DEPARTMENT OF COMMUNICATION SCIENCES AND DISORDERS

The Communication Sciences and Disorders Program prepares students for careers in the profession of speech-language pathology or audiology. Speech-language pathologists (SLPs) evaluate and treat children and adults who have communication, swallowing, and/or cognitive communication disorders. Difficulties in the areas of speech, language, fluency, swallowing, and voice are associated with a variety of disorders, including developmental delay, hearing impairment, cleft palate, cerebral palsy, stroke, and head injury. Audiologists are involved in prevention, identification, assessment, and rehabilitation of hearing disorders. Students who choose these professions should be interested in working with people.

Opportunities

The entry level for speech-language pathology is the master's degree. The entry level for audiology is the doctoral degree. Employment opportunities for speech-language pathologists and audiologists are found in speech and hearing clinics, public schools, hospitals, universities, health departments, skilled nursing facilities, home health agencies, rehabilitation centers, industry, research institutes, and private practice. These environments allow for considerable flexibility. There is ample opportunity for employment as a speech-language pathologist.

Employment opportunities for speech-language pathology assistants (SLPAs) include working under the supervision of a speech-language pathologist. Although SLPAs work primarily in schools, there are also employment opportunities in hospitals and private clinics. Students pursuing the Bachelor of Science degree may work toward meeting eligibility requirements for registration in the state of California as speech-language pathology assistants.

Student professional association

Students are eligible for membership in the National Student Speech-Language-Hearing Association (NSSLHA) and are also encouraged to become members, read the journals, and participate in the many activities sponsored by the local chapter. Information about NSSLHA can be found at http://www.nsslha.org. Further, students are encouraged to become members of the California Speech-Language-Hearing Association (CSHA). Information about membership and participation in CSHA events can be found at http://www.csha.org.

Chair

Karen J. Mainess

Primary faculty Lamitra Baez

Aieshea Banks

Janine G. Benner

Terry D. Douglas

Julia E. Hollister

Karen J. Mainess

Christina V. Nobriga

Eric Reid

Brian D. Sharp

Jennifer St. Clair

Keith Wolgemuth

Programs

- Advanced Speech-Language Pathology Certificate (http:// llucatalog.llu.edu/allied-health-professions/adv-speech-languagepathology-certificate/)
- Communication Sciences and Disorders B.S. (http:// Ilucatalog.llu.edu/allied-health-professions/communication-sciencesbs/), M.S. (traditional and transitional) (http://llucatalog.llu.edu/ allied-health-professions/communication-sciences-ms/), Comparison (http://llucatalog.llu.edu/allied-health-professions/communicationsciences-ms/comparison/)
- Speech-Language Pathology S.L.P.D. (http://llucatalog.llu.edu/ allied-health-professions/communication-sciences-slpd/)

Communication Sciences and Disorders Courses

CMSD 217. Beginning Sign Language. 3 Units.

Focuses on learning American Sign Language (ASL) for conversational purposes. Finger spelling, a sign vocabulary of approximately 500 words, and acquisition of the basic grammatical rules of ASL. ASL contrasted with the various sign systems currently being used in educational settings in this country.

CMSD 267. Speech-Language Pathology Assistant Fieldwork. 2 Units.

Guided observation of clinical management of individuals with communication disorders. Supervised clinical experience in assisting the speech-language pathologist in a school and hospital setting. Course may not be taught every year.

CMSD 284. Introduction to Speech-Language Pathology and Audiology. 3 Units.

Major types of disorders. Etiology and treatment. Survey course for students majoring in speech-language pathology and audiology, prospective teachers, and others who may encounter speech-language or hearing disorders in their professions.

CMSD 314. Language Science. 4 Units.

Introduces techniques of linguistic analyses used in the study of phonology, morphology, syntax, and semantics.

CMSD 318. Transcription Phonetics. 3 Units.

Student develops transcription skills using the International Phonetic Alphabet.

CMSD 324. Language Disorders of Children. 4 Units.

Impairments of language development in children. Formal and informal assessment of children. Program planning and remediation procedures. Prerequisite or concurrent: CMSD 388.

CMSD 334. Speech Sound Disorders in Children. 4 Units.

Definition, classification, etiology, diagnosis, and treatment of phonological/articulation disorders. Prerequisite or concurrent: CMSD 318.

CMSD 367. SLPA Practicum and Ethics. 4 Units.

Discussion of scope of practice and requirements for licensure for SLPAs in the state of California. Discussion of ethical issues related to the profession. Guided observation of clinical management of individuals with communication disorders. Supervised clinical experience in assisting the SLP in a school or hospital setting.

CMSD 368. SLPA Scope of Practice. 1 Unit.

Addresses the laws, regulations, ethics, and clinical principles and procedures within the scope of practice of the speech-language pathologist assistant. Prerequisite or concurrent: CMSD 369.

CMSD 369. SLPA Fieldwork Experience. 3 Units.

Guided observation of clinical management of individuals with communication disorders. Supervised clinical experience in assisting the speech-language pathologist in a school, hospital, or private clinical setting. Prerequisite or concurrent: CMSD 368.

CMSD 376. Anatomy of Speech-Hearing Mechanism. 4 Units.

Anatomy and physiology of auditory-vocal communicative process.

CMSD 388. Communication across the Life Span. 4 Units.

Overview of language development and normal changes over the life span. Development of language from infancy to adolescence, and the effects of aging on communication. Includes study of hearing.

CMSD 424. Adult Language Pathology. 4 Units.

Impairment of language and speech related to organic neuropathology.

CMSD 426. Behavior Management Applications with Special Populations. 4 Units.

Addresses the principles of behavior modification and discrete trials training as they apply to persons with autism, developmental delays, congenital syndromes, and attention deficit hyperactivity disorders.

CMSD 436. Speech and Hearing Science. 4 Units.

Outline of fundamental properties of sound creation, transmission, and reception. Utilizes those properties for an in-depth analysis of English consonants, vowels, and prosodies; focusing on applications within the fields of communication sciences and disorders, and audiology.

CMSD 444. Organic Speech Disorders. 4 Units.

Introduces the classification, cause, manifestations, assessment, and treatment of craniofacial disorders/cleft palate, tongue thrust, dysarthria, apraxia of speech, and dysphagia.

CMSD 446. Instruction in American English Dialects. 2 Units.

Discusses principles and procedures for elective clinical practice for populations that wish to communicate more effectively in various dialects of American English.

CMSD 448. Disorders of Fluency. 3 Units.

Overview of fluency disorders in children and adults. Addresses the nature of developmental stuttering and introduces basic therapy techniques used to promote fluency.

CMSD 449. Voice Disorders. 3 Units.

Introduction to healthy and disordered voice. Overview of definition, classification, etiology, diagnosis, and treatment of voice disorders. Vocal characteristics of pitch, intensity, quality, and resonance are discussed.

CMSD 454. Introduction to Audiology. 4 Units.

Anatomy and physiology of the auditory mechanism. Nature of the acoustic stimulus, disorders of the ear, problems of the hard-of-hearing. Pure-tone audiometry. Applicable toward California audiometric certification.

CMSD 464. Introduction to Aural Rehabilitation. 4 Units.

Explores methods and techniques used with hearing-impaired children and adults who depend on hearing aids, cochlear implants, or assistive devices to develop or improve auditory and visual reception and speech production. Prerequisite: CMSD 454.

CMSD 467. Speech-Language Pathology and Audiology Practicum. 1-4 Units.

Supervised practice in diagnosis and therapy.

CMSD 477. Bilingualism and Biculturalism. 3 Units.

Focuses on clinical competencies and cultural sensitivity necessary and appropriate for addressing the needs of bicultural and bilingual persons. The impact of such knowledge is addressed as it pertains to speechlanguage pathology assessment and intervention.

CMSD 485. Clinical Methods in Speech-Language Pathology. 4 Units.

Principles and procedures of speech-language therapy within and across disorders. Methods of determining treatment effectiveness. Regulations governing public school services.

CMSD 486. Diagnostic Methods in Speech-Language Pathology. 4 Units. Purposes for assessment. Procedures employed in describing and diagnosing speech-language impairments.

CMSD 488. Autism Spectrum Disorders. 4 Units.

Characteristics, classifications, theories of etiologies, and principles of management of the autism spectrum disorders. Emphasizes assessment methods and intervention. Prerequisite: CMSD 324, CMSD 426, CMSD 485, CMSD 486.

CMSD 499. Speech-Language Pathology and Audiology Independent Study. 1-2 Units.

Student submits a project or paper on a topic of current interest in an area related to speech-language pathology and audiology. Regular meetings to provide the student with guidance and evaluation. Elected on the basis of need or interest.

CMSD 511. Graduate Portfolio I. 2 Units.

The first in a series of two courses that provides students with a format for demonstrating their acquisition of the knowledge and skills that prepare them for entry into the profession. Students learn the requirements for professional accreditation and certification, and of licensing entities; and develop a professional portfolio. Emphasizes ethical, business, and legislative considerations in speech-language pathology.

CMSD 512. Graduate Portfolio II. 1 Unit.

The second in a series of two courses that teaches students the requirements for professional accreditation and certification, and of licensing entities; and that helps them continue to develop an organized means of demonstrating the knowledge and skills acquired during their graduate program. Requires development of a professional portfolio.

CMSD 514. Anatomy of Speech-Hearing Mechanism. 3 Units.

Addresses anatomy and physiology of basic human auditory-vocal communicative processes. In addition to scheduled classes, students required to meet monthly to discuss application to clinical populations.

CMSD 515. Transcription Phonetics. 2 Units.

Student develops transcription skills using the International Phonetic Alphabet. In addition to scheduled classes, students required to meet monthly to discuss application to clinical populations.

CMSD 520. Communication across the Life Span. 3 Units.

Overview of language development and normal changes over the life span. Development of language from infancy to adolescence, and the effects of aging on communication. Includes study of hearing. Includes monthly meetings to discuss clinical applications.

CMSD 521. Language Disorders of Children. 3 Units.

Addresses impairments of language development in children, formal and informal assessment of children, and programming and planning of remediation procedures. Students meet monthly to discuss application to clinical populations. Prerequisite or concurrent: CMSD 520.

CMSD 522. Organic Speech Disorders. 3 Units.

Introduces the classification, cause, manifestations, assessment, and treatment of craniofacial disorders/cleft palate, tongue thrust, dysarthria, apraxia of speech, and dysphagia. In addition to scheduled classes, students required to meet monthly to discuss application to clinical populations.

CMSD 523. Seminar in Early Childhood Language Disorders. 3 Units.

Addresses the principles and procedures in assessment and interventions of language disorders in children. Emphasizes earlylanguage learners (birth to 3 years).

CMSD 525. Seminar in School-Aged Child Language Disorders. 3 Units.

Addresses the principles and procedures of assessment and intervention of preschool, primary, and adolescent school-age children with language disorders. Emphasizes school-age learning in the areas of semantics, syntax, pragmatics, narrative, and phonological awareness.

CMSD 529. Adult Language Pathology. 3 Units.

Addresses impairment of language and speech related to organic neuropathology. In addition to scheduled classes, students required to meet monthly to discuss application to clinical populations.

CMSD 530. Language Science. 3 Units.

Introduces techniques of linguistic analysis used in the study of phonology, morphology, syntax, and semantics. In addition to scheduled classes, students required to meet monthly to discuss application to clinical populations.

CMSD 531. Service-Learning in Speech-Language Pathology I. 1 Unit.

Provides foundational knowledge and practice in service-learning, an integration of academic material with meaningful service in the community, followed by reflection. Addresses the concept of civic engagement, which extends beyond mere assistance to partnering with members of the community for mutual benefit and support.

CMSD 532. Service-Learning in Speech-Language Pathology II. 1 Unit. Builds on the foundations formed in CMSD 531. Students collaborate

Builds on the foundations formed in CMSD 531. Students collaborate with community partners to complete a service-learning project. Critical thought, reflection, collaboration, and team-learning skills are emphasized. Includes practical service-learning experiences. Prerequisite: CMSD 531.

CMSD 534. Speech Sound Disorders in Children. 3 Units.

Addresses definition, etiology, characteristics, prevention, assessment, and intervention for phonological/articulation disorders. In addition to scheduled classes, students required to meet monthly to discuss application to clinical populations.

CMSD 535. Voice Disorders. 3 Units.

Discusses diagnosis and intervention techniques used with children and adults displaying a variety of voice disorders. Includes demonstration and operation of instrumentation used for physiological and acoustic analysis of abnormal voice production.

CMSD 536. Speech and Hearing Science. 3 Units.

Fundamental properties of sound creation, transmission, and reception. Utilizes those properties for an in-depth analysis of English consonants, vowels, and prosodies; focusing on applications within the fields of communication sciences and disorders, and audiology. Prerequisite: CMSD 515.

CMSD 537. Clinical Methods in Speech-Language Pathology. 3 Units. Addresses principles and procedures of speech and language therapy within and across disciplines. Addresses methods of determining treatment effectiveness. Discusses regulations governing public school

services. In addition to scheduled classes, students required to meet monthly to discuss application to clinical populations.

CMSD 538. Diagnostic Methods in Speech-Language Pathology. 3 Units. Discusses purpose of assessment, including procedures employed in describing and diagnosing speech and language impairments. In addition to scheduled classes, students required to meet monthly to discuss application to clinical populations.

CMSD 539. Introduction to Audiology. 3 Units.

Provides anatomy and physiology of the auditory mechanism. Addresses the nature of acoustic stimulus, disorders of the ear, and problems of the hard-of-hearing. Covers pure-tone audiometry. Applicable for California audiometric certification. In addition to scheduled classes, students required to meet monthly to discuss application to clinical populations.

CMSD 545. Issues in School Speech-Language Pathology. 3 Units.

Addresses issues confronted by school speech-language pathologists, including PL 94-142, IDEA, NCLB, planning for and conducting IEPs, scheduling and caseload management, evaluating and assessing students from diverse backgrounds, due process, and advocating for students.

CMSD 546. Laryngopharyngeal Endoscopy Techniques. 1 Unit.

Provides hands-on learning of rigid and flexible endoscopy techniques within the scope of practice for speech pathologists in the assessment and management of communication and swallowing disorders.

CMSD 547. Autism Spectrum Disorders. 2 Units.

Examines characteristics, classifications, theories of etiologies, and principles of management of the autism spectrum disorders. Emphasizes assessment methods and intervention. Prerequisite: CMSD 324, CMSD 426, CMSD 485, CMSD 486.

CMSD 548. Disorders of Fluency. 2 Units.

Overview of fluency disorders in children and adults. Primarily addresses the nature of developmental stuttering and introduces basic therapy techniques used to promote fluency.

CMSD 549. Voice Disorders. 2 Units.

Introduction to the healthy and the disordered voice. Overview of definition, classification, etiology, diagnosis, and treatment of voice disorders. Discusses vocal characteristics of pitch, intensity, quality, and resonance.

CMSD 554. Swallowing Disorders. 3 Units.

Lecture and discussion of the speech-language pathologist's role in the diagnosis and treatment of swallowing disorders in children and adults. Addresses ethical and cultural issues. Emphasizes analysis of current literature and clinical applications. Selected laboratory experiences.

CMSD 564. Seminar: Aural Rehabilitation and Cochlear Implants/Hearing Aids. 3 Units.

Studies the mechanisms for achieving hearing rehabilitation including amplification, speech reading, auditory training, hearing-aid orientation, and speech conservation. Considers hearing-aid function and philosophies of rehabilitation for the hearing impaired (e.g., auditory, aural, manual, and total communication).

CMSD 567. Clinical Practice in Speech-Language Pathology and Audiology, Advanced. 1-6 Units.

Supervised practice in diagnosis and therapy.

CMSD 575. Instrumentation in Speech and Hearing I. 1 Unit.

Lecture, discussion, and laboratory experience in the areas of speech acoustics, speech production and perception, psychoacoustics, and speech and hearing physiology.

CMSD 576. Instrumentation in Speech and Hearing II. 1 Unit.

A continuation of CMSD 575 content and methodology. Discusses and connects principles behind speech production, perception, physiology, aerodynamics, and acoustics with their practical applications. Prerequisite: CMSD 575.

CMSD 577. Bilingualism and Biculturalism. 2 Units.

Focuses on clinical competencies and cultural sensitivity necessary and appropriate for addressing the needs of bicultural and bilingual persons. The impact of such knowledge is addressed as it pertains to speechlanguage pathology assessment and intervention.

CMSD 586. Educational Fieldwork I. 1 Unit.

Initial supervised therapy on the elementary and/or secondary level and/ or in a classroom for the severely language-handicapped child.

CMSD 587. Counseling in Communication Disorders. 3 Units.

Explores the counseling role of the speech-language pathologist and identifies clinician responsibilities in working with individuals of different cultures, ethnicity, gender, age, and belief systems.

CMSD 588. Educational Fieldwork II. 8 Units.

Supervised therapy on the elementary and/or secondary level and/or in a classroom for the severely language-handicapped child.

CMSD 589. Remediation/Advanced Directed Teaching. 1 Unit.

For students who have not successfully completed CMSD 588. Requires remediation or completion of clinical skills necessary for work in the public schools. Prerequisite: CMSD 588.

CMSD 596. Medical Fieldwork I. 1 Unit.

Initial supervised clinical practice in a medical center, rehabilitation facility, or skilled nursing facility.

CMSD 597. Fieldwork II. 8 Units.

Supervised clinical practice in a medical center, rehabilitation facility, skilled nursing facility, outpatient, private practice, or adult education placement. Prerequisite: CMSD 596.

CMSD 598. Research Methods and Professional Literature in Communication Sciences and Disorders. 3 Units.

Lecture and discussion that facilitates the student's ability to read and interpret professional literature, develop research ideas, and develop professional writing skills.

CMSD 599. Remediation/Externship. 1 Unit.

For students who have not successfully completed CMSD 597. Requires remediation or completion of clinical skills necessary for work in medical settings. Prerequisite: CMSD 597.

CMSD 601. Project Planning. 4 Units.

Guides students through developing a plan for a major project in Speech Language Pathology which fills a need in their current workplace. Encourages student discussion of issues in the workplace directly related to how they perform their jobs. Enables students to analyze goals, objectives, and barriers related to their potential project, as well as researching and considering applicable development models. Prerequisite: Masters degree in speech-language pathology; Certification by the American Speech Language Hearing Association (ASHA).

CMSD 602. Project Proposal. 4 Units.

Guides students through the further development of a proposal for the project initiated during CMSD 601. Addresses developing rationale, determining resources and finances, meeting approval processes, considering impact on the current workload, and creating timelines for implementing the project—leading up to presenting the proposal during the final class meeting. Prerequisite: CMSD 601.

CMSD 603. Project Implementation. 4 Units.

Uses an independent study format in which formal approval is secured from a student's workplace to initiate and implement a proposed project (developed in CMSD 602) and complete effectiveness assessments. Prerequisite: CMSD 601, CMSD 602.

CMSD 604. Project Dissemination. 4 Units.

Culminates project implemented in CMSD 603, including composition of an assessment report reflecting the outcomes of the student project, creation of a presentation covering genesis through project completion, and orally presenting to program faculty. Prerequisite: CMSD 601, CMSD 602, CMSD 603.

CMSD 679. Seminar: Motor Speech Disorders/Augmentative Communication. 3 Units.

Problem-based learning seminar that focuses on etiology, characteristics, evaluation, and treatment of motor speech disorders, including the dysarthrias and apraxia.

CMSD 682. Seminar: Traumatic Brain Injury. 3 Units.

Explores pathophysiology, diagnosis, and rehabilitation of cognitive communication disorders in children and adults with traumatic closed-head injuries. Lecture and discussion format emphasizes reading current professional literature and developing skills in formal and informal assessment and functional treatment.

CMSD 684. Seminar: Adult Language Disorders. 3 Units.

Problem-based learning seminar that focuses on etiology, characteristics, evaluation, and treatment of acquired adult language disorders.

CMSD 685. Seminar: Stuttering. 3 Units.

Provides practical instruction in assessment and remediation with individuals who stutter and/or clutter.

CMSD 687A. Seminar: Open Seminar. 1 Unit.

Facilitates students' advanced study of current issues in the diagnosis and treatment of communication disorders.

CMSD 687B. Seminar: Open Seminar. 1 Unit.

Facilitates students' advanced study of current issues in the diagnosis and treatment of communication disorders.

CMSD 688. Seminar: Speech Sound Disorders - Advanced. 3 Units.

Typical development of phoneme acquisition and use. Explores etiology, characteristics, assessment and treatment of articulation and phonological disorders and differences in children.

CMSD 697. Research. 1-4 Units.

CMSD 699. Directed Study. 1-3 Units.

Independent study on a research project selected in consultation with the advisor. For advanced students. May be repeated once. Student's transcript will show specific area of study, for example: SPPA 699 Directed Study: Adult Language Disorders.

Speech-Lang Path Doctorate Courses

SLPD 550. Advanced Seminar in Neuroanatomy and Neuroscience. 3 Units.

Provides in-depth information on the role played by the brain in speech and language. Reviews functional neuroanatomy as an introduction to the following topics: functional commitment, neuroplasticity, longterm potentiation, etc. Informs clinical best practice by focusing on the complexity of the brain with regard to cognitive and motor function, and by providing background on functional brain imaging research.

SLPD 570. Special Topics in Speech-Language Pathology. 3 Units.

Provides an in-depth look at a variety of topics in the field. Topics selected by faculty with input from students may include dysphagia, autism, dysfluency, bilingualism, etc. Students critically examine current research in the topic area in order to determine best practice. May be repeated for additional credit.

SLPD 580. Clinical Issues in Speech-Language Pathology. 3 Units.

Topics covered include clinical supervision, administration, and starting/ managing an independent clinic; as well as ethics and counseling. Focuses on interprofessional collaboration both within the allied health professions (e.g., occupational or physical therapy) and beyond (for either education or medical contexts). Students comment in online discussions on case studies.

SLPD 600. Components of Clinical Inquiry. 3 Units.

Focuses on skills fundamental to critical evaluation of the strength of scientific research. Covers elements of research design important to the validity of a study and identification of flaws in design and conclusions.

SLPD 610. Capstone IRB Proposal. 4 Units.

Provides instruction in developing an individual research proposal, completing Institutional Review Board (IRB) training, and successfully submitting a proposal to the IRB. Emphasizes reflective discussions of research interests and experiences, planning, conceptual framework, proposed methodology, and data analysis. Includes interprofessional peer reviews throughout the course.

SLPD 621. Capstone Planning. 3 Units.

Instructs students in how to design their capstone project with guidance from the primary course instructor. Emphasizes identification of a focus area, objectives, goals, outcomes, on-site mentor, faculty mentor, and time frame.

SLPD 622. Capstone Proposal. 2 Units.

Provides framework for developing and submitting a proposal to the student's research advisor(s) for final approval. Prerequisite: SLPD 621.

SLPD 623. Capstone II. 3 Units.

Continues the capstone project, requiring students to complete a needs assessment and program development. Provides information in data collection, data management techniques, and introduction to various data analysis strategies. Prerequisite: SLPD 622.

SLPD 624. Capstone III. 3 Units.

Continues with remaining data collection and beginning data analyses for capstone project. Prerequisite: SLPD 600, 610, 621, 622, 623.

SLPD 625. Capstone IV. 3 Units.

Requires final implementation of aspects of the capstone. Requires student to prepare a manuscript and participate in online critical discussions with classmates. Prerequisite: SLPD 623.

SLPD 626. Dissemination of Research. 3 Units.

A culmination course in which students complete their manuscript and perform an oral presentation for their completed research project. Prerequisites: SLPD 600, 610, 621, 622, 623, 624, 625.