

SPEECH PATHOLOGY AND AUDIOLOGY



**BACHELOR OF SCIENCE
CLINICAL REHABILITATIVE SERVICES CREDENTIAL
MASTER OF SCIENCE**

PROGRAM DESCRIPTION

The field of Speech Pathology and Audiology is concerned with disorders of speech, language and hearing. A Speech-language Pathologist is trained to diagnose and treat language and speech disorders. An Audiologist is trained to provide diagnostic hearing assessment and aural habilitation and rehabilitation services.

The Department offers both the Bachelor of Science and the Master of Science degrees. However, the two degrees are integrated into one sequence of training. The Bachelor's degree provides background in theoretical and clinical areas necessary for graduate study. The Master's degree provides professional training for careers in either Speech-language Pathology or Audiology. Students with Bachelor's degrees in Speech-language Pathology and Audiology from other institutions may enter the program as graduate students, although some adjustments in their programs may be necessary.

Employment in Speech Pathology or Audiology requires both a Master's degree and a credential or license. Completion of the Master's degree provides the training necessary for students to qualify for the California State License as a Speech Pathologist or Audiologist, the California state credential for working as a Speech Pathologist in the public schools, and the American Speech-Language-Hearing Association's Certificate of Clinical Competence in Speech Pathology or Audiology. (Other experience and exams are also required before the license and Certificate are granted; these will be described below under "Additional Information.") The Department also offers the Special Class Authorization, an extension of the public school credential required to teach a classroom of language-disordered children.

FACULTY

Colette Coleman, *Department Chair*
Candace Goldsworthy, *Vice Chair*
John Addicott; Elizabeth Dokimos; Barbara Hoadley; Robert Hubbell; Carole Mayer; James McCartney; Robert Tice
Irene Bingham, *Department Secretary*
Department Office, Speech/Drama 172, 278-6601

FEATURES

Majors in Speech Pathology and Audiology conduct supervised clinical practice in the Maryjane Rees Language, Speech and Hearing Center. Located in the Speech-Drama Building on the CSUS campus, this facility provides assistance to individuals with communicative disorders. Students begin clinical practice in the graduate program. Graduate practicum in Speech Pathology includes an internship in the public schools and optional internships in local hospitals and other agencies. Graduate practicum in Audiology includes internships in local agencies and hospitals. By the end of the Master's degree, students will have acquired a variety of supervised clinical experiences totaling at least 350 clock hours, concentrated in either Speech Pathology or Audiology.

More than 500 clients per year receive speech, language and hearing services. The Center provides services for many disorders such as stuttering, cleft palate, laryngectomy, cerebral palsy, deafness, and speech and language disorders. Video taping of therapy is used as an important procedure in developing clinical skills. There is also an in-clinic computer lab. Supervised practicum experiences off campus provide unique clinical opportunities in a variety of professional settings.

The Educational Standards Board of the American Speech-Language-Hearing Association has approved the programs in Speech-Language Pathology and Audiology. The Commission on Teacher Credentialing has approved the Clinical Rehabilitative Services Credential (Language, Speech, and Hearing) with Special Class Authorization.

CAREER POSSIBILITIES

Speech-language Pathologist in Hospitals, Rehabilitation Centers, Private Practice or Other Settings • Audiologist in Hospitals, Clinics or Other Agencies • Language, Speech and Hearing Specialist in the Public Schools • Teacher of a Special Day Class for Language Disordered Children.

MAJOR REQUIREMENTS • BS

Total units required for BS: 124

Total units required for Audiology Major: 54-55

Total units required for Speech Pathology Major: 61

Courses in parentheses are prerequisites.

Note: This program is organized for students to begin in the Fall semester. If begun in the Spring it may take an extra semester to finish the undergraduate curriculum.

A. Required Premajor Courses (9 units)

- (3) A course in Human Development such as: CHDV 30 or HUES 52 or PSYC 148 and 149.
- (3) A course in Introduction to Statistics such as STAT 1
- (3) A course in Introduction to Linguistics such as LING 130 or ENGL 110A

B. Required Upper Division Courses (33 units) *

- (3) SPHP 110 Phonetics
- (3) SPHP 111 Anatomy & Physiology of the Speech Mechanism
- (3) SPHP 120 Introduction to Language, Speech & Hearing Problems
- (4) SPHP 125 Introduction to Children's Language & Its Disorders
- (4) SPHP 126 Clinical Phonology
- (2) SPHP 129 Hearing
- (3) SPHP 131 Audiometric Testing & Hearing Conservation (SPHP 129)
- (2) SPHP 133 Aural Rehabilitation (SPHP 125, 126, 131)
- (2) SPHP 137 Auditory Processing Disorders (SPHP 125, 129, 131)
- (1) SPHP 145 Supervised Field Observations
- (3) SPHP 146 Introduction to Clinic (SPHP 145)
- (3) SPHP 148 Research in Speech – Language Pathology & Audiology

* Student liability insurance must be purchased through the department during the first semester in the major.

C. Area Requirements (12-19 units)

Select one of the two following areas of emphasis:

1. Speech Pathology (19 units)

- (3) SPHP 123 Stuttering (SPHP 110)
- (4) SPHP 127 Voice Disorders (SPHP 111)
- (3) SPHP 143 Multilingual Language Disorders (SPHP 110, 125, 126)
- (3) SPHP 147 Assessment Procedures (SPHP 125, 126, 131, 145)
- (3) one course in manual communication
- (3) one course in introduction to counseling

2. Audiology (12-13 units)

- (3) SPHP 134 Conductive Hearing Disorders (SPHP 129, 131)
- (6) two courses in manual communication
- (3-4) one course in physiologic psychology

Course Sequence

Students must follow a definite sequence of courses and complete all courses in a preceding semester with a "C" grade or better before progressing to the next semester.

Semester 1, Fall SPHP 110, 111, 120, 129, 145

Semester 2, Spring SPHP 125, 126, 131, 145

Semester 3, Fall SPHP 123*, 133; 137, 143*, 146

Semester 4, Spring SPHP 127*, 134**, 146, 147*, 148

* Required for the Speech Pathology emphasis only

** Required for the Audiology emphasis only

Admission to Supervised Clinical Practice

Prior to enrolling in the first course involving direct-client contact (SPHP 146) the student must demonstrate the criteria listed below. These criteria are applicable for all succeeding clinical practica.

1. Able to model appropriate speech, voice and language in the clinical setting. Screening for these skills occurs during the first semester in the program.
2. The ability to write using correct grammar, spelling, and punctuation. The writing proficiency requirement is fulfilled by passing the CSUS Writing Proficiency Examination administered by the English Department.
3. Physical capability of dealing with young children and physically disabled persons.
4. Sufficient self-discipline and reliability to maintain and meet regular clinical schedules.
5. Sufficient emotional stability to work with difficult clients.
6. Once the student has met with the client(s) or students in the public schools, dropping clinical practicum classes by the student is prohibited except for medical reasons or extraordinary circumstances as approved by the Department. Students are not allowed to repeat clinical practicum courses if they drop without permission.
7. Major GPA of 3.0 with no SPHP courses below a grade of a "C."
8. Pass a tuberculin (Tine) test and have measles and rubella immunizations.

GRADUATE PROGRAM

The Speech Pathology and Audiology Department offers graduate programs leading to the MS (Speech Pathology emphasis) and the MS (Audiology emphasis). These professional programs provide the academic and clinical requirements for the public school credential, state license and Certificate of Clinical Competence. Interested persons are advised to contact the Speech Pathology and Audiology Department for more detailed information.

Department Policies

The Department of Speech Pathology and Audiology has the following policies:

- In order to complete the MS, students must meet the clock-hour practicum requirements established by the American Speech-Language-Hearing Association.
- classes may be repeated only once without special department petition; the total number of classes which may be retaken is limited to two at the undergraduate and two at the graduate level.
- students must keep a signed record of observation hours and supervised clinical clock hours in the supply room for each semester; a personal copy is recommended in the event signed hours may be missing from the student's department file.
- with incompletes in clinic practice the student will not be allowed to enroll in public school practice or clinic practice.
- students may not register for SPHP 500 (Thesis) until his or her prospectus has been approved by the Thesis Committee and the first and second readers judge that the first two chapters of the thesis are sufficiently well developed. No subjects may be run until the student has registered for SPHP 500 or until written permission of the first reader has been accepted by the department chair.

- regarding grades of "Incomplete" ("I") and "Satisfactory Progress" ("SP") in SPHP 500: if all coursework has been completed and an "SP" has been carried for over two years (i.e., two calendar years since date grade was first assigned), the student will receive "No Credit" ("NC") and must:
 - reapply for admission to the University,
 - meet any new requirements for the Certificate of Clinical Competence that the American Speech-Language-Hearing Association has established since the grade in SPHP 500 was first assigned; **and**
 - submit to the department chair written approval of the first reader to continue work on the thesis project.

Note: If a student has not maintained an SP during the two years since the date the first grade was assigned, the student will receive "NC", must apply for admission, and meet all Departmental criteria in place at that time.
- students may switch from a Thesis to Comprehensive Track providing they have not enrolled in SPHP 500 (Thesis).

Admission Requirements

Admission as a classified graduate student to any of the Speech Pathology and Audiology graduate programs requires:

- a baccalaureate degree **and**
- an undergraduate major in Speech Pathology and Audiology or communicative disorders **and**
- a minimum 2.75 GPA overall and 3.0 GPA in the major **and**
- Graduate Record Examination (GRE) scores totaling at least 900 on the verbal and quantitative portions of the exam, or 1350 if the analytic score is included (The GRE may be waived if the student has a 3.5 GPA or above in the major.) **and**
- three letters of recommendation **and**
- a letter describing relevant experience.

Applicants who have deficiencies in Admission Requirements that can be removed by specified additional preparation may be admitted with deferred or conditionally classified graduate status. Students with degrees in other fields must complete the equivalent of an undergraduate major. Any deficiencies in Admission Requirements will be noted on a written response to the student's admission application.

Admission Procedures

Applications are accepted as long as room for new students exists. However, students are strongly urged to apply by February 1 for the following Fall or September 1 for the following Spring in order to allow time for admission before Computer Access Student Phone Entry Registration. All prospective graduate students, including CSUS graduates, must file the following with the Graduate Center:

- an application for admission and a supplemental application for graduate admission (Forms A and B in the CSU application booklet)
- one set of official transcripts from all colleges and universities attended, *other than CSUS*

At the same time, each applicant must send the following to the Graduate Coordinator in the Speech Pathology and Audiology Department:

- Graduate Record Examination (aptitude section) scores
- a record of the supervised clinical experience if any
- one additional set of transcripts and three letters of recommendation, as noted above
- a letter describing relevant experience

Approximately ten weeks after the closing date for applications, a decision regarding admission will be mailed to the applicant. Students must be admitted to a Speech Pathology and Audiology Department graduate program before registering for any of the programs' courses.

Advancement to Candidacy

Each student in a MS program must file an application for Advancement to Candidacy, indicating a proposed program of graduate study. This procedure should begin as soon as the classified graduate student has:

- passed the Writing Proficiency Examination **and**
- removed any deficiencies in Admission Requirements **and**
- completed the first and second semester sequence of courses with a minimum 3.0 GPA

The student fills out the Advancement to Candidacy form after planning a degree program in consultation with a Speech Pathology or Audiology advisor. The completed form is then returned to the Graduate Center for approval.

Degree Requirements

Courses should be taken in the sequence shown. Students working toward a master's degree may choose as a **Culminating Requirement** either a Thesis (Plan A) or a Comprehensive Examination (Plan C). Contact the Speech Pathology and Audiology Department for more information on these programs. Additional enrollments in supervised practicum or fieldwork may be required depending on the number and distribution of clock hours completed in the undergraduate program.

Note: This program assumes that you start in the Fall semester. You may start in Spring. If you start in Spring, you begin with the courses listed under second semester, but you take the clinical methods and practice listed under first semester. You then continue with coursework listed under the first, third, and fourth semester. You continue with clinical methods and practice for the second, third and fourth semesters in the same order as those that start in the Fall semester.

MS Speech Pathology Emphasis (47 - 55 units)

1. First Semester (12 units)

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|-----|------------|--|
| (3) | SPHP 223 | Language Disorders in Children & Adolescents |
| (3) | SPHP 226 | Acoustic Phonetics |
| (2) | SPHP 228A* | Methods: Speech Disorders I |
| (1) | SPHP 229A* | Practice: Speech Disorders I |
| (1) | SPHP 241S | Practice: Hearing Screening |
| (1) | SPHP 242A* | Methods: Language Disorders I |
| (1) | SPHP 243A* | Practice: Language Disorders I |

2. Second Semester (13 units)

- (1) SPHP 211 Ethical & Legal Issues in Speech Pathology & Audiology
- (4) SPHP 218 Motor Speech Disorders
- (3) SPHP 222 Curriculum in Relation to Language — Learning Disabilities in School-age Children
- (1) SPHP 224 Technology for Speech – Language Pathology and Audiology
- (1) SPHP 228B* Methods: Speech Disorders II
- (1) SPHP 229B* Practice: Speech Disorders II
- (1) SPHP 242B* Methods: Language Disorders II
- (1) SPHP 243B* Practice: Language Disorders II

3. Third Semester (11-15 units)

- (3) SPHP 221 Neurogenic Language Disorders
- (2) SPHP 227 Dysphagia
- (1) SPHP 228C* Methods: Speech Disorders III
- (1) SPHP 229C* Practice: Speech Disorders III
- (1) SPHP 242C* Methods: Language Disorders III
- (1) SPHP 243C* Practice: Language Disorders III
- (1) SPHP 244* Methods: Speech – Language Assessment
- (1) SPHP 245* Practice: Speech – Language Assessment
- (0-4) SPHP 500 Culminating Experience

4. Fourth Semester (11-15 units)

- (3) SPHP 250 Seminar: Speech – Language Internships
- (4-8)+ SPHP 295B Internship: LS HS in Schools
- (0-4)+ SPHP 295C Internship: Speech Pathology in Hospitals/Clinics **AND/OR**
- (0-4)+ SPHP 295D Internship: SDC-CH Classes

* Permission of instructor.

+ Minimum of 8 units of internships required.

Notes:

- Students must meet clock hour requirements for the CCC, License, and credential. Clock hours from SPHP 295B and 245D may be counted for the CCC and License if the on-site supervisors hold the CCC.
- The student must complete 100 supervised practicum hours with minors prior to enrolling in student teaching.

MS Audiology Emphasis (34 - 38 units)

Group One (13 units)

- (2) SPHP 228A* Methods: Speech Disorders I
- (1) SPHP 229A* Practice: Speech Disorders I
- (1) SPHP 242A* Methods: Language Disorders I
- (1) SPHP 243A* Practice: Language Disorders I
- (1) SPHP 248A* Methods: Audiology
- (1) SPHP 249A* Practice: Audiology
- (3) SPHP 231 Cochlear & Retrocochlear Hearing Loss
- (3) SPHP 233 Amplification

Group Two (13-17 units)

- (1) SPHP 211 Ethical & Legal Issues in Speech Pathology & Audiology
- (3) SPHP 232 Central Auditory Disorders
- (3) SPHP 234 Industrial Audiology
- (1) SPHP 248A* Methods: Audiology
- (1) SPHP 249A* Practice: Audiology
- (1) SPHP 295A Internship: Audiology
- (3) SPHP 296 Experimental Offerings in Speech Pathology & Audiology
- (0-4) SPHP 500 Culminating Experience

Group Three (8-12 units)

- (3) SPHP 235 Pediatric Audiology
- (1) SPHP 248A* Methods: Audiology
- (1) SPHP 248B* Methods: Aural Rehabilitation
- (1) SPHP 249A* Practice: Audiology
- (1) SPHP 249B* Practice: Aural Rehabilitation
- (1) SPHP 295A Internship: Audiology
- (0-4) SPHP 500 Culminating Experience

* Permission of instructor.

Note: additional enrollments in supervised clinical practice or fieldwork may be required to meet Certificate of Clinical Competence and licensure requirements. The number will vary according to the number of hours completed. The degree requires meeting CCC and licensure requirements.

Additional Information

Certificate of Clinical Competence

A Master's degree is required for the Certificate of Clinical Competence, which is granted by the American Speech-Language-Hearing Association. The MS degree fulfills the academic and clinical practicum requirements for this certificate in Speech Pathology or Audiology. The student must complete a Clinical Fellowship Year (one year of paid professional experience under supervision) and pass the appropriate NTE exam before the certificate is granted. The Certificate of Clinical Competence is required for most positions, both in the public schools and in other settings.

Licensure

A Master's degree is required for the California License in Speech-Language Pathology or Audiology. The MS degree fulfills the academic and clinical practicum requirements for this license. The license is required for employment in settings other than schools or federal agencies. The student must complete the required professional experience (one year) and pass the appropriate NTE exam before the license is granted.

Credential

A Master's degree is required for the Clinical Rehabilitative Services Credential (Language, Speech and Hearing). The MS degree fulfills the academic and clinical requirements for this credential, authorizing the individual to work as an itinerant speech-language clinician in the public schools. This requires a minimum of 200 clock hours of clinical practice with minors. One hundred of these hours must be in a public school setting. In addition to the credential, students may pursue the Special Class Authorization, which is required to teach a special classroom of language disordered children. This requires a minimum of 100 hours in a class for children with severe language disorders.

Candidates must not have a criminal record that would preclude the issuance of a credential as determined by California State law. Candidates must pass the CBEST (California Basic Education Skills Test).

LOWER DIVISION COURSES

97. Speech Improvement. Individual assignments and practice in speech improvement. Limited to full-time university students with speech or hearing disorders. Provides assistance for students who must pass the speech examination for credential candidates. May be repeated. 1 unit.

UPPER DIVISION COURSES

110. Phonetics. Physical production and acoustic characteristics of the sounds of American speech; International Phonetic Alphabet as applied to American speech sounds; practice in phonetic transcription of dialects and deviant speech; applications in speech education and speech and hearing therapy. Fall only. 3 units.

111. Anatomy and Physiology of the Speech Mechanism. Anatomical, physiological and neurological bases of speech. Covers development, normal structure and function. A general course in human anatomy is recommended as background. Fall only. 3 units.

120. Introduction to Language, Speech and Hearing Problems. Review of normal speech development. Survey of speech and hearing problems, their causes and characteristics. Fall only. 3 units.

123. Stuttering. Characteristics of stuttering behavior, etiologic theories and their implications for treatment. Management of stuttering and other disorders of rhythm. **Prerequisite:** SPHP 110. Fall only. 3 units.

125. Introduction to Children's Language and Its Disorders. Course focuses on normal and disordered language in children. Topics include children's language acquisition, analysis of children's talking through language sampling, language delay and principles of assessment and treatment. **Prerequisites:** introductory course in linguistics, junior standing. Spring only. 4 units.

126. Clinical Phonology. Detailed study of articulation and phonological disorders, their causes and manifestations, and of phonological difficulties associated with English as a second language (ESL). Methods of assessment and remediation for children and adults. **Prerequisites:** SPHP 110, 111, 120, 129. Spring only. 4 units.

127. Voice Disorders. Discussion of current concepts regarding etiology, assessment and treatment of children and adults presenting hyperfunctional and organic voice disorders, including cleft lip and palate and laryngectomy. **Prerequisites:** SPHP 111, senior standing. Spring only. 3 units.

129. Hearing. Introduction to audiology; anatomy and physiology of the ear; physics of sound and tuning fork tests as they relate to hearing measurement. Interrelations between hearing and speech. Fall only. 2 units.

131. Audiometric Testing and Hearing Conservation. Theory and technique of individual pure-tone screening and threshold audiometry; identification audiometry with emphasis on school programs. Interpretation of hearing test results as related to medical referral and the need for special education or rehabilitation. Development and administration of hearing conservation programs. Hearing aids and amplification. **Prerequisite:** SPHP 129. Spring only. 3 units.

133. Aural Rehabilitation. Receptive and expressive communication problems of the hearing-impaired. Speech reading, auditory training, and amplification needs will be discussed. Speech and language remediation techniques for the hearing impaired will be covered. **Prerequisites:** SPHP 125, 126, 131. Fall only. 2 units.

134. Conductive Hearing Disorders. Emphasis on diagnostic tests for conductive hearing loss. Special attention given to calibration techniques for both air-and bone-conduction systems. **Prerequisites:** SPHP 129, 131. 3 units.

137. Auditory Processing Disorders. An overview of normal speech processing and introduction to the characteristics of an auditory processing disorder. The sequelae of frequent middle ear effusions and the relationship of auditory processing problems to language; academic and social problems will be discussed. Specific assessment instruments to identify disorders and remediation programs will be introduced. **Prerequisites:** SPHP 125, 129, 131. Fall only. 2 units.

143. Multilingual Language Disorders. Special techniques for the identification, evaluation and treatment of multilingual and multi-dialectal children with communication disorders; communication disorders in cultural context; procedures for identifying cultural values relevant to these disorders. **Prerequisites:** SPHP 110, 125, 126. Fall only. 3 units.

145. Supervised Field Observations. Directed observations of speech and hearing testing (screening and diagnostic); therapy and case staffings in schools, service clinics and hospitals. Student may be expected to participate in some therapy activities when appropriate. **Note:** student must furnish transportation. Forty hours per unit of enrollment. 1 unit.

146. Introduction to Clinic. Methods and materials used in clinical procedures are introduced. Work with graduate students and clients provides introduction to actual procedures and ethical practices. **Prerequisites:** SPHP 145; senior standing. 3 units.

147. Assessment Procedures. Presentation of a model of the assessment process describing the principles and methods of screening, diagnosis, diagnostic therapy, therapy, and dismissal criteria for persons with language, speech, and hearing disorders. Application of this model to five methods of assessment including standardized tests, clinician-devised tasks, observation, interviewing and consultations. **Prerequisites:** SPHP 125, 126, 131, 145. Spring only. 3 units.

148. Research in Speech – Language Pathology and Audiology. Survey of research strategies and methods in Speech-language Pathology and Audiology. Statistical procedures and single-subject designs. Emphasis on interpreting research reports in the literature and on developing research projects. Writing research proposals and reports. **Prerequisites:** introductory course in statistics or consent of instructor; senior standing. Spring only. 3 units.

196. Experimental Offerings in Speech Pathology and Audiology. An undergraduate course will be offered on some phase of Speech Pathology or Audiology when warranted by student interest and faculty availability. 1-3 units.

197. Speech Improvement. Individual assignment and practice in speech improvement. Limited to full-time university students with speech or hearing disorders. Provides assistance for students who must pass the speech examination for credential candidates. May be repeated. 1 unit.

199. Special Problems. Individual projects or directed reading. Open only to students competent to carry on individual work. **Note:** admission requires approval of the instructor, advisor, and department chair. 1-3 units.

GRADUATE COURSES

211. Ethical and Legal Issues in Speech Pathology and Audiology. Ethical and legal issues in professional practice including federal and state laws and regulations, funding sources and scope of practice, survey of professional settings for speech and hearing services, including multidisciplinary settings. Spring only. 1 unit.

218. Motor Speech Disorders. Background pertinent to understanding neurophysiology associated with congenital and acquired dysarthria and dyspraxia, and descriptions and classifications of disorders and their causes, methods of assessment and treatment, including aided and unaided augmentative and alternative communication systems, are presented and discussed. Spring only. 4 units.

221. Neurogenic Language Disorders. In-depth study of language and cognitive disorders adults, secondary to cerebrovascular accident (including left and right CVAs) and/or traumatic brain injury. Assessment and intervention strategies are covered with particular emphasis on functional communication and training for measuring treatment outcomes are considered. **Prerequisite:** SPHP 218. Fall only. 3 units.

222. Curriculum in Relation to Language – Learning Disabilities in School-age Children. Language acquisition as a continuum from oral language to reading and writing, the role of the speech-language specialist in working with reading disabilities; the intersections between speech-language intervention and curricula areas including mathematics, spelling, handwriting, social studies and language arts; and various service delivery model, including collaborative consultation and learning centers. **Prerequisite:** permission of instructor. Spring only. 3 units.

223. Language Disorders in Children and Adolescents. Detailed study of language disorders in infants through adolescents, including associated diagnostic categories, transdisciplinary approaches to assessment and management, working with parents. **Prerequisite:** SPHP 125 or equivalent. Fall only. 3 units.

224. Technology for Speech-Language Pathology and Audiology. A computer lab course focusing on current computer and multimedia technology in Speech-language Pathology and Audiology. Clinical applications of software, firmware and hardware to assessment and remediation will be explored. **Prerequisites:** knowledge of word processing on either IBM or Macintosh computers and knowledge of primary operating systems. Spring only. 1 unit.

226. Acoustic Phonetics. Current models of speech production/perception are reviewed, with emphasis on critical evaluation of data from which the models have been devised and their relevancy to current methods of articulation testing and therapy. Fall only. 3 units.

227. Dysphagia. Swallowing problems from infancy through old age; growth patterns and failures in younger populations; feeding and swallowing problems related to normal aging processes and those associated with neurogenic disorders. Assessment and treatment. This course includes both theoretical and experiential components. **Prerequisites:** SPHP 218, 221, permission of instructor. Fall only. 2 units.

228A. Methods: Speech Disorders I. Diagnosis and treatment as applied to the current caseload, including articulation and phonological disorders and phonological difficulties associated with English as a second language (ESL) populations. Methods for both children and adults. Staffings, case studies and presentations, demonstrations and class discussions. **Prerequisites:** SPHP 125, 126, 131, 143, 145, 146, 148 or equivalents; permission of instructor. **Corequisite:** SPHP 229A. 2 units.

228B. Methods: Speech Disorders II. Techniques and materials for assessing and treating speech disorders emphasizing fluency and voice. Staffings and discussion of cases in the current caseload. May be repeated. **Prerequisites:** SPHP 123, 127 or equivalents; SPHP 228A, permission of instructor. **Corequisite:** SPHP 229B. 1 unit.

228C. Methods: Speech Disorders III. Techniques and materials for assessing and treating clients with disordered speech secondary to developmental disabilities and syndromes, degenerative diseases or complex problems associated with English as a second language (ESL). Discussions of cases in the current caseload. May be repeated. **Prerequisites:** SPHP 218, 228B; SPHP 221 may be concurrent; permission of instructor. **Corequisite:** SPHP 229C. 1 unit.

229A. Practice: Speech Disorders I. Supervised clinical practice emphasizing articulation and phonological disorders, and phonological difficulties associated with English as a second language (ESL). Clients may include both children and adults. **Prerequisite:** permission of instructor. **Corequisite:** SPHP 228A. 1 unit.

229B. Practice: Speech Disorders II. Supervised clinical practice emphasizing clients whose speech is disrupted by abnormal rhythm and rate (e.g. stuttering and cluttering) or abnormal vocal pitch, loudness, and/or quality. May be repeated. **Prerequisite:** permission of instructor. **Corequisite:** SPHP 228B. 1 unit.

229C. Practice: Speech Disorders III. Supervised clinical practice emphasizing children and adults whose speech is disrupted secondary to developmental disorders and syndromes, degenerative disorders or complex problems. May be repeated. **Prerequisite:** permission of instructor. **Corequisite:** SPHP 228C. 1 unit.

231. Cochlear and Retrocochlear Hearing Loss. Diagnostic tests for cochlear and retrocochlear hearing loss, test interpretation, referral criteria, review of remedial procedures and client counseling. **Prerequisite:** permission of instructor. 3 units.

232. Central Auditory Disorders. Methods, procedures, and instruments used in the measurement of auditory function. Emphasis on techniques for evaluating central hearing disorders. **Prerequisite:** permission of instructor. 3 units.

233. Amplification. Hearing aid and earmold types and function. Hearing-aid evaluation procedures and "fitting" techniques. Amplification devices used in schools and auditory training. Electroacoustic evaluation of hearing aids. Hearing-aid dispensing for audiologists. **Prerequisites:** SPHP 129, 131, 133, 134; or permission of instructor. 3 units.

234. Industrial Audiology. Physics of sound, sound measurement, effects of noise on people, damage risk criteria for noise, legal aspects of occupational noise exposure, laboratory experience in noise surveys, elements of noise control, and types of ear protection. A section on functional hearing loss will be included. **Prerequisites:** SPHP 129, 131, 133, 134; or permission of instructor. 3 units.

235. Pediatric Audiology. Focuses on the special problems of evaluating the hearing of infants and children. Students will become familiar with behavioral test adaptations and electrophysical test procedures. Special needs in amplification, fitting procedures, cochlear implants and educational needs will be discussed and demonstrated. 3 units.

241S. Practice: Hearing Screenings. Supervised clinical practice in the administration of hearing screening tests. The student must furnish his/her own transportation. Fifteen to twenty hours for one unit. **Prerequisite:** SPHP 129, 131, or permission of instructor. 1 unit.

242A. Methods: Language Disorders I. Methods, materials and procedures in language disorders with emphasis on working with children and adults with peripheral hearing loss or central auditory processing disorders (CAPD). Includes staffings and discussion of cases in the current caseload. **Prerequisites:** SPHP 129, 131, 133, 137, 145, 146, 148 or equivalents; permission of instructor. **Corequisite:** SPHP 243A. 1 unit.

242B. Methods: Language Disorders II. Techniques and materials for assessing and treating children with disordered language secondary to a myriad of contributing factors including delayed development, neurological problems and various genetic conditions. Discussion of cases in the current caseload. May be repeated. **Prerequisites:** SPHP 223, 242A; permission of instructor. **Corequisite:** SPHP 243B. 1 unit.

242C. Methods: Language Disorders III. Techniques and materials for assessing and treating speech and language disorders emphasizing disorders secondary to cerebral vascular accidents and to traumatic brain injury. Discussion of cases in the current caseload. May be repeated. **Prerequisites:** SPHP 218, 242B; SPHP 221 may be taken concurrently; permission of instructor. **Corequisite:** SPHP 243C. 1 unit.

243A. Practice: Language Disorders I. Supervised clinical practice in language disorders emphasizing children and adults with peripheral hearing loss or central auditory processing disorders (CAPD). May be repeated. **Prerequisite:** permission of instructor. **Corequisite:** SPHP 242A. 1 unit.

243B. Practice: Language Disorders II. Supervised clinical practice with children demonstrating language disorders secondary to a myriad of contributing factors including delayed development, neurological problems, and various genetic conditions. May be repeated. **Prerequisite:** SPHP 242B; permission of instructor. **Corequisite:** SPHP 242B. 1 unit.

243C. Practice: Language Disorders III. Supervised clinical practice emphasizing adult clients whose speech and language are disordered secondary to neurogenically related problems such as cerebrovascular accident or traumatic brain injury. May be repeated. **Prerequisite:** SPHP 243B; permission of instructor. **Corequisite:** SPHP 242C. 1 unit.

244. Methods: Speech – Language Assessment. Methods and materials for initial assessment in Speech-language Pathology. **Prerequisites:** SPHP 147 or equivalent; SPHP 228B, 242B; permission of instructor. **Corequisite:** SPHP 245. 1 unit.

245. Practice: Speech – Language Assessment. Supervised clinical practice in assessment with a variety of communication disorders in children and adults. Experience with interdisciplinary teams. **Prerequisite:** permission of instructor. **Corequisite:** SPHP 244. 1 unit.

248A. Methods: Audiology. Methods, materials, and procedures in advanced clinical practice in audiology staffings, and discussion of cases from the current caseload. Observations in other professional settings. May be repeated. **Prerequisite:** permission of instructor. **Corequisite:** SPHP 249A. 1 unit.

248B. Methods: Aural Rehabilitation. Client caseload discussion, interpretation of differential diagnostic audiological data as it relates to aural habilitation and rehabilitation, use of audiologic testing procedures as a demonstration technique for parent counseling, hearing-aid evaluations, and review of current literature relevant to the aural rehabilitation process. May be repeated. **Prerequisite:** permission of instructor. **Corequisites:** SPHP 249B, permission of instructor. 1 unit.

249A. Practice: Audiology. Supervised clinical practice in the administration of diagnostic hearing tests. Three clock hours per week. May be repeated. **Prerequisites:** SPHP 231, permission of instructor. **Corequisite:** SPHP 248A. 1-3 units.

249B. Practice: Aural Rehabilitation. Supervised clinical practice in aural habilitation/rehabilitation. Three hours per week. May be repeated. **Prerequisite:** permission of instructor. **Corequisite:** SPHP 248B. 1 unit.

250. Seminar: Speech – Language Internships. Assessment, scheduling and conducting language speech and hearing programs in schools, hospitals, clinics, home health and skilled nursing facilities. Related issues including scope of practice, managed care, interagency cooperation and transdisciplinary approaches. **Prerequisites:** completion of all required practice. **Corequisites:** 8 units of SPHP 295B and 295C or 295D. 3 units.

295A. Internship: Audiology. Directed observation and experience in the various work settings in which speech and hearing services are offered. The student must furnish his/her own transportation. Thirty-five hours per unit of enrollment. **Prerequisite:** permission of instructor. May be repeated for credit. Graded Credit/No Credit. 1-3 units.

295B. Internship: LS HS in Schools. Supervised clinical practice in the school setting. Includes at least 140 client-contact hours to which students are assigned. Observations, staffings, case-conferences, individual and group conferences as assigned. Students are expected to conform to the schedules of the schools to which they are assigned. Students must furnish their own transportation to the schools assigned. **Prerequisites:** approval of the Department's Credential Committee, achievement of a passing score on the CBEST, completion of all required graduate clinics. **Corequisite:** SPHP 250. Graded Credit/No Credit. 4 or 8 units.

295C. Internship: Speech Pathology in Hospitals/Clinics. Directed observation and experience in the various work settings in which speech and hearing services are offered. The student must furnish his/her own transportation. Thirty-five hours per unit of enrollment. **Prerequisite:** permission of instructor. **Corequisite:** SPHP 250. 4 units.

295D. Internship: SDC-CH Classes. Supervised school experience in special classes for pupils with severe language disorders (aphasia). Experience in developing remedial plans and program, scheduling learning tasks, charting progress, and task training communication aides. Includes conferences to be arranged with the University Supervisor. Students are expected to conform to public school schedules, and must furnish own transportation to the schools assigned. **Prerequisites:** approval of the Department's Credential Committee, a passing score on the CBEST, completion of all required graduate clinics. **Corequisite:** SPHP 250. 4 units.

296. Experimental Offerings in Speech Pathology and Audiology. A seminar in some phase of Speech Pathology or Audiology will be scheduled as needed. 2-3 units.

299. Special Problems. Individual projects or directed reading. Open only to students who appear competent to carry on individual work. **Note:** approval of the instructor, advisor, and department chair required. 1-3 units.

500. Culminating Experience. A. Master's Thesis. Credit given upon successful completion of a thesis approved for the MS degree. Open only to students who have been advanced to candidacy for the Master's degree and who have permission from student's first reader and the department chair. 2-4 units. B. Comprehensive Exam. Open only to students who have been advanced to candidacy to the master's degree and who have permission of the department chair. Normally taken immediately preceding the student's last semester in the MS program. 0 units.