SPEECH, LANGUAGE AND HEARING SCIENCES

Graduate College of Education

Dean: Dr. Cynthia Grutzik

Department of Speech, Language and Hearing Sciences

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The Department of Speech, Language and Hearing Sciences offers a Bachelor of Science (BS) and a Master of Science (MS) in Speech, Language and Hearing Sciences.

The Bachelor of Science (BS) is designed to provide undergraduate students with a clinical science foundation that is rigorous and appropriate preparation for a wide range of clinical, educational, and related fields such as nursing, kinesiology, physical therapy, dietetics, orientation & mobility, counseling, and teaching in primary, secondary, and special education. The SLHS undergraduate degree also prepares students to acquire the prerequisites necessary to apply for graduate study in speech-language pathology and audiology. Program courses constitute the specific requirements for a science major in SLHS leading to the baccalaureate degree at this University. The undergraduate sequence or a program equivalence is a prerequisite to the Master of Science in Speech, Language and Hearing Sciences.

A master's degree in the area of speech-language pathology (SLP) is required for the professional license to practice in the field. A doctoral degree in Audiology (AUD) is required for professional licensing in audiology. All undergraduates, regardless of their intention to become an audiologist or speech-language pathologist, or another career, take the same coursework. Fourteen core courses are required for the major. The B.S. degree is not a terminal degree. While the B.S. degree does not qualify the student to practice speech-language pathology or audiology, there are related fields open to the B.S. graduate that include employment as teacher's assistant, classroom aide, child development worker, and speech-language pathology assistant with additional intern experience beyond the undergraduate degree. In addition, the B.S. degree is strong preparation for a number of graduate programs in special education, education, rehabilitation counseling, and related fields.

The Master's level curriculum of the Department of Speech, Language and Hearing Sciences includes all academic and clinical experiences necessary for American Speech and Hearing Association (ASHA) certification in speech-language pathology, State of California Speech-Language Pathology Services Credential, and the State of California license to practice speech-language pathology. Students are required to complete all academic and clinical courses. The practice of speech-language pathology in the state of California requires a license issued by the Speech-Language Pathology & Audiology & Hearing Aid Dispensers' Board of the Department of Consumer Affairs. Exempted settings are public schools and federal facilities. The academic and clinical requirements for the state license are similar to those of ASHA requirements in speech-language pathology.

Professor

Laura Epstein (2006), *Professor in Speech, Language and Hearing Sciences*. Ph.D. University of California, Santa Barbara.

Marcia Raggio (1997), *Professor in Speech, Language and Hearing Sciences*. Ph.D. University of California, San Francisco.

Betty Yu (2009), *Professor in Speech, Language and Hearing Sciences*. Ph.D. San Francisco State University University of California, Berkeley.

Associate Professor

Teresa Gray (2015), *Associate Professor in Speech, Language and Hearing Sciences*. Ph.D. Boston University.

Anusha Sundarrajan (2019), *Associate Professor in Speech, Language and Hearing Sciences*. Ph.D. Purdue University.

Assistant Professor

Victor Lugo (2024), *Assistant Professor in Speech, Language and Hearing Sciences*. Ph.D., Florida State University.

Major

- Bachelor of Science in Speech, Language, and Hearing Sciences (https://bulletin.sfsu.edu/colleges/education/speech-language-hearing-sciences/bs-speech-language-hearing/)

Masters

- Master of Science in Speech, Language, and Hearing Sciences (https://bulletin.sfsu.edu/colleges/education/speech-language-hearing-sciences/ms-speech-language-hearing-disorders/)

Certificate

- Certificate in Augmentative and Alternative Communication (https://bulletin.sfsu.edu/colleges/education/speech-language-hearing-sciences/certificate-augmentative-alternative-communication/)

Credentials

- Speech-Language Pathology Services Credential: Language, Speech & Hearing (https://bulletin.sfsu.edu/colleges/education/speech-language-hearing-sciences/speech-pathology-credential/)

SLHS 300 Introduction to Speech, Language, and Hearing Sciences (Units: 3)
Prerequisites: GE Areas 1A/A2*, 1B/A3*, 1C/A1*, and 2/B4* all with grades of C- or better or permission of the instructor.

Speech, language, and hearing sciences; communicative development and disabilities; processes and models; language universals; basis of language; family and cultural influences; bilingualism and dialectal variations; communicative competence. A grade of C- or better is required for Speech, Language, and Hearing Sciences majors.
Course Attributes:

- 4UD: Social/Behavioral Science
- UD-D: Social Sciences
- Social Justice

SLHS 651 Anatomy and Physiology of the Speech Mechanism (Units: 3)
Prerequisites: Restricted to upper-division Speech, Language, and Hearing Sciences majors; a course in area 5A/B1: Physical Science (Physics or Chemistry is strongly recommended), a course in Statistics (including MATH 124 or PSY 171 or ISED 160), a course in biological science in one of the following areas: human or animal biology, human anatomy and physiology, neuroanatomy and neurophysiology, human genetics, or veterinary science, and a course in social/behavioral sciences in one of the following areas: psychology, sociology, anthropology, or public health. Concurrent enrollment in SLHS 652 and SLHS 655.

Normal structures and functioning of respiration, phonation, resonation, and articulation. Speech, Language, and Hearing Sciences majors must earn a C- or better in this course to advance in the major. (Plus-minus letter grade only)

SLHS 652 Audiology (Units: 3)
Prerequisites: Restricted to Speech, Language, and Hearing Sciences majors; a course in area 5A/B1: Physical Science (Physics or Chemistry is strongly recommended), a course in Statistics (at SF State, courses include MATH 124 or PSY 171 or ISED 160), a course in biological science in one of the following areas: human or animal biology, human anatomy and physiology, neuroanatomy and neurophysiology, human genetics, or veterinary science, a course in social/behavioral sciences in one of the following areas: psychology, sociology, anthropology, or public health. Concurrent enrollment in SLHS 651 and SLHS 655.

Structure and function of the ear; sound related to the hearing mechanism; causes, implications, and techniques of determination of hearing impairment. Speech, Language, and Hearing Sciences majors must earn a C- or better in this course to advance in the major. (Plus-minus letter grade only)

SLHS 654 Audiometry (Units: 3)
Prerequisites: Restricted to Speech, Language, and Hearing Sciences majors; SLHS 300, SLHS 651, SLHS 652, and SLHS 655 with grades of C- or better; or by advisement; concurrent enrollment in SLHS 658, SLHS 661, and SLHS 680.

Pure tone and bone conduction hearing testing. Masking, immittance testing, electrophysiological testing, pediatric audiology, speech audiometry, and public school hearing/conversation programs. (Plus-minus letter grade only)

SLHS 655 Language Development (Units: 3)
Prerequisites: GE Areas 1A/A2*, 1B/A3*, 1C/A1*, and 2/B4* all with grades of C- or better or permission of the instructor.

Exploration of the acquisition patterns of speech, language, and pragmatic behaviors. Theories of language development, phonology, morphology, syntax, and semantics. Language analysis. (ABC/NC grading only)
Course Attributes:

- 4UD: Social/Behavioral Science
- UD-D: Social Sciences

SLHS 656GW Diagnosis of Communicative Disabilities - GWAR (Units: 3)
Prerequisites: Restricted to upper-division Speech, Language, and Hearing Sciences majors; GE Area 1A/A2; SLHS 654, SLHS 658, SLHS 661, and SLHS 680; or by advisement; concurrent enrollment in SLHS 657 and SLHS 664.

Diagnosis of communicative disabilities. Observation, language sample analysis, and distinctive feature analysis. (ABC/NC grading only)
Course Attributes:

- Graduation Writing Assessment

SLHS 657 Aural Rehabilitation (Units: 3)
Prerequisites for 757: Graduate Speech, Language, and Hearing Sciences students or permission of the instructor.
Prerequisites for 657: Restricted to upper-division Speech, Language, and Hearing Sciences majors; SLHS 654, SLHS 658, SLHS 661, and SLHS 680 with grades of C- or better; or by advisement; concurrent enrollment in SLHS 656GW and SLHS 664.

Psychological, educational, and sociological implications of hearing loss. Aural rehabilitation: speech reading, auditory training, amplification, and speech conservation and/or improvement. (Plus-minus letter grade only) (SLHS 757/SLHS 657 is a paired course offering. Students who complete the course at one level may not repeat the course at the other level.)

SLHS 658 Developmental Speech-Language Disabilities (Units: 3)
Prerequisites: Restricted to upper-division Speech, Language, and Hearing Sciences majors and SLHS 655*.

Examination of the foundational knowledge and evidence base necessary for understanding the learning needs of children with language disabilities within diverse sociocultural and sociolinguistic contexts. Analysis of language competencies across ages and types of communicative modalities. (Plus-minus letter grade only)

SLHS 659 Speech and Voice Science (Units: 3)
Prerequisites: Restricted to upper-division Speech, Language, and Hearing Sciences majors; SLHS 656GW, SLHS 657, and SLHS 664 with grades of C- or higher; or by advisement; concurrent enrollment in SLHS 663 and SLHS 668.

Fundamentals of speech sound production and transmission, speech perception, swallowing science, and language science. Key content areas covered include the four speech subsystems; acoustic and physiologic phonetics; theories of speech production and perception; and clinical application of speech sciences. (Plus-minus letter grade only)

SLHS 661 Neurolinguistics (Units: 3)
Prerequisites: Restricted to upper-division Speech, Language, and Hearing Sciences majors; SLHS 300, SLHS 651, SLHS 652, and SLHS 655 with grades of C- or better; concurrent enrollment in SLHS 652, SLHS 658, and SLHS 680.

Cortical and subcortical components of language processing; current research on the central nervous system and its application to speech, language, and hearing. (Plus-minus letter grade only)

SLHS 663 Introduction to Augmentative and Alternative Communication (Units: 3)
Prerequisites: Restricted to upper-division Speech, Language, and Hearing Sciences majors; SLHS 656GW, SLHS 657, and SLHS 664; or by advisement; concurrent enrollment in SLHS 659 and SLHS 668.

Introduction and applied experiences with augmentative and alternative communication including low- and hi-tech systems. Assessment, team collaboration, funding, and use of AAC such as designing systems that meet functional communication needs. (Plus-minus letter grade only) [CSL may be available]

SLHS 664 Clinical Phonetics (Units: 3)
Prerequisites: Restricted to upper-division Speech, Language, and Hearing Sciences majors; SLHS 654, SLHS 658, SLHS 661, and SLHS 680; concurrent enrollment in SLHS 657 and SLHS 656GW.

Speech sounds of American English and the development of phonology. IPA transcription experience applied with regard to human diversity. Not open to students who have taken COMM 410. (Plus-minus letter grade only)

SLHS 668 Social Communication and Linguistic Justice (Units: 3)
Prerequisites: Restricted to upper-division Speech, Language, and Hearing Sciences major; completion of SLHS 656GW, SLHS 664, and SLHS 753; or by advisement; concurrent enrollment in SLHS 659 and SLHS 663 required.

Explore the use of language in social contexts with a focus on linguistic discrimination and social justice. Analyze language use in everyday life, examine how language is used to maintain social relationships, and reimagine possibilities for transformation towards social justice, especially as it pertains to the Speech, Language, and Hearing Sciences. (Plus-minus letter grade only)

SLHS 680 Practicum in Communication Therapy (Unit: 1)
Prerequisites: Restricted to Speech, Language, and Hearing Sciences majors; concurrent enrollment in SLHS 654 for undergraduate students.

Supervised clinical experiences in communication rehabilitation for communicative disorders.
May be repeated for a total of 10 units. Type of experience and number of units determined by advisement. (Plus-minus letter grade, RP)

SLHS 699 Independent Study in Speech, Language, and Hearing Sciences (Units: 1-3)
Prerequisite: Upper-division standing or permission of the instructor.

Study of a particular problem under the direction of a member of the department. Enrollment by petition approved by the instructor, adviser, and department chair. Open to regularly enrolled students only.

SLHS 701 Culturally and Linguistically Responsive Practices in Speech, Language, and Hearing Sciences (Units: 3)
Prerequisite: Restricted to graduate Speech, Language, and Hearing Sciences students or permission of the instructor.

Engage in a critical exploration of issues related to speech, language, and communication services for children from diverse backgrounds. Understand the equity issues impacting the referral, identification, and educational placement of children from minority communities. Develop knowledge and skills for the provision of effective, evidence-based, and culturally and linguistically responsive assessment and intervention services. (Plus-minus letter grade only) [CSL may be available]

SLHS 702 Social Communication Development (Units: 3)
Prerequisite: Restricted to graduate Speech, Language, and Hearing Sciences students.

Issues related to social-communication development and disabilities, with a focus on autism and issues of neurodiversity. Develop knowledge and skills for the provision of effective, evidence-based, and culturally and linguistically responsive assessment, intervention counseling, and advocacy services. (Plus-minus letter grade only)

SLHS 703 Research Methods, Evidence-Based Practices, and Professional Issues (Units: 3)
Prerequisite: Restricted to graduate Speech, Language and Hearing Sciences students or permission of the instructor.

In-depth exploration of the methods and procedures of clinical research and evidence-based practices. Examination of quantitative, qualitative, and mixed-methods research designs, within the context of clinical documentation. (Plus-minus letter grade only)

SLHS 706 Counseling in Speech, Language, and Hearing Sciences (Units: 3)
Prerequisites: SLHS 701, SLHS 708, and SLHS 709.

Exploration of the interpersonal, sociocultural, psychological, and social-emotional dimensions of working with persons with communicative disabilities and their families. Examination of the therapeutic relationship and the facilitation of the clients' wellness through the lifespan. Focus on the professionals' own sense of wellness and fulfillment in the workplace. Study of skills essential to counseling, including the investigation of wellness in self and others, engagement in deep listening, offering therapeutic responses, and facilitating clients' informed decision making and active participation in their own care. (Plus-minus letter grade only)

SLHS 707 Serving School Communities in Speech, Language, and Hearing Sciences (Units: 3)
Prerequisite: Graduate Speech, Language, and Hearing Sciences students, Inclusive Early Childhood Practices students; or permission of the instructor.

Assessment, intervention, and organizational procedures for use with children of various ages with language disabilities in school settings. (Plus-minus letter grade only)

SLHS 708 Neurogenic Disabilities of Language (Units: 3)
Prerequisite: Restricted to graduate Speech, Language, and Hearing Sciences students or permission of the instructor.

Theories and methods of assessment and therapy for persons with aphasia. Focus on the nature and diagnosis of aphasia, bilingual aphasia, and primary progressive aphasia, as well as providing therapeutic support. (Plus-minus letter grade only)

SLHS 709 Speech Sound Production (Units: 3)
Prerequisite: Graduate Speech, Language, and Hearing Sciences students.

Development, differential diagnosis, and management of disorders in speech sound production in children, including articulation, motor planning and execution, phonology, and accent modification. (Plus-minus letter grade only)

SLHS 710 Seminar in Dysphagia (Units: 3)
Prerequisite: Graduate standing or permission of the instructor.

Nature, etiology, and physiology of normal and abnormal patterns of swallowing across the lifespan, with emphasis on the adult population. Clinical swallowing assessment, modified barium swallow study, and therapeutic intervention for dysphagia. Treatment and clinical decision-making emphasized. (Plus-minus letter grade only)

SLHS 711 Seminar in Therapy for Functional Communicative Disorders (Unit: 1)
Prerequisites: Restricted to graduate Speech, Language, and Hearing Sciences students; concurrent enrollment in SLHS 880.

Communication therapy, functional speech, and language disorders: articulation, delayed speech, and stuttering. Repeated with variable clinic experiences. Units co-vary with the frequency of client-staff conference and time delivering more complex therapeutic treatment. May be repeated for a total of 4 units. (Plus-minus letter grade only)

SLHS 712 Internship Workshop Seminar: Communicative Disabilities (Unit: 1)
Prerequisites: Graduate Speech, Language, and Hearing Sciences students; concurrent enrollment in SLHS 882.

Seminar and peer discussion during school or non-school intern placement. Review of clinical practices related to speech-language pathology in the evaluation, intervention, and interaction and personal qualities in the treatment of clients/patients. (Plus-minus letter grade only)
Course Attributes:

- Internship Component Req./Opt.

SLHS 713 Seminar in Therapy (Unit: 1)
Prerequisite: Graduate standing or permission of the instructor.

Communication therapy with speech and language disorders. May be repeated for up to 9 units with additional clinic experiences. (Plus-minus letter grade only.)

SLHS 714 Interprofessional Education & Family-Centered Practice (Unit: 1)
Prerequisite: Restricted to graduate Speech, Language, and Hearing Sciences students.

Seminar and discussion integrating graduate program first-year clinical training and academic coursework in the context of Interprofessional, team-based collaborative practice.

SLHS 754 Voice and Resonance (Units: 3)
Prerequisites: Restricted to graduate Speech, Language, and Hearing Sciences students.

Knowledge and skills in assessment across the lifespan for disorders and differences associated with voice and resonance, including respiration, and phonation. (Plus-minus letter grade only)

SLHS 755 Stuttering (Units: 3)
Prerequisites: Restricted to graduate Speech, Language, and Hearing Sciences students or permission of the instructor.

Causes of stuttering; current theories, evaluations, assessments, and therapies relative to stuttering in children and adults. (Plus-minus letter grade only)

SLHS 756 Right Hemisphere Syndrome, TBI, Dementia in Communicative Disabilities (Units: 3)
Prerequisites: Restricted to graduate Speech, Language, and Hearing Sciences students; SLHS 708; or permission of an adviser.

Discussion of the right hemisphere, brain dysfunction, acquired and traumatic brain injuries, and dementia; an understanding of assessment tools, interpretation of results, report writing and treatment; and different service models. (Plus-minus letter grade only)

SLHS 757 Aural Rehabilitation (Units: 3)
Prerequisites for 757: Graduate Speech, Language, and Hearing Sciences students or permission of the instructor.
Prerequisites for 657: Restricted to upper-division Speech, Language, and Hearing Sciences majors; SLHS 654, SLHS 658, SLHS 661, and SLHS 680 with grades of C- or better; or by advisement; concurrent enrollment in SLHS 656GW and SLHS 664.

Psychological, educational, and sociological implications of hearing loss. Aural rehabilitation: speech reading, auditory training, amplification, and speech conservation and/or improvement. (Plus-minus letter grade only) (SLHS 757/SLHS 657 is a paired course offering. Students who complete the course at one level may not repeat the course at the other level.)

SLHS 764 Evidence-Based Practice in Augmentative and Alternative Communication (Units: 3)
Prerequisite: Graduate standing or permission of the instructor.

Research-based preparation for speech-language pathologists, educators, and other related services personnel to design and implement augmentative and alternative communication (AAC) systems for individuals with complex communication needs, including aided/unaided approaches as well as high tech/low tech communication strategies. Focus on AAC assessment and intervention strategies using collaborative, interdisciplinary, and culturally and linguistically responsive practices. (Plus-minus letter grade only)

SLHS 765 Augmentative and Alternative Communication in the Schools (Units: 3)
Prerequisite: Graduate standing or permission of the instructor.

Application of school-based AAC solutions for speech-language pathologists, educators, and related services personnel to adapt and design curriculum to provide inclusion and access to general education for students with complex communication needs related to their sensory, perceptual, cognitive, and physical needs across developmental levels. Interprofessional collaboration with the school team and families; cultural and linguistic representation for students and families of diverse backgrounds. (Plus-minus letter grade only)

SLHS 880 Advanced Communication Therapy (Units: 2)
Prerequisite: Restricted to graduate Speech, Language, and Hearing Sciences students or permission of the instructor.

Supervised clinical methods and practice in communication rehabilitation. May be repeated for a total of 10 units. (Plus-minus letter grade only)

SLHS 881 Interprofessional Internship in Alternative and Augmentative Communication (Units: 3)
Prerequisite: Graduate standing or permission of the instructor.

Collaborative projects in assessment and intervention in Alternative and Augmentative Communication, completed in culturally and linguistically diverse communities. Settings may include schools, clinics and other programs. May be repeated for a total of 12 units. (Plus-minus letter grade only)
Course Attributes:

- Internship Component Req./Opt.

SLHS 882 Advanced Internship (Units: 6)
Prerequisites: Restricted to graduate Speech, Language, and Hearing Sciences students; concurrent enrollment in SLHS 712.

Participate in all professional roles of a speech-language pathologist in school, community, and medical settings. Open only to graduate students who have completed all prerequisite coursework, determined by advisor. May be repeated for a total of 12 units. (Plus-minus letter grade only)
Course Attributes:

- Internship Component Req./Opt.

SLHS 884 Advanced Diagnosis in Speech, Language, and Hearing Sciences (Units: 3)
Prerequisites: 4 units of SLHS 880 and SLHS 756 and permission of the clinic supervisor.

Supervised clinical diagnosis in Speech, Language, and Hearing Sciences. (Plus-minus letter grade only)

SLHS 896EXM Culminating Experience Examination (Units: 0-3)
Prerequisites: Permission of the instructor, committee chair, and approval of Advancement to Candidacy (ATC) and Culminating Experience (CE) forms by Graduate Studies. ATC and Proposal for Culminating Experience Requirement forms must be approved by the Graduate Division before registration.

Enrollment in 896EXAM required for students whose culminating experience consists of an examination only. Not for students enrolled in SLHS 898 as a culminating experience. (CR/NC, RP)

SLHS 898 Master's Thesis in Communicative Disorders (Units: 3)
Prerequisites: Permission of the instructor and graduate major adviser; approval of Advancement to Candidacy (ATC) and Culminating Experience (CE) forms by Graduate Studies. ATC and Proposal for Culminating Experience Requirement forms must be approved by the Graduate Division before registration.

(CR/NC grading only)

SLHS 899 Independent Study (Units: 1-3)
Prerequisite: Graduate standing or permission of the instructor.

An intensive study of a particular problem in speech, language, and hearing sciences under the direction of a member of the department. Enrollment by petition. May be repeated for up to 12 units.