Intercampus Program in Communicative Disorders

KU offers a doctorate in audiology, a master’s degree in speech-language pathology, a doctorate in speech-language pathology and Ph.D. degrees in audiology and speech-language pathology through its Intercampus Program in Communicative Disorders.

About the Intercampus Program in Communicative Disorders

The Intercampus Program in Communicative Disorders consists of the Department of Speech-Language-Hearing: Sciences and Disorders (http://splh.ku.edu) on the Lawrence campus and the Department of Hearing and Speech (http://splh.ku.edu/ipcd) on the KU Medical Center campus. The Department of Speech-Language-Hearing is part of the College of Liberal Arts and Sciences, while the Department of Hearing and Speech is part of the KU School of Health Professions.

Students pursuing these graduate degrees take course work on the Medical Center campus in Kansas City and on the main campus in Lawrence. A student may live in either community. Block scheduling of courses reduces the frequency of commuting. A committee of faculty from both departments is responsible for instruction, curriculum planning, student selection and advising, clinical practicum policies, and course scheduling.

The College of Liberal Arts and Sciences also offers undergraduate programs in Speech-Language-Hearing: Sciences and Disorders (http://splh.ku.edu). The Lawrence department collaborates with the departments of Applied Behavioral Science, Linguistics, and Psychology to offer a Ph.D. in child language (http://catalog.ku.edu/liberal-arts-sciences/child-language).

Hearing and Speech Courses

AUD 805. Introduction to Clinical Research. 1 Hour.
The course will provide a comprehensive overview to clinical research. The student will gain an understanding of how to develop clinical research questions including protocol design and the factors that should be considered in initiating a clinical research study. This will include biostatistical considerations, the recruitment of study participants, regulatory issues, and data management, and defining measures and instruments. Students will gain knowledge of how to define clinical research among the various institutional entities involved with clinical research at the University of Kansas Medical Center such as the Research Institute (RI), General Clinical Research Center (GCRC) and the Human Subjects Committee (HSC). Additionally, one component of the course will focus on how to apply for funding (grantsmanship), critical appraisal of research studies, and how to present research data. Prerequisite: Consent of instructor. LEC.

AUD 810. Diagnostic Audiology. 4 Hours.
Audiometric calibration, pure tone and speech testing, analysis of audiograms, middle ear testing. Prerequisite: AUD 697. LAB.

AUD 811. Hearing Disorders. 3 Hours.
A study of disorders of the auditory system including anatomical, physiological, perceptual, and audiological manifestations of pathologies affecting hearing. Prerequisite: AUD 810 and AUD 829. LAB.

AUD 813. Psychoacoustics and Theories of Hearing. 3 Hours.
A study of relations between common acoustic stimuli and the responses they elicit; consideration of sensory scales, noise phenomena, and speech intelligibility. Prerequisite: AUD 697 and AUD 829. LEC.

AUD 814. Hearing Conservation. 2 Hours.
A study of the major components of hearing conservation programs in industrial, educational, and military settings. Forensic audiology issues related to occupational hearing loss are included. Prerequisite: AUD 697 and AUD 829. LAB.

AUD 816. Speech Perception. 2 Hours.
Acoustic and perceptual characteristics of phonemes, words, and connected speech for normal-hearing adults and infants; how speech perception is assessed clinically and is affected by hearing loss, aging, use of amplification, talker differences, and linguistic factors. LEC.

AUD 817. Pediatric Audiology. 3 Hours.
Normal and pathological development of the auditory system; pediatric audiometric testing; auditory and communication aspects in the habilitation of hearing-impaired children. Prerequisite: AUD 697 and AUD 810. LAB.

AUD 818. Vestibular Systems and Disorders. 3 Hours.
Study of the anatomy and physiology of the normal peripheral and central vestibular system; clinical assessment of vestibular disorders; vestibular rehabilitation. LEC.

AUD 819. Hearing Aids I. 3 Hours.
Study of the components, function, fitting, and performance characteristics of hearing aids, applications of amplification in rehabilitative audiology. Prerequisite: AUD 697 and AUD 810. LEC.

AUD 820. Rehabilitative Audiology and Counseling. 3 Hours.
Principles and methods of auditory, communication, and social assessment and intervention with hard of hearing and deaf adults, children, and their families. Prerequisite: AUD 810 and AUD 819 or equivalent. LEC.

AUD 821. Hearing Aids II. 3 Hours.
The advanced study of the theoretical bases, techniques, and clinical application of hearing aids and their assessment. Participants will review, present, and discuss contemporary issues in hearing aid literature and research. Prerequisite: AUD 819. LEC.

AUD 822. Electro-Acoustics and Instrumentation. 3 Hours.
A study of the generation, control and measurement of the simple and complex sounds essential to clinical audiology and hearing research. LAB.

AUD 823. Cochlear Implants and Hearing Assistance Technologies. 2 Hours.
Through lecture and discussion format, this course will cover the principles and methods of assessment, candidacy, surgery, programming and rehabilitation of patients receiving cochlear implants. In addition, hearing assistance technologies such as large area systems and alerting devices will be covered with emphasis on classroom amplification. Prerequisite: AUD 819 and AUD 821 or permission of instructor. LEC.

AUD 824. Central Auditory Processing. 2 Hours.
The study of the anatomy and physiology of the central auditory system. Analysis and review of the diagnostic procedures and the therapeutic strategies for central auditory processing disorders. LEC.
AUD 828. Genetics and Hearing Loss. 2 Hours.
The fundamentals of human genetics as related to hearing loss, including patterns of inheritance, genotypic and phenotypic characteristics of the major forms of syndromic and nonsyndromic hearing loss; genetic counseling, genetic testing, possible genetic treatment, and issues related to them; resources for keeping up with this rapidly changing field. Prerequisite: Permission of instructor. LEC.

AUD 829. Anatomy and Physiology of the Hearing and Vestibular Mechanisms. 3 Hours.
Advanced study of the anatomical and physiological properties of the human hearing and vestibular mechanisms. LEC.

AUD 843. Clinical Practice in Audiology. 1-6 Hours.
Supervised clinical work at the University and/or University Medical Center audiology clinics, or affiliated, off-campus practicum sites. Prerequisite: Permission of instructor. FLD.

AUD 846. Independent Study in Problems in Audiology. 1-10 Hours.
IND.

AUD 851. Auditory Evoked Potentials. 3 Hours.
Theoretical bases, techniques, and clinical applications for auditory evoked potentials including electrocochleography, auditory brainstem response, middle and late latency and cognitive responses. Prerequisite: AUD 810, AUD 822, AUD 829, or permission of instructor. LEC.

AUD 853. Pharmacology for Audiology. 2 Hours.
Presentation and discussion topics including: basic pharmacology (pharmacokinetics and pharmacodynamics), mechanisms of ototoxicity, selected ototoxic agents, drugs used in otorhinolaryngology, and a review of patient management strategies. Prerequisite: Enrollment in the Au.D. or Ph.D. audiology program or permission of instructor. LEC.

AUD 858. Business Audiology. 2 Hours.
An introduction to audiology business practice principles. Operational functions of the audiology clinic will be reviewed, including human resources, marketing, legal and ethical practice concerns, billing, coding and reimbursement. Prerequisite: enrollment in the Au.D. or Ph.D. audiology program or permission of instructor. LEC.

AUD 889. Thesis. 1-10 Hours.
THE.

AUD 940. Seminar in Audiology: ____. 1-4 Hours.
Advanced study of selected topics in audiology such as (but not limited to): cochlear micromechanics and other physiological processes; psychoacoustics, speech perception, cochlear implants, etc. Prerequisite: Enrollment in the Audiology Ph.D. program or permission of instructor. LEC.

AUD 941. Grand Rounds in Audiology. 1 Hour.
Presentations/discussion of clinical case studies and professional issues in Audiology. Au. D. students and audiology faculty members will participate in these sessions. DIS.

AUD 944. Clinical Rotation. 1-6 Hours.
Supervised clinical work at the University and/or University Medical Center Audiology Clinics, or affiliated off-campus sites. The Clinic Rotation is intended to prepare students for entry into their Clinical Externship and foster increasing independence. Clinical skills required are defined in standards set forth by the American Speech-Language Hearing Association. FLD.

AUD 945. Clinical Externship. 1-9 Hours.
Supervised clinical work at the University of Kansas and/or KUMC audiology clinics, or affiliated, off-campus sites. The Clinical Externship is intended to refine clinical skills, increase clinical independence, and ensure that clinical skills meet the certification standards in audiology set forth by the American speech-Language-Hearing Association. Open to 3rd and 4th year Au.D. students. Approval from Instructor needed for 3rd year students. PRA.

AUD 999. Doctoral Dissertation. 1-12 Hours.
THE.

SLPD 801. Seminar on Evidence-Based Practice in Speech-Language Pathology and Other HealthSciences I. 3 Hours.
This course is designed to give students a thorough understanding of evidence-based principles and procedures so that they could provide evidence-based services in a clinical setting. It is also designed to prepare students to assume a position of leadership in which they would be required to promote and teach evidence-based practices to their staff clinicians. Prerequisite: Consent of instructor. SEM.

Students participate in clinical experiences (assessment and/or treatment) related to their primary and/or secondary area of concentration. Clinical experiences in which the student learns about a particular patient population, standardized and non-standardized assessment measures, instrumentation, computer software, devices, and/or treatment techniques and strategies are possible. Prerequisite: certification in speech-language pathology from the American Speech-Language-Hearing Association. CLN.

SLPD 805. Independent Study in Speech-Language Pathology. 1-3 Hours.
Investigation of special topics by individual SLPD students. Prerequisite: Consent of Instructor. LEC.

Speech-Language-Hearing Courses

SPLH 120. The Physics of Speech. 4 Hours. N.
An introduction to the acoustic structure of speech intended for nonscience 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 177. First Year Seminar: ____. 3 Hours. GE11 / U.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Speech-Language and Hearing. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status. LEC.

SPLH 250. Study Abroad Topics in: ____. 1-5 Hours. S.
A course designed to enhance international experience in topic areas related to speech-language-hearing at the freshman/sophomore level. Coursework must be arranged through the Office of KU Study Abroad. May be repeated for credit if the content differs. Prerequisite: Department permission. LEC.

SPLH 261. Survey of Communication Disorders. 3 Hours. SI GE3S / 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 418. Introduction to Cognitive Science. 3 Hours. S.
Examines the data and methodologies of the disciplines that comprise
Cognitive Science, an inter-disciplinary 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 Hours. 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 Hours.
AE61 / 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 450. Study Abroad Topics in: ____. 1-5 Hours. S.
A course designed to enhance international experience in topic areas
related to speech-language-hearing at the junior/senior level. Coursework
must be arranged through the Office of KU Study Abroad. May be
repeated for credit if the content differs. Prerequisite: Department
permission. LEC.

Hours. S.
An independent study designed to enhance international experience in
topic areas related to speech-language-hearing. Investigation of
special topic or project selected by the student with advice, approval, and
supervision by a KU SPLH instructor and an authorized agent of the study
abroad site. Experience must be arranged through the Office of KU Study
Abroad. Such study may take the form of directed reading and/or directed
research/clinical observation. A daily journal and final report is required. A
maximum of six hours of credit may be counted, with no more than three
in a single area of study. Prerequisite: Consent of instructor IND.

SPLH 462. Principles of Speech Science. 3 Hours. 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, or concurrent enrollment in SPLH 120 or consent
of instructor. LEC.

SPLH 463. Principles of Hearing Science. 3 Hours. N.
This class discusses the concepts and principles relevant to normal
hearing processing: anatomy, psychophysical methods, and basic
subjective correlates of the auditory system. Prerequisite: SPLH 120, or
concurrent enrollment in SPLH 120, or consent of instructor. LEC.

SPLH 464. Undergraduate Seminar in: ____. 1-3 Hours. 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 Hour. 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:
Corequisite: SPLH 120. LEC.

SPLH 466. Language Science. 3 Hours. 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 467. Mentored Research Experience. 2-8 Hours. AE61 / S.
Study may be directed toward either reading for integration of knowledge
and insight in Speech-Language-Hearing, or original research in the field.
Student creates a plan of activities at the beginning of each semester
under the mentor's guidance. Student and mentor review this plan at
the end of each semester to evaluate progress. In the final semester
of enrollment, student must complete a written report or a public oral
presentation detailing the purpose, methods, results, and impact of the
research. This final product partially meets the requirements for Research
Experience Certification. (Eight hours maximum credit, which may be
distributed through 4 semesters. No student may enroll for less than
two hours credit or more than 4 hours of credit in a given semester).
Prerequisite: Consent of Departmental Research Experience Coordinator.
IND.

SPLH 468. Departmental Honors Research. 2-8 Hours. AE61 / S.
Study may be directed toward either reading for integration of knowledge
and insight in Speech-Language-Hearing, or original research in the field.
Student creates a plan of activities at the beginning of each semester
under the mentor's guidance. Student and mentor review this plan at
the end of each semester to evaluate progress. In the final semester
of enrollment, student must complete a written report or a public oral
presentation detailing the purpose, methods, results, and impact of the
research. This final product partially fulfills the requirements for
Departmental Honors. (Eight hours maximum credit, which may be
distributed through 4 semesters. No student may enroll for less than
two hours credit or more than 4 hours of credit in a given semester).
Prerequisite: Consent of Departmental Honors Coordinator. IND.

SPLH 469. Directed Study in Speech-Language-Hearing. 1-3 Hours.
AE61 / S.
Investigation of 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 and/or directed research/clinical observation.
Individual reports and conferences. (Distribution credit given for two-
three hours only.) A maximum of six hours of credit may be counted, with
not more than four in a single area of study.) Prerequisite: Consent of
instructor IND.

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

SPLH 566. Language Development. 3 Hours. SI GE3S / 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. May be taught in lecture or online format.
LEC.
SPLH 568. Introduction to Audiological Assessment and Rehabilitation. 4 Hours. 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 571. Introduction to Speech-Language Pathology. 4 Hours. 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 620. The Communicating Brain: The Ultimate Personal Computer. 3 Hours. U.
This course introduces the study of human neuroscience with a particular focus on human communication. The course provides an overview of the relevant anatomical structures and function along with an introduction to the basic methods used to investigate central nervous system function. Students are introduced to the study of perceptual, motor, and language function in the nervous system through a series of examples drawn from normal function and clinical cases. The examples are selected to highlight how these systems develop and are influenced by experience, implantable devices developed to interface with the nervous system, and how computers and animals are used as models to learn about nervous system function. Prerequisite: A 400-level course in SPLH, or consent of instructor. LEC.

Research Methods is about the methods used to conduct, describe and evaluate science in communication disorders. Goals for learner outcomes include: 1) evaluation of research including adequacy of research to address scientific and clinical problems, 2) reading, summarizing and describing research through a literature review, 3) describing a hypothetical research study that addresses a specific question or hypothesis identified by the student, and 4) providing constructive peer reviews of research paper drafts. Prerequisite: 9 credits of SPLH course work; English 101 and ENGL 102 (or course meeting core skill in written communication); or consent of instructor. LEC.

SPLH 670. Beginning Clinical Practice in Audiology. 1-3 Hours. N.
Testing of hearing using pure tone air and bone conduction tests with both normal and hearing-impaired individuals. Prerequisite: Completion of or concurrent enrollment in SPLH 668. FLD.

SPLH 672. Clinical Practice in Speech-Language Pathology. 3 Hours. S.
Clinical practice with children and adults. Group and individual conferences with staff required. Repeatable once for credit. Prerequisite: SPLH 671 and overall GPA of 3.0. FLD.

SPLH 699. Speech-Language Pathology. 3 Hours. 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 Hours.
Study of the communication problems associated with hearing loss. Introduction to aural habilitative intervention related to speech, language, and academic achievement in children with early hearing loss, as well as, communication strategies training for adults with acquired hearing loss. Prerequisite: SPLH 669 or equivalent. LEC.

SPLH 764. Seminar in: ____. 1-3 Hours.
The subject matter of this seminar will be special topics from speech pathology and audiology. Special prerequisite may be established for a given topic. LEC.

SPLH 784. Proseminar in Communication and Aging. 1 Hour.
A weekly forum for students and faculty to discuss professional issues and interdisciplinary research in communication and aging. May be repeated for credit. (Same as COMS 784.) (Same as PSYC 784.) Prerequisite: Consent of instructor. LEC.

SPLH 799. Proseminar in Child Language. 2 Hours.
A review and discussion of current issues in children's language acquisition. May be repeated for credit. Students are graded S/F. (Same as ABSC 797, LING 799 and PSYC 799.) (Formerly HDFL 797.) LEC.

SPLH 816. Language Development. 3 Hours.
Study of language acquisition in children, including the morphologic, syntactic, and semantic components. Methods of language measurement, the role of comprehension, and pragmatic aspects of language use will be included. Not open to students who have credit for SPLH 566. Laboratory by appointment. LEC.

SPLH 820. Developmental Phonological Disorders. 2 Hours.
Focuses on speech and non-speech characteristics of children with developmental phonological disorders. Emphasis placed on collection and phonetic transcription of speech samples, phonological analysis of transcribed data, and decision-making processes in assessment and intervention. LEC.

SPLH 822. Dysarthria/Apraxia. 2 Hours.
This course describes the neuroanatomic bases of motor-speech processes, the diagnosis, classification, assessment, prognosis, and treatment of dysarthria(s) and apraxia(s). LEC.

SPLH 824. Fluency Disorders. 2 Hours.
The nature of stuttering in children and adults is discussed. Theories regarding etiology, development, and maintenance of the disorder are presented. Emphasis is placed on various clinical approaches to assessment, measurement, and treatment. LEC.

SPLH 826. Phonatory Disorders. 2 Hours.
This course reviews the function of the laryngeal and respiratory mechanisms including the parameters and processes of phonation. Primary content addresses diagnosis, description, and treatment of organic and non-organic disorders of phonation. LEC.

SPLH 828. Speech Disorders in Special Populations. 2 Hours.
This course reviews anatomy and physiology of the velopharyngeal mechanism. Diagnosis and management of velopharyngeal dysfunction and associated problems considered. Anatomy, physiology, and rehabilitation associated with certain oral, pharyngeal, and laryngeal abnormalities discussed. Emphasis is on the speech problems of adults following medical management. Populations include individuals with laryngeotomies, glossectomies, and tracheotomies. LEC.

SPLH 832. Dysphagia. 2 Hours.
This course covers normal and disordered swallowing. Evaluation and treatment of swallowing disorders, the dysphagia team, and dysphagia in special populations are considered. LEC.

SPLH 836. Genetics of Communication and Learning Disorders. 2 Hours.
This course focuses on the description, assessment, and treatment of communication problems associated with particular genetic syndromes (e.g., Down's, Turner's syndromes). Also covered are current data about the genetic factors involved in nonsyndromic communication and learning
problems, such as those commonly seen in the schools. Ethical and practical issues in these areas are discussed. LEC.

SPLH 840. Language Disorders of Children: Infants and Toddlers. 2 Hours. This course examines factors relating to language disorders in the birth to three population. At-risk populations, as well as those with known etiologies, are considered. Information on assessment, intervention, and service delivery models is addressed. Issues relating to Public Law 99-457 are also examined. LEC.

SPLH 842. Language Disorders of Children: Preschool. 2 Hours. This course examines language disorders of preschool-age children in the late preschool years. The course includes information on incidence, characteristics, assessment, and intervention. Theoretical issues and their implication for language intervention are also examined. LEC.

SPLH 844. Language Disorders of Children: School Age. 2 Hours. This course examines language development during the school years and how problems in this development interact with school performance. Emphasis is placed on the role of the speech-language pathologist in the early identification, assessment, and remediation of language-learning problems. LEC.

SPLH 846. Language Disorders of Adults. 2 Hours. Neurological aspects of language processes, classification of aphasia, and assessment of language deficits are discussed. Management approaches including intervention strategies and rehabilitation are also considered. LEC.

SPLH 848. Language Disorders of Special Populations. 2 Hours. This course focuses on the unique language impairments of individuals with mental retardation, autism, cerebral palsy, hearing impairments, dual sensory impairments, and other communication disorders (e.g., ADD). Language characteristics as well as assessment and intervention strategies are studied. LEC.

SPLH 850. Language Disorders Secondary to Closed Head Injury and Dementia. 2 Hours. Neuroanatomy and physiology relevant to diffuse brain injury are discussed. Characteristics and intervention strategies relating to traumatic brain injury and dementia are studied. LEC.

SPLH 852. Augmentative and Alternative Communication. 2 Hours. This course describes augmentative and alternative communication (AAC) assessment and intervention issues as they apply to children and adults with both congenital and acquired speech and/or language disabilities. Areas of study include AAC systems, assessment strategies and procedures, intervention strategies, and AAC information resources. LEC.

SPLH 854. Reading Disorders. 2 Hours. This course addresses the perceptual, linguistic, and cognitive processes utilized in written communication. Acquired and developmental disorders of written language are examined in relation to issues concerning characteristics, etiology, early identification, assessment, and remediation. LEC.

SPLH 860. Evaluation of Speech and Language. 2 Hours. Provides a general framework for speech and language evaluations. Issues related to initiation and termination of treatment are discussed. Practice is provided in evaluating norm- and criterion-referenced information used in diagnostic, referral, and treatment decisions. LEC.

SPLH 861. Seminar in Research Methodology in Speech Pathology and Audiology: _____. 3 Hours. This seminar is concerned with the design, instrumentation, execution, and reporting of research in audiology and speech pathology. SPLH 760 or its equivalent and some statistics are recommended before entering this seminar. LEC.

SPLH 862. Clinical Processes. 1 Hour. Orient student to clinical procedures, policies, requirements, and expectations of program. Therapy models, planning, and philosophies are discussed along with implementation and evaluation of therapy procedures. Professional issues are also considered. May be repeated for credit. LEC.

SPLH 864. Advanced Clinical Practice in Speech-Language Pathology. 1-6 Hours. Students conduct supervised clinical work in a variety of settings. May be repeated for credit. Prerequisite: Department approval. Group and individual conferences with staff required. FLD.

SPLH 866. Field Study in Speech-Language Pathology. 5-12 Hours. The field study provides work experiences in clinical and/or research activities. The student takes this course near the end of the degree program. Assignments include supervised work in a variety of approved settings. May be repeated for credit. Prerequisite: Advisor's consent. FLD.

SPLH 868. Professional Seminar. 1 Hour. Forum for the presentation and discussion of scientific and professional issues by faculty and advanced graduate students. May be repeated for credit. LEC.

SPLH 874. Research Practicum. 1-3 Hours. Application of research methodology in a laboratory situation. Emphasis is on direct participation in designing and conducting an experimental investigation in speech, language, or hearing. May be repeated for up to a maximum of 3 credits. Prerequisite: SPLH 660 or equivalent research methods course. RSH.

SPLH 876. Independent Study in Problems of Speech, Language, and Hearing. 1-6 Hours. Investigation of special topics by individual master's level students. Paper required. Prerequisite: Consent of instructor. RSH.

SPLH 880. Seminar in Speech-Language Pathology: _____. 1-3 Hours. May be repeated for credit. LEC.

SPLH 898. Investigation and Conference (For Master's Candidates). 1-8 Hours. (Limited to eight hours credit toward the M.A. degree.) Directed research and experimentation for M.A. students in some phase of speech science. RSH.

SPLH 899. Master's Thesis. 1-6 Hours. THE.

SPLH 900. Proseminar in Communicative Disorders. 1 Hour. A weekly forum for students and faculty to discuss professional issues and interdisciplinary research in communicative disorders and related fields. May be repeated for credit. Limited to two hours credit counted toward an MA or AuD degree. Limited to four hours credit counted toward the PhD degree. Graded on satisfactory/unsatisfactory basis. SEM.

SPLH 961. Experimental Phonetics I. 3 Hours. This course will provide a description of the acoustic properties of the major classes of speech sounds, and will describe how these properties are utilized perceptually. It will also provide an understanding of the acoustic theory of speech production, and will discuss the implications of that theory relative to the modification of impaired speech. LEC.

SPLH 962. Experimental Phonetics II. 3 Hours. This course will examine the current methodologies utilized in speech physiology research, and will review the findings of recent research into
the movement patterns of individual speech articulators. The course will emphasize the interpretation of individual research results in terms of an overall theory of speech motor timing and control. LEC.

**SPLH 963. Seminar in Hearing Science. 3 Hours.**
Considers more advanced research problems in hearing science including psychoacoustics, speech perception, physiology. Prerequisite: Consent of instructor. LEC.

**SPLH 964. Seminar in:** _____ 1-3 Hours.
The subject matter of this seminar will be special topics from speech pathology and audiology, including those related to research methodology and research or academic careers. Special prerequisites may be established for a given topic. LEC.

**SPLH 966. Seminar in Language Development. 3 Hours.**
The course pertains to relevant research regarding infant speech development, vocabulary development, linguistic development, articulation development, and language retardation. (Same as ABSC 920, formerly HDFL 920.) LEC.

**SPLH 967. Seminar in Articulation. 3 Hours.**
Research and important clinical procedures pertaining to discrimination, structural, and physiological considerations, causal factors in defective articulation, and principal therapeutic approaches are carefully examined. LEC.

**SPLH 968. Seminar in Communication Disorders. 3 Hours.**
Study in depth of the communication behavior associated with brain injury and/or oral anomalies. LEC.

**SPLH 969. Laboratory Instrumentation for Speech and Hearing Research. 3 Hours.**
Instruments for speech and hearing research, their design and application. Experimental projects using laboratory equipment. Designing equipment for special purposes. Prerequisite: SPLH 962. FLD.

**SPLH 970. Independent Study in Problems of Speech and Hearing. 1-6 Hours.**
Investigation of special topics by individual students. Paper required. RSH.

**SPLH 972. Extensions of Clinical Management. 3 Hours.**
This course is designed to provide didactic and practical experience in methods of obtaining diagnostic information and generalization of speech and language responses away from the clinical setting. Models for effecting behavioral change and data collection will be discussed and utilized. FLD.

**SPLH 974. Research Practicum. 1-6 Hours.**
Application of research methodology in a laboratory situation. Emphasis is on direct participation in designing and conducting an experimental investigation in speech or hearing. FLD.

**SPLH 975. Directed Teaching: Speech Pathology and Audiology. 1-3 Hours.**
Provides experiences in classroom and laboratory instruction under supervision of graduate faculty. Variable credit to reflect amount of instructional responsibility assumed. May be repeated up to a maximum of six semester hours. FLD.

**SPLH 976. Independent Study in Grant Writing. 1-3 Hours.**
Students will identify a funding agency appropriate for their research, learn the application procedures for that agency, and draft a grant application following the identified agency's format. The faculty mentor will arrange for a review of the grant application following the agency's review criteria and format. May be repeated up to a maximum of three credits. IND.

**SPLH 982. Issues in Scientific Conduct. 3 Hours.**
Lectures and discussion on issues in the conduct of a scientific career, with emphasis on practical topics of special importance in behavioral science. Topics will include the academic and scientific roles of behavioral scientists, establishing a research lab, communicating research findings, tenure processes, gender equity, ethical conduct, and good scientific citizenship. Discussions will highlight important case studies. (Same as PSYC 982.) LEC.

**SPLH 998. Investigation and Conference (For Doctoral Candidates). 1-8 Hours.**
(Limited to eight hours credit towards the Ph.D. degree.) Directed research and experimentation for Ph.D. students in some phase of speech science. RSH.

**SPLH 999. Doctoral Dissertation. 1-12 Hours.**
THE.