of six hours of credit may be counted, with not more than four in a single area of study.) Investigation of a special topic or project selected by the student with advice, approval, and supervision of an instructor. Such study may take the form of directed reading or special research. Individual reports and conferences. (Distribution credit given for two-three hours only.) Prerequisite: Consent of instructor. IND

SPLH 565 Language Sample Analysis Laboratory (1). S The study of the analysis of language produced by children with respect to its phonological, lexical, morphological, syntactic, and pragmatic characteristics. Prerequisite or corequisite: SPLH 566. LAB

SPLH 566 Language Development (3). S/S Study of language acquisition in children, including phonologic, morphologic, syntactic, and semantic components. Methods of language measurement, the role of comprehension, and pragmatic aspects of language use are included. LEC

SPLH 660 Research Methods in Speech-Language-Hearing (3). An introduction to basic concepts of scientific methodology and of statistical and psychophysical measurement. Study of the application of these concepts to research in speech, language, and hearing. The complimentary nature of the research process and the clinical process will be emphasized. Graduate students who take this course must complete additional requirements. LEC

SPLH 662 Principles of Speech Science (3). N Survey of the physiology of speech production, and the physics of sound. Emphasis upon methodologies in the laboratory study of normal speech. Prerequisite: SPLH 120 and SPLH 320, or concurrent enrollment in SPLH 120 and SPLH 320, or consent of instructor. LEC

SPLH 663 Principles of Hearing Science (3). N Concepts and principles relevant to the normal hearing processes: gross anatomy, psychophysical methods, and basic subjective correlates of the auditory system. Prerequisite: SPLH 120 and SPLH 320, or concurrent enrollment in SPLH 120 and SPLH 320, or consent of instructor. LEC

SPLH 668 Introduction to Audiological Assessment and Rehabilitation (4). U Introduction to methods for assessing and treating hearing disorders in adults and children, as well as conditions that result in hearing loss. Course includes clinical observation and extensive hands-on experience with clinical techniques. Prerequisite: SPLH 663. LEC

SPLH 670 Beginning Clinical Practice in Audiology (1-3). N Testing of hearing using pure tone air and bone conduction tests with both normal and hearing-impaired individuals. (Same as AUD 550.) Prerequisite: Completion of or concurrent enrollment in SPLH 669. FLD

SPLH 671 Introduction to Speech-Language Pathology (4). U This course provides training in clinical management of communicative disorders in children and adults. Principles of evaluation, application of diagnostic information, intervention planning, intervention process, data collection and application, report writing, and interactions with parents and other professionals are examined. Participation in observation and laboratory activities is required. LEC

SPLH 672 Clinical Practice in Speech-Language Pathology (3). S Clinical practice with children and adults. Group and individual conferences with staff required. Repeatable once for credit. Prerequisite: SPLH 671 and consent of instructor. FLD

SPLH 699 Speech-Language Pathology (3). S Concepts and principles relevant to the perception of speech with emphasis on the auditory system; acoustics, psychophysical methods, and basic subjective correlates of speech perception. Prerequisite: SPLH 662 and SPLH 663, or consent of instructor. LEC

SPLH 761 Aural Rehabilitation (3).

SPLH 764 Seminar in: _____ (1-3).

SPLH 784 Proseminar in Communication and Aging (1).

SPLH 799 Proseminar in Child Language (2).

Swahili

See African and African-American Studies in this chapter of the catalog.

Swedish

See Germanic Languages and Literatures in this chapter of the catalog.

Systems Analysis and Design

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Courses are offered only on the KU Edwards Campus in Overland Park. They lead to a 15-hour certificate in systems analysis and design. The certificate offers working adults the opportunity to develop knowledge and skills to prepare for roles as systems analysts. A systems analyst analyzes, designs, and implements improvements in business processes through computer information systems so those systems are useful to planners and decision-makers who develop business strategy. For information, call the CLAS undergraduate adviser on the Edwards Campus at 864-8659 (from Lawrence) or (913) 897-8659 (outside of Lawrence).

The minimum requirement for licensure in speech-language pathology in most states is a master's degree; for audiology, it is the Au.D.

Three theatres in Murphy Hall provide unique performance spaces: the Crafton Preyer Theatre, a proscenium house seating 1,100; the more intimate William Inge Theatre, which seats 100; and an adaptable space called Stage Too!, which seats 300.