

Communicative Sciences and Disorders

Communicative Sciences and Disorders

Audiology, deaf studies, and speech-language pathology are concerned with the development, problems, and disorders found with people's speech, hearing, and language. These professions are devoted to providing diagnostic, rehabilitative, and educational services to children and adults with communicative problems.

Bachelor of Arts

The Bachelor of Arts degree in Communicative Disorders provides the students with a liberal arts foundation integrated with courses designed to provide a basic understanding of speech, language, and hearing development and communicative problems. Students pursuing deaf studies have two options: deaf education and interpreting. Students majoring in deaf education and speech-language pathology can continue their options in our graduate program.

Master of Arts

Education beyond the bachelor's degree is necessary for completion of the academic, credential, and licensure requirements leading to professional employment. Two professional option areas are available to the student:

Deaf Education. Our deaf education program gives you a broad background in bilingual-bicultural education, total communication, and cued speech philosophies along with speech, language, auditory training, deaf culture, and American Sign Language. This program includes all of the essential elements of a good education for deaf and hard-of-hearing children. The program is nationally accredited by the Council of Education of the Deaf (CED).

Speech-Language Pathology. Our speech and language pathology program provides you with a broad professional background in normal speech and language development, language disorders, voice disorders, articulation disorders, and fluency disorders. The program is nationally accredited by the Educational Standards Board (ESB) of the American Speech-Language-Hearing Association.

The undergraduate curriculum plus a master's degree in communicative disorders prepares you for one or more of the following: state licensure as a speech-language pathologist, national certification in speech-language pathology by the American Speech-Language-Hearing Association,



provisional certification in deaf education by the Council on Education of the Deaf, public school special education specialist, clinical rehabilitative services credential, and/or school multiple subject credentials.

Certificate in Conversational American Sign Language

A program of study leading to a Certificate in Conversational American Sign Language has become popular to many students pursuing professional fields and other majors on campus. The demand for health and human services professionals who can communicate effectively with deaf and hard-of-hearing children, youth, and adults has made sign language skills necessary.

Communicative Disorders Minor

A Minor in Communicative Disorders is also available for students in various education and health professions (nursing, health science, physical therapy, counseling, elementary and secondary education, special education, child development, linguistics, criminology, etc.) who are interested in expanding their understanding of children and adults with communicative disorders.

Facilities

As a student, you are given the opportunity to work in a well-equipped speech and hearing clinic. You can also gain practical experience in a variety of school, private practice, and hospital situations. Library facilities contain specialized collections including student access to local medical

College of Health
and Human Services

Department of Communicative Sciences and Disorders

Steven D. Wadsworth, *Chair*

Christine Smith, *Administrative Support Coordinator*

Laboratory School, Room 125

(559) 278-2423

TTY/TDD: (559) 278-2856

<http://www.csufresno.edu/csd/>

B.A. in Communicative Disorders

M.A. in Communicative Disorders

Options:

- Deaf Education
- Speech-Language Pathology

Minor in Communicative Disorders

Education Specialist Credential:

Deaf and Hard of Hearing

Clinical Rehabilitative Services Credential

Certificate in Conversational American Sign Language

libraries. In the Anna Michelson Memorial Instructional Media Center, you have access to a wide range of therapy production materials such as films, video, clinical equipment, and professional journals.

University Speech and Hearing Clinic. The department operates an ongoing clinic that provides diagnostic, therapeutic, and counseling services to clients of all ages with a variety of different communication problems or disorders.

The clinic provides supervised clinical practice for students who are preparing to be professional speech-language pathologists and educators of deaf and hard-of-hearing children. As a valuable community resource, the clinic serves thousands of clients each year from the Fresno metropolitan area. The clinic is accredited by the Professional Services Board of the American Speech-Language-Hearing Association.

Communicative Sciences and Disorders

Career Opportunities

The department prepares you to work in various diagnostic and rehabilitation settings in preschool programs, elementary and secondary schools, colleges, hospitals, rehabilitation centers, private or community clinics, or private practice. Employment opportunities have been and are expected to remain very good.

Faculty

Steven D. Wadsworth, *Chair*

Ron M. Parker, *Graduate Coordinator*

Ron M. Parker, *Audiology Adviser*

Deaf Studies/Deaf Education Advisers:

Paul W. Ogden, Deborah S. Stryker

Speech-Language Pathology Advisers:

Don B. Freed, M. N. Hegde, Stuart I.

Ritterman, Steven L. Skelton, Steven D.

Wadsworth

Rita H. Humphreys, *Clinic Director*

Don B. Freed Kenneth G. Shipley

M. N. Hegde Steven L. Skelton

Paul W. Ogden Deborah S. Stryker

Ron M. Parker Steven D.

Stuart I. Ritterman Wadsworth

Bachelor of Arts

Degree Requirements

Communicative Disorders Major Units

Major requirements..... 41-47

Concentration

Select one:

Audiology

CSD 80, 91, 95, 101, 102, 103,
105, 107, 109, 110, 116, 128,
131, 141, 172 (41)

Deaf Education

CSD 80, 91, 92, 95, 102, 106,
114, 123, 128, 131, 135, 139,
141, 162, 163, 164 (46)

Interpreting

CSD 80, 91, 92, 95, 106, 123,
124, 135, 136, 139, 141, 166,
168, 169, 170, 175 (47)

Speech-Language Pathology

CSD 80, 95, 101, 102, 103,
105, 107, 109, 110, 114, 115,
116, 122, 128, 131, 171,
172 (47)

General Education 51

Electives and remaining degree requirements* 27-31

May be courses used to satisfy credential requirements or a minor in another field. See advising notes 4 and 5 for recommended electives.

Total..... 124

*This figure takes into consideration that CSD 92 and 139 are anticipated to satisfy a communicative sciences and disorders major requirement as well as the requirement for General Education Breadth - Area C2 and General Education Integration - International/Multicultural (see *General Education*). Consult the department chair or faculty adviser for additional details.

Advising Notes

1. **CR/NC** grading is not permitted for CSD majors for any coursework required in the major, with the exception of specified clinical courses.
2. General Education and elective units may be used toward a dual major or minor (see *Dual Major* or departmental minor). Consult the appropriate department chair, program coordinator, or faculty adviser for further information.
3. Students in CSD 110, 162, 163, 164, and other clinical, internship, and student teaching courses are required to show health certification that they are free from tuberculosis and rubella, and to purchase student clinic malpractice insurance for the clinical courses (see the University Speech and Hearing Clinic director for details).
4. PSYCH 101 is a required credential course than can also be used as an undergraduate elective.
5. A statistics course is a prerequisite to CSD 200, which is typically taken the first semester of graduate work. It is recommended that students take statistics as an undergraduate elective prior to applying to graduate school.

Certificate in Conversational American Sign Language

The Certificate in Conversational American Sign Language will be awarded to students who first complete the 15-unit program of study consisting of three advanced sign language classes and then pass the departmental proficiency interview in American Sign Language. The recipients of the certificate are considered fluent and possess the expressive and receptive communication skills needed to successfully communicate with deaf and hard-of-hearing children, youth, and adults.

The following list includes the five required courses. Students must complete all the coursework with a *C* grade or better.

Units

Required..... 15
CSD 106, 123, 124, 136, 139

Note: No course substitutions may be made without the department's approval.

Communicative Disorders Minor

A Minor in Communicative Disorders is designed to provide students in psychology, education, and the health professions with an appreciation and understanding of the problems and procedures related to people who have speech, language, and hearing disorders.

Units

Select one of the following:

Speech Pathology/Audiology

CSD 80, 91, 95, 101, 102, 109 **18**

Deaf Studies

CSD 80, 91, 92, 135, 139, 141 **18**

Note: With permission of the department chair, substitutions can be made.

Graduate Program

The master's degree is considered essential for the professional training needed for effective clinical practice in deaf education or speech-language pathology. The master's degree generally involves about two years of full-time study.

Admission Requirements. Students with bachelor's degrees in communicative disorders or a related field may apply for consideration. They must demonstrate the ability to excel at an advanced level. For consideration, submit the following: (1) proof of a minimum GPA of 3.0 in the last 60 units of any coursework and a minimum GPA of 3.0 in CSD coursework; (2) three letters of recommendation; (3) a letter of intent; and (4) Graduate Record Examination (GRE) scores.

Consideration for admission may include but will not be limited to the following: (1) students with outstanding clinical potential, (2) deaf and hard of hearing students, (3) students with disabilities, and (4) students with multicultural or bilingual experience.

Applicants who have specific deficiencies or need coursework may be accepted with conditionally classified status. Students must apply to the department for fully classified graduate standing as soon as any conditions of acceptance have been met. No more than 10 units of graduate work

taken under conditional classification can be used to meet the requirements of the master's degree.

Admission Procedures. Applications for the graduate program in communicative disorders are accepted until October 1 for the spring semester and February 1 for the fall semester. Applications received after these dates are considered the following semester. Application is a two-step process that involves submitting the following:

1. **To the University**
 - An Application of Admission and the Supplemental Application for Graduate Admission (forms *A* and *B* in the CSU application booklet)
 - Official transcripts from all universities and colleges other than California State University, Fresno
 - Official GRE scores
2. **To the Department**
 - Departmental application
 - Official transcripts from all universities attended (California State University, Fresno students may supply the unofficial transcripts issued by Admissions and Records.)
 - Official GRE scores
 - Three letters of recommendation (These letters should be written by instructors or other persons familiar with communicative disorders.)
 - Letter of intent

The departmental application, including information about the letter of intent, and letter of recommendation forms are available from the department. Students cannot be accepted into the graduate program until all materials are received by the university and the department. Students are encouraged to take their GRE *early* during their senior year to avoid delays in acceptance for graduate work.

Advancement to Candidacy. Each student in a master's degree program must file for advancement to candidacy. See *Admissions and Master's Degree Programs, Division of Graduate Studies*.

Graduate-Level Writing Competence. California State University, Fresno requires that students have graduate-level writing abilities before being advanced to candidacy for the master's degree. Students can demonstrate these abilities by taking CSD 200 and obtaining written clearance from the instructor. Deaf education students can take ERF 220 to satisfy the graduate-level writing requirements instead of CSD 200. Written clearance can be obtained from the department for students who have demon-

strated graduate-level writing abilities in coursework equivalent to CSD 200.

Statistics. Any 3-unit, one semester statistics course (lower division, upper division, or graduate level) is required to complete the Master of Arts in Communicative Disorders. Students are encouraged to take the course during their senior year. Exceptions may be made with the consent of their faculty adviser.

Grade Requirements. To be eligible to receive the master's degree, a student must have maintained a *B* average with no more than two *C* grades on the approved Program of Study. Once a student has received three *C*s at any point in the graduate program, he or she will automatically be disqualified from the graduate program.

Master of Arts Degree Requirements
Communicative Disorders Major Units

<i>Common Experience</i>	
Core: CSD 202 (Aural Rehabilitation) ...	3
Clinical Lab	0
Lab taken concurrently with CSD 202	
Professional Topics Seminar	0
Attendance is mandatory each semester	
Options (select one)	27
<i>Deaf Education</i>	
CSD 200 or ERF 220;	
CSD 201 or COUN 240;	
CSD 255, 262, 263, 264;	
3 units in approved electives* and CSD 268 or 6	
units in electives*	(27)
<i>Speech-Language Pathology</i>	
CSD 200, 204, 207, 210,	
213, 214, 215, 216, 220	(27)
Thesis or project	6
Total	36

<i>Comprehensive Examination</i>	
Core: CSD 202	3
Options (select one)	27
<i>Deaf Education</i>	
CSD 200 or ERF 220;	
CSD 201 or COUN 240;	
CSD 255, 262, 263, 264;	
3 units in approved electives* and CSD 268 or 6	
units in electives*	(27)
<i>Speech-Language Pathology</i>	
CSD 200, 204, 207, 210,	
213, 214, 215, 216, 220	(27)
Written examination	0
Total	30

* Approved electives are as follows: CSD 190, CTET 228, CTET 230, LEE 138, LING 244.

Other coursework is developed with the adviser to reflect such factors as students' desires regarding thesis or project, individual needs and desires for training, meeting certain state or national requirements, etc.

Student Teaching and Internship. Students are required to take their final student teaching and internship (e.g. CSD 257, 258, 267, 268) during the last two semesters of their approved Program of Study and within the last 12 units of graduate coursework. Earlier final student teaching and internships are not permitted in the Communicative Sciences and Disorders Department.

Clinical Training. All students are involved in supervised clinical practicum experience during their graduate training. At least 350 clinical hours are required prior to receiving the M.A. degree. A minimum of 250 of these hours must be at the graduate level. These hours are gained at the University Speech and Hearing Clinic and in at least two other settings (internship, student teaching, residency program, etc.).

Thesis, Project, and Non-Thesis or Project Alternatives. A limited number of students may be permitted to undertake a thesis or project, depending on availability of the faculty committee members. Selection of students for these assignments is determined by their consistent demonstration of academic superiority in coursework and evidence of outstanding writing skills and research papers. Six units of credit are earned for a thesis or project. These units may be applied toward the unit requirements of the degree. (See *Criteria for Thesis and Project*.) Students considering a thesis or project need to consult the faculty very early in the graduate program. Selecting a thesis or project option is recommended for students who may at some point consider working toward a doctoral degree. Students who do not participate in a thesis or project complete written and oral comprehensive examinations.

Culminating Experience. A culminating experience is required of all California State University, Fresno master's degrees. Students in communicative disorders are involved with written examinations and an oral culminating experience.

Students choosing a non-thesis or project alternative take a written examination on specific areas of the field, as approved by an adviser, then take an oral examination on their written examination and subject matter within the field. For thesis and project students, their thesis or project is considered as the written examination. These

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students are orally examined on the subject matter of their work and within the field. Information about these options is available from an adviser.

Certificate of Clinical Competence in Speech-Language Pathology. Completion of the master's degree fulfills all the academic and clinical practicum requirements for the Certificate of Clinical Competence (CCC) in Speech Pathology. A Clinical Fellowship Year (CFY) of paid, professional supervised experience is required along with passing the National Examination in Speech Pathology (NESPA) before the certificate is granted by the American Speech-Language-Hearing Association. A Certificate of Clinical Competence is required for employment in nearly all work settings except the public schools. All students are encouraged to acquire national certification regardless of the work setting they may choose.

California License as a Speech Pathologist. The master's degree fulfills all academic and clinical practicum requirements for the State License. A year of paid Required Professional Experience (RPE) is necessary along with passing the NESPA before the license is issued by the Department of Consumer Affairs. The license is required for employment in almost all settings except the public schools.

The CFY and RPE can be completed concurrently when graduates accept their first professional position.

Certification by Council on Education of the Deaf. For students specializing in deaf education, completion of the master's degree fulfills all the academic and clinical practicum requirements for Provisional Certification by the Council on Education of the Deaf, the national organization responsible for certifying teachers of the deaf. Professional level certification is available following three years of successful teaching under the supervision of a professionally certified educator of deaf and hard-of-hearing children. All students are encouraged to acquire national certification.

Credentials

Two major school credentials for employment are available through the Department of Communicative Sciences and Disorders. Students majoring in speech-language pathology complete their Clinical Rehabilitative Services Credential before they work as speech-language pathologists with individuals and/or small groups in one or several schools. Speech-language pathology students accepted into the gradu-

ate program in the fall of 1994 or thereafter must complete the master's degree before they are issued the Clinical Rehabilitative Services Credential.

Students in speech-language pathology must be approved for admission into the graduate program before the Clinical Rehabilitative Services (CRS) credential is issued. Deaf education students may pursue the Education Specialist Credential: Deaf and Hard-of-Hearing with or without pursuing the M.A. degree. They are trained to teach classes of deaf and hard-of-hearing children in early childhood, elementary, and secondary settings, as certified by CED. Students pursuing either credential must meet all admission requirements for the graduate program.

Students are not eligible to take any Communicative Sciences and Disorders (CSD) 200-level coursework without departmental acceptance into the M.A. or credential program. CSD 200-level coursework taken by deaf education students for a credential will not be included on a master's degree program of study unless the student has been admitted into the M.A. program. Students cleared as credential candidates by the department and the School of Education and Human Development are not automatically accepted into the department's graduate program.

Information regarding the two credentials is available from departmental credential advisers and the School of Education and Human Development. Students must see their advisers in regard to the upcoming changes in the credential programs.

Education Specialist Credential: Deaf and Hard of Hearing

	<i>Units</i>
Core: CSD 80, 95 (or LING 150); CSD 102, 106, 114, 128 and 131 (concurrently)	19
Deaf Education core: CSD 91, 92, 135, 139, 141, 162, 163, 164, 202, 255, 262, 263, 264	39
Clinical core: CSD 260 (1-6 units); CSD 258 (6 units); CSD 268 (6 units) or CSD 258 (12 units)	13-18
Generic core: CTET 100; H S 120	6
Total	70-76

Clinical Rehabilitative

Services Credential

<i>Language, Speech, and Hearing Services</i>	<i>Units</i>
Generic courses: CSD 80, 95, 101, 102, 103, 105, 107 and 110 (concurrently), 109, 114, 115, 116, 122, 128 and 131 (concurrently), 171, 172; PSYCH 101	50
Advanced Specialization in Language, Speech, and Hearing: CSD 200, 202, 204, 207, 210, 213, 214, 215, 216, 220	30
Clinical core: CSD 257 (4-9 units), 209 (1 unit), 130 or 230 (10-15 units), 150 or 250 (5 units)	20-30
Total	97-110

COURSES

Note: Students must provide their own transportation in those courses requiring off-campus clinical instruction or observation and defray any resulting personal expense. Students involved with clinical practice must carry professional liability insurance and meet departmental health requirements.

Communicative Sciences and Disorders (CSD)

- 80. Introduction to Human Communication and Disorders (3)**
An overview of speech, language and hearing, and disorders of communication; interrelations among audiology, deaf education, and speech-language pathology. (Formerly C D 80)
- 91. American Sign Language I (3)**
Introduction to the appreciation, comprehension, and analysis of a language developed in a visual/gestural mode. American Sign Language, including its cultural/historical background, the role it plays in the deaf community, and its growing influence in American mainstream society. (Formerly CSD 133)
- 92. American Sign Language II (3)**
Prerequisite: CSD 91. Further appreciation, comprehension, and analysis of the uniqueness of a visual/gestural language, including its cultural/historical background, and the role it has played in deaf communities in the United States and throughout the world. G.E. Breadth C2. (Formerly CSD 134)

95. Introduction to Speech and Language Development (3)

Study of normal verbal development; compilation of developmental milestones in speech and language acquisition. (Formerly C D 95)

101. Phonetics of American English (3)

Perceptual and physiological characteristics of American English speech sounds; application of phonetics to the study of normal and abnormal speech patterns and regional dialects. (2 lecture, 2 lab hours) (Formerly C D 101)

102. Anatomy and Physiology of Speech and Hearing (3)

Anatomic and physiologic bases of the speech and hearing mechanisms. (Formerly C D 102)

103. Speech and Hearing Science (3)

Physiological acoustics, psychoacoustics, acoustic phonetics, and perception of speech. (2 lecture, 2 lab hours) (Formerly C D 103)

105. Disorders of Articulation (3)

Prerequisites: CSD 80, 95, 101, 102. Seminar on the assessment and treatment of articulation and phonological disorders. (2 lecture, 2 lab hours) (Formerly C D 105)

106. Analysis of Language Acquisition by Deaf Children (3)

Prerequisite: ENGL 1. Comparative analysis of the structure of written language of normally developing and deaf children and youth. (Formerly C D 106)

107. Observation in Speech-Language Pathology (1-3; max total 3)

Prerequisites: CSD 80, 95, 101, 102, 103, 105; corequisite: CSD 110. Observation of assessment, treatment, parent counseling, and other clinical services in the University Speech and Hearing Clinic. (Formerly C D 107)

109. Disorders of Language in Children (3)

Prerequisites: CSD 80, 95, 101, 102. Language disorders in children and adolescents; description of clinical subgroups; assessment and treatment. (2 lecture, 2 lab hours) (Formerly C D 109)

110. Diagnostic Procedures (3)

Prerequisites: CSD 80, 95, 101, 102, 105. Corequisite: CSD 107 (1 unit). Principles and procedures of diagnostic evaluation of communicative disorders. (2 lecture, 2 lab hours) (Formerly C D 110)

114. Education of Exceptional Children (3)

Characteristics of exceptional children; diagnostic and instructional programs; legal and certification issues; observation. (2 lecture, 2 lab hours) (Formerly C D 114)

115. Disorders of Fluency and Voice (3)

Prerequisites: CSD 80, 95, 101, 102. Normal and deviant vocal productions; introduction to assessment and treatment principles in voice. Foundational principles of analysis, measurement, and management of fluency disorders in children and adults. (Formerly C D 115)

116. Treatment Procedures in Communicative Disorders (3)

Select one of the following prerequisites: CSD 105, 109, or 115. Treatment procedures that apply across disorders of communication; developing client-specific treatment programs. (2 seminar, 2 lab hours) (Formerly C D 116)

122. Communicative Disorders in Multicultural Populations (3)

Select one of the following prerequisites: CSD 105 or 109. Differentiation between speech-language disorders in culturally and linguistically diverse clients. Current research in specific diagnosis and remediation techniques for children and adults. Application to case studies.

123. American Sign Language III (3)

Prerequisites: CSD 91, 92. Continued study of grammatical structure of the lexicon of American Sign Language. Third semester emphasis on advanced receptive/expressive conversational and cultural skills for communication with deaf children and adults.

124. American Sign Language IV (3)

Prerequisites: CSD 91, 92, 123. Further development of receptive and expressive skills. Exclusive use of American Sign Language in a culturally appropriate and participatory fashion, to converse, narrate, teach, and engage in conversations with deaf children.

128. Observation in Audiology (1-3; max total 3)

Prerequisites: CSD 80, 95, 102; priority will be given to seniors; corequisite: CSD 131. Observation of audiologic testing. (Formerly C D 128)

131. Principles of Audiology (3)

Prerequisite: CSD 80, 95, 102; priority will be given to seniors; corequisite: CSD 128. Hearing loss and its medical aspects; introduction to hearing conservation; assessment

of hearing loss; interpretation of diagnostic test results. (Formerly C D 131)

135. Sign Variations for Classroom Use (3)

Prerequisites: CSD 91, 92, 123. Focus on signing skills and different models/systems of communication used with deaf and hard-of-hearing students in a classroom. (Formerly C D 135)

136. Sign Language Vocabulary for Professionals (3)

Prerequisites: CSD 91, 92, 135. Focus primarily on building extensive specialized vocabularies essential for gaining sign language fluency and conversational competence for professionals working and communicating with deaf and hard-of-hearing children and adults.

139. Deaf Culture (3)

Experiences faced by deaf people, and their varying degrees of participation in deaf culture/deaf community; social, emotional, vocational, intellectual, and linguistic aspects of deaf culture; historical and current struggles to overcome problems experienced by deaf people in American and international cultures. G.E. Multicultural/International MI. (Formerly C D 139)

141. Education of Deaf Children and Their Parents (3)

Study of deaf children in general, parent education, and various educational programs and services for deaf children and their parents. Emphasis on methods of instruction, education of deaf children, and families. (Formerly C D 141)

161. Instructional Technology with Deaf and Hard-of-Hearing Children (3)

Prerequisite: CTET 100. Principles, analysis, assessment techniques, and implementation of instructional technology for teaching deaf and hard-of-hearing students. Includes computer-based approaches for teaching deaf and hard-of-hearing individuals. (2 lecture, 2 lab hours) (Lab fee, \$15) (Formerly C D 261; CSD 261)

162. Speech for Deaf and Hard-of-Hearing Children Youth (3)

Prerequisites: CSD 80, 91, 92, 95, 106; corequisite: CSD 135. Seminar on techniques to develop speech in deaf and hard-of-hearing children and youth; observation, demonstration, and practice with deaf and hard-of-hearing children and youth. (Formerly C D 162)

163. ASL and English Acquisition by Deaf Children and Youth (3)

Prerequisites: CSD 80, 91, 92, 95, 106, 135, 141. Teaching techniques to develop language in deaf and hard-of-hearing children and youth; construction of English sentences and grammar; comparative studies of various language curricula. (Formerly C D 163)

164. School Subjects for Deaf and Hard-of-Hearing Children and Youth (3)

Prerequisites: CSD 80, 91, 92, 95, 106, 135, 141; and permission of instructor. The process of teaching academic school subjects to deaf and hard-of-hearing children and youth; observation and demonstration. (2 lecture, 2 lab hours) (Formerly C D 164)

166. Introduction to Interpreting (3)

Prerequisites: CSD 95 or LING 150, CSD 136 (may be taken concurrently with 166), 139, 141. Study of the theoretical foundations and technical skills needed to interpret in professional settings for deaf and hard-of-hearing children and adults. The roles, responsibilities, and ethics of interpreters providing interpreting services in various professional settings.

168. Observation in Sign Language Studies (2)

Prerequisite: CSD 166. Observation of professionals using sign language in professional settings, such as: artistic, educational, health, legal, medical, mental health, rehabilitation, and social services settings.

169. Sign Language Interpreting I: Voice to Sign (3)

Corequisite: CSD 124. Emphasis on the development of the communication skills necessary for interpreting from spoken English to sign language in professional settings.

170. Sign Language Interpreting II: Sign to Voice (3)

Corequisite: CSD 124. Emphasis on the development of the communication skills necessary for interpreting from sign language to spoken English in professional settings.

171. Professional Writing in Communicative Sciences and Disorders (3)

Select one of the following prerequisites: CSD 105, 106, or 109. Principles of clinical and scientific writing in communicative disorders; exercises in writing professional and scientific reports. (Formerly C D 171)

172. Neural Bases of Speech, Language, and Hearing (3)

Prerequisites: CSD 80, 95, 101, 102. Neuroanatomical and neurophysiological bases of speech, language, and hearing; clinical implications of neuropathology. (Formerly C D 172)

175. Internship in Interpreting (3)

Corequisites: CSD 169, 170. Interpreting under supervision in professional settings such as: artistic, educational, health, legal, medical, mental health, rehabilitation, and social services settings. *CR/NC* grading only.

188T. Topics in Communicative Sciences and Disorders (1-3; max total 6)

Special courses offered on various topics not included in the regular curricula in speech, language, and hearing sciences and disorders. (Formerly C D 188T)

190. Independent Study (1-3; max total 6)

See *Academic Placement — Independent Study*. (Formerly C D 190)

GRADUATE COURSES

(See *Course Numbering System*.)

Communicative Sciences and Disorders (CSD)

200. Graduate Studies and Research in Communicative Sciences and Disorders (3)

Prerequisite: statistics (H S 92 or equivalent). Introduction to graduate studies and methods of research in communicative disorders; concepts and methods of science and clinical research designs; graduate level professional and scientific writing skills. (Formerly C D 200)

201. Interviewing and Counseling in Communicative Sciences and Disorders (3)

Theory and practice in interviewing and counseling clients and families related to specific speech, language and hearing disorders. Techniques for altering and modifying behaviors that affect maximum growth and potential of the client and families. (Formerly C D 201)

202. Aural Rehabilitation (3)

Prerequisites: CSD 128, 131. Habilitative and rehabilitative procedures to assist deaf and hard-of-hearing individuals: amplification, speech-reading, auditory training, speech and language training; psycho-socio-educational issues. (2 lecture, 2 lab hours) (Formerly C D 202)

204. Seminar in Stuttering (3)

Prerequisite: permission of instructor. Research on stuttering in children and adults; assessment and treatment procedures. (Formerly C D 204)

207. Seminar in Neurogenic Language Disorders (3)

Prerequisite: CSD 172. Demography, etiology, and symptomatology of aphasia, traumatic brain injury, and dementia; medical and communication assessment; treatment and treatment efficacy research. (Formerly C D 207)

209. Speech-Hearing in Public School Environment (1)

Corequisite: CSD 257. Seminar in selecting assessment and remediation procedures for public school children with communicative disorders; demonstration and application of therapeutic procedures; organization and administration of school speech and hearing program. (Formerly C D 209)

210. Seminar in Communicative Disorders with Orofacial Anomalies (3)

Prerequisite: permission of instructor. Etiology and symptomatology of cleft palate and other orofacial syndromes in children; medical and communication assessment and treatment procedures. (Formerly C D 210)

213. Seminar in Motor Speech Disorders (3)

Prerequisites: CSD 102, 172. Etiology and symptomatology of apraxia, and dysarthria; assessment and treatment. (Formerly C D 213)

214. Seminar in Language Disorders of Infants and Toddlers (3)

Prerequisites: CSD 95, 109. Etiology, symptomatology, assessment, and habilitation of language disorders in infants and toddlers. (Formerly C D 214)

215. Phonological and Severe Speech Disorders: Communication Intervention, Augmentation, and Alternatives (3)

Advanced study in intervention of phonologic and severe speech disorders. The design, selection, and use of augmentative and alternative methods of communication; the populations for which they are appropriate; and issues related to assessment and treatment.

216. Seminar in Voice Disorders (3)

Information addressing significant clinical, theoretical, and scientific issues in the study, diagnosis, and treatment of voice disorders in children and adults. Presentation of case studies. Analysis of current research.

220. Seminar in Dysphagia and Traumatic Brain Injury (3)

The assessment and treatment of swallowing disorders and traumatic brain injury. Emphasis on functional treatment outcomes for both disorders.

230. Advanced Clinical Practice in Speech-Language Pathology (1-6; max total 24)

Prerequisites: CSD 80, 95, 101, 102, 103, 105, 107, 110. Supervised clinical practice in the diagnosis and treatment of communicative disorders; development of treatment programs, parent counseling; referrals; on- and off-campus clinical sites. *CR/NC* grading only. (Lab fee, \$10) (Formerly C D 230)

250. Advanced Clinical Practice: Audiology (1-6; max total 24)

Prerequisites: CSD 103, 128, 131, graduate standing and permission of instructor. Supervised clinical practice in diagnosis and management of hearing problems. *CR/NC* grading only. (Lab fee, \$10) (Formerly C D 250)

255. Seminar in Assessment of Deaf and Hard-of-Hearing Children and Youth (3)

Prerequisite: permission of instructor. In-depth examination of psychological, achievement, language, communication, and diagnostic assessment tools and unique administration procedures used with deaf children and youth, including an extensive independent child/youth study and evaluation, shared through discussions, student presentations, and written form.

257. Student Teaching: Speech-Language Pathology (4-9; max total 9)

Prerequisites: 5-15 units of CSD 130 or 230, including 150 supervised clinical hours; admission to the credential program; corequisite: CSD 209. Directed observation, participation, and clinical practice (100 hours minimum) under supervision. *CR/NC* grading only. (Formerly A S 164A; C D 164A; CSD 164A)

258. Student Teaching: Deaf and Hard-of-Hearing (6-12; max total 12)

Prerequisites: CSD 202, 255, 262, 263, 264. Teaching under supervision in a class for deaf or hard-of-hearing children and youth. Directed observation, participation, and weekly conference with university supervisor. *CR/NC* grading only. (Formerly C D 164B; CSD 164B)

260. Advanced Clinical Practice: Deaf Education (1-6; max total 12)

Prerequisites: CSD 135, 162, 163, 164. Supervised clinical participation and practice in teaching deaf and hard-of-hearing children and youth; parent counseling; on- and off-campus clinical sites. *CR/NC* grading only. (Lab fee, \$10) (Formerly C D 260)

262. Seminar in Speech for Deaf and Hard-of-Hearing Children and Youth (3)

Prerequisites: CSD 162, 202, permission of instructor. Methods to develop oral communication for deaf and hard-of-hearing children and youth; demonstration and off-campus practicum. (2 lecture, 2 lab hours) (Formerly C D 262)

263. Seminar in Language for Deaf and Hard-of-Hearing Children and Youth (3)

Prerequisites: CSD 163, permission of instructor. Language problems of deaf and hard-of-hearing children and youth; techniques of remediation; use of specialized equipment and development of teaching materials. (2 lecture, 2 lab hours) (Formerly C D 263)

264. Seminar in School Subjects for Deaf and Hard-of-Hearing Children and Youth (3)

Prerequisites: CSD 164 and permission of instructor. Special problems and techniques of adapting pre- K-12 school curriculum to the needs of deaf and hard-of-hearing children and youth; demonstration and practice. Project required. (Formerly C D 264)

267. Externship in Speech-Language Pathology (1-6; max total 24)

Prerequisites: 5-15 units of CSD 230 and permission of instructor. Supervised externship in speech-language pathology; diagnosis and management of communicative disorders. *CR/NC* grading only. (Formerly C D 267)

268. Externship with Deaf Children and Youth (6)

Prerequisites: CSD 202, 255, 258, 262, 263, 264. Supervised externship in a residential school for deaf children and youth. Full time in residence for 8 weeks. *CR/NC* grading only. (Formerly C D 268)

290. Independent Study (1-3; max total 6)

See *Academic Placement — Independent Study*. Approved for *SP* grading. (Formerly C D 290)

298. Individual or Group Research Project (1-6; max total 6)

Prerequisite: consent of advisory committee. See *Criteria for Thesis and Project*. A written report on an individual or group research project for the master's degree. Approved for *SP* grading. (Formerly C D 298)

299. Thesis (2-6; max total 6)

Prerequisite: See *Criteria for Thesis and Project*. Preparation and submission of a thesis. Approved for *SP* grading. (Formerly C D 299)

IN-SERVICE COURSE

(See *Course Numbering System*.)

Communicative Sciences and Disorders (CSD)

300T. Selected Topics in Communicative Sciences and Disorders for Continuing Education (1-3; max total 6) (Formerly C D 300T)