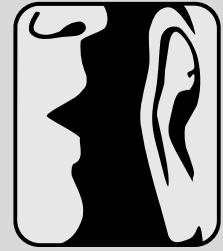


speech pathology and audiology



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 Pathology or Audiology. Students with Bachelor's degrees in Speech 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, Clinical Rehabilitative Services credential for working as a Speech-Language 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 Clinical Rehabilitative Services credential required to teach a classroom of language-disordered children.

Faculty

John Addicott, Rupa Balachandran, Larry Boles, Candace Goldsworthy, Carole Mayer, James McCartney, Lauren O'Hanlon, Celeste Roseberry-McKibbin

Contact Information

James McCartney, *Department Chair* ■ Irene Bingham, *Administrative Support Coordinator* ■ Shasta Hall 172 ■ (916) 278-6601 ■ www.hhs.csus.edu/SPA

Concentrations

BS, MS: Speech Pathology / Audiology

Special Features

- Majors in Speech Pathology and Audiology participate in supervised clinical practice under faculty supervision in the Maryjane Rees Language, Speech and Hearing Center. Located in Shasta Hall on the CSUS campus, this facility provides assistance to individuals with communicative disorders. Students begin clinical practice in the graduate program.
- Graduate practica in Speech Pathology include an internship in the public schools and optional internships in local hospitals and other agencies. Graduate practica in Audiology include 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 through the Maryjane Rees Language, Speech and Hearing Center. The Center provides services for many disorders such as stuttering, cleft palate, laryngectomy, cerebral palsy, deafness, communication problems following stroke and traumatic brain injury, and other 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.

Career Possibilities

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

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

Undergraduate Program

A student must maintain a 2.5 GPA in the major to graduate from the program. If the student falls below a 2.5 GPA, s/he may repeat two courses and must petition the Department to take any additional courses to improve his/her GPA.

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.

Requirements ■ Bachelor of Science Degree

Units required for Audiology Major: 58-62

Units required for Speech Pathology Major: 62-65

Minimum total units required for BS: 124

Courses in parentheses are prerequisites.

A. Required Pre-Major Courses (9 units)

- (3) A course in Human Development such as CHDV 030
- (3) A course in Introduction to Statistics such as STAT 001
- (3) A course in Introduction to Psychology such as PSYC 001 or PSYC 005

B. Required Upper Division Courses (37 units)*

- (3) SPHP 110 Phonetics
- (3) SPHP 111 Anatomy and Physiology of the Speech Mechanism
- (1) SPHP 111L Anatomy and Physiology of the Speech Mechanism Laboratory
- (3) SPHP 112 Introduction to the Evaluation of Language Development
- (3) SPHP 116 Speech and Hearing Sciences (Senior status, SPHP 110, SPHP 111)
- (3) SPHP 125 Language Disorders Across the Life Span (SPHP 122)
- (4) SPHP 126 Clinical Phonology (SPHP 110)
- (3) SPHP 130 Hearing
- (3) SPHP 131 Audiometric Testing and Hearing Conservation (SPHP 130)
- (2) SPHP 133 Aural Rehabilitation (SPHP 125, SPHP 126, SPHP 131)
- (2) SPHP 137 Auditory Processing Disorders (SPHP 125, SPHP 130, SPHP 131)
- (1) SPHP 145 Supervised Field Observations
- (3) SPHP 146 Introduction to Clinical Methods, Ethical Practices and Legal Issues (SPHP 145, Senior status, fulfill requirements under "Admission to supervised clinical practice")
- (3) SPHP 148 Research in Speech - Language Pathology and Audiology (introductory course in statistics or instructor permission; senior standing)

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

C. Area Requirements (12-16 units)

Select one of the two following areas of emphasis:

Speech Pathology (16 units)

- (3) SPHP 123 Stuttering (SPHP 110)
- (4) SPHP 127 Voice Disorders (SPHP 111, senior standing)
- (3) SPHP 143 Communication Disorders in Multicultural Populations (SPHP 110, SPHP 125, SPHP 126)
- (3) SPHP 147 Assessment Procedures (SPHP 125, SPHP 126, SPHP 145)
- (3) Select one course in manual communication

Audiology (12-13 units)

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

D. Electives (0-3 units)

- (3) SPHP 146* Introduction to Clinical Methods, Ethical Practices and Legal Issues (SPHP 145)

* Required for students who plan to attend graduate school at CSUS in Speech Pathology and Audiology. Optional for students who do not plan to attend graduate school or plan to attend graduate school at another university. Must meet requirements for Admission to Supervised Clinical Practice. Students who do not take this course may need to take an elective to meet the 124 total unit requirement.

Course Sequence

Students must maintain a 2.5 GPA in order to continue in the program. If the student falls below a 2.5 GPA, he/she may repeat two courses and must petition the department to take any additional courses to improve his/her GPA.

Listed below is the recommended course sequence:

Semester 1, Fall:

SPHP 110, SPHP 111, SPHP 111L, SPHP 112, SPHP 130, SPHP 145

Semester 2, Spring:

SPHP 125, SPHP 126, SPHP 131, SPHP 145

Semester 3, Fall:

SPHP 123*, SPHP 137, SPHP 146 or SPHP 116, SPHP 147

Semester 4, Spring:

SPHP 116 or SPHP 146, SPHP 127*, SPHP 133, SPHP 134**, SPHP 143, SPHP 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. Must maintain a 3.0 GPA within the major (SPHP) with no SPHP clinical practicum course grade below a "B-" and no other SPHP course below a "C."
8. Pass a tuberculin (PPD) test and have measles, rubella and hepatitis B immunizations.
9. Must obtain liability insurance through the Department during the first semester in the major.
10. Have current CPR certification for infants, children and adults prior to beginning internships (SPHP 295, SPHP 295A, SPHP 295B, SPHP 295C, SPHP 295D).

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 course work for the Clinical Rehabilitative Services Credential and Special Class Authorization for the public schools, state license and Certificate of Clinical Competence. Interested persons are advised to contact the Speech Pathology and Audiology Department for more detailed information.

Department of Speech Pathology and Audiology: 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 500A or SPHP 500B 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 "Report in Progress" ("RP") in SPHP 500: if all course work has been completed and an "RP" 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:
 1. reapply for admission to the University;
 2. 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
 3. submit to the Department Chair written approval of the first reader to continue work on the thesis and/or project.
- **Note:** If a student has not maintained an "RP" 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 or Project to Comprehensive Exam Track providing they have not enrolled in SPHP 500A or SPHP 500B.

Admission Requirements

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

- a baccalaureate degree;
- an undergraduate major in Speech Pathology and Audiology or communicative disorders;
- a minimum 2.75 GPA overall and 3.0 GPA in the major;
- Graduate Record Examination (GRE) scores totaling at least 900 on the verbal and quantitative portions of the exam. In the event that 900 is not achieved, the minimum total score required is 1350 if the analytic score is included, or 4.5 on the analytical writing portion. (The GRE may be waived if the student has a 3.5 GPA or above in SPHP courses);
- three letters of recommendation on the department form; and
- a letter describing relevant experience. (See Undergraduate Advising Manual.)

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 and apply to be classified. Any deficiencies in admission requirements will be noted on a written response to the student's admission application.

Admission Procedures

Students are strongly urged to apply by February for the following fall or September for the following spring in order to allow time for admission before Computer Access to Student Personal and Enrollment Records (CASPER).

All prospective graduate students, including CSUS graduates, must file the following with the Office of Graduate Studies, River Front Center 206, (915) 278-6470:

- an online application for admission; and
- 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 clinical observation hours and supervised clinical experience if any;
- one additional set of transcripts;
- three letters of recommendation, on the department form; and
- description of relevant work, volunteer and internship experience and description of experience with ethnic and minority groups (persons with disabilities, multilingualism and signing).

Approximately ten weeks after the closing date for applications, a decision regarding admission will be mailed to the applicant. Students may take up to 6-7 units as unclassified graduates.

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:

- removed any deficiencies in admission requirements;
- completed the first and second semester sequence of courses with a minimum 3.0 GPA; and
- passed the Writing Proficiency Examination (WPE) or secured approval for a WPE waiver.

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 Office of Graduate Studies for approval.

Requirements ■ Master of Science Degree

Courses should be taken in the sequence shown. Students working toward a master's degree may choose as a Culminating Experience either a Thesis (Plan A) or Project (Plan B) or a Comprehensive Examination (Plan C). Contact the Speech Pathology and Audiology Department for more information on these programs.

If a student with a BA or BS in Speech Pathology and Audiology (Communicative Disorders) is admitted into the CSUS graduate program and had a "C-" grade in any undergraduate course in the major, he/she must retake the course or an equivalent course before enrolling in related clinical practice courses.

Note: This program assumes that the student starts in the fall semester; h/she may start in spring. If starting in spring, the student begins with the courses listed under second semester, but takes the clinical methods and practice listed under first semester. H/she then

continues with course work listed under the first, third, and fourth semester, continuing with clinical methods and practice for the second, third and fourth semesters in the same order as those that start in the fall semester.

Speech Pathology Emphasis (55 - 61 units)

A. First Semester (15 units)

- (4) SPHP 221 Neurogenic Language Disorders
- (3) SPHP 223 Advanced Seminar in Child Language Disorders (SPHP 125)
- (2) SPHP 228A* Methods: Speech Disorders I (SPHP 125, SPHP 126, SPHP 131, SPHP 143, SPHP 145, SPHP 146, SPHP 148 or equivalents; Corequisite: SPHP 229A)
- (2) SPHP 229A* Practice: Speech Disorders I (Corequisite: SPHP 228A)
- (1) SPHP 241S Practice: Hearing Screenings (SPHP 130, SPHP 131, or instructor permission)
- (1) SPHP 242A* Methods: Language Disorders I (SPHP 130, SPHP 131, SPHP 133, SPHP 137, SPHP 145, SPHP 146, SPHP 148 or equivalents; Corequisite: SPHP 243A)
- (2) SPHP 243A* Practice: Language Disorders I (Instructor permission. Corequisite: SPHP 242A)

B. Second Semester (14 units)

- (4) SPHP 218 Motor Speech Disorders
- (3) SPHP 222* Curriculum in Relation to Language - Learning Disabilities in School-Age Children (instructor permission)
- (1) SPHP 224 Technology in Communication Disorders (Knowledge of word processing on either IBM or Macintosh computers and knowledge of primary operating systems)
- (1) SPHP 228B* Methods: Speech Disorders II (SPHP 123, SPHP 127 or equivalents; SPHP 228A, Instructor permission. Corequisite: SPHP 229B)
- (2) SPHP 229B* Practice: Speech Disorders II (Instructor permission. Corequisite: SPHP 228B)
- (1) SPHP 242B* Methods: Language Disorders II (SPHP 223, SPHP 242A, Instructor permission. Corequisite: SPHP 243B)
- (2) SPHP 243B* Practice: Language Disorders II (instructor permission, SPHP 242B, may be taken concurrently)

C. Third Semester (15-17 units)

- (3) SPHP 219 Counseling Techniques for Speech Pathologists and Audiologists
- (2) SPHP 227* Dysphagia (SPHP 218, SPHP 221, instructor permission)
- (1) SPHP 228C* Methods: Speech Disorders III (SPHP 218, SPHP 228B; SPHP 221 may be concurrent; instructor permission. Corequisite: SPHP 229C)
- (2) SPHP 229C* Practice: Speech Disorders III (Instructor permission. Corequisite: SPHP 228C)
- (1) SPHP 242C* Methods: Language Disorders III (SPHP 218, SPHP 242B; SPHP 221 may be taken concurrently; instructor permission. Corequisite: SPHP 243C)
- (2) SPHP 243C* Practice: Language Disorders III (SPHP 243B; instructor permission. Corequisite: SPHP 242C)

- (1) SPHP 244* Methods: Speech - Language Assessment (SPHP 147 or equivalent; SPHP 228B, SPHP 242B. Corequisite: SPHP 245)
- (1) SPHP 245* Practice: Speech - Language Assessment (Instructor permission. Corequisite: SPHP 244)
- (2-4) SPHP 500A Culminating Experience
SPHP 500B (Advanced to candidacy)
SPHP 500C

D. Fourth Semester (11-15 units)

- (3) SPHP 250 Seminar: Speech - Language Internships (Completion of all required practice. Corequisite: 8 units of SPHP 295B and SPHP 295C or SPHP 295D)
- (4-8) SPHP 295B** Internship: LS HS in Schools (Approval of the Department's Credential Committee, achievement of a passing score on the CBEST, completion of all required graduate clinics. Corequisite: SPHP 250)
- (0-4) SPHP 295C** Internship: Speech Pathology in Hospitals/Clinics (Instructor permission; Corequisite: SPHP 250) **AND/OR**
- (0-4) SPHP 295D** Internship: SDC-CH Classes (Approval of the Department's Credential Committee, a passing score on the CBEST, completion of all required graduate clinics. Corequisite: SPHP 250)

* Instructor Permission.

**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 SPHP 295D 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 SPHP 295B.

Audiology Emphasis (49-55 units)

Note: Each graduate audiology course is offered once every three semesters. Practicum and fieldwork courses are offered every semester.

A. First Semester (16 units)

- (3) SPHP 219 Counseling Techniques for Speech Pathologists and Audiologists
- (6) Audiology Rotation courses
- (2) SPHP 228A* Methods: Speech Disorders I (SPHP 125, SPHP 126, SPHP 131, SPHP 143, SPHP 145, SPHP 146, SPHP 148 or equivalents; Corequisite: SPHP 229A)
- (2) SPHP 229A* Practice: Speech Disorders I (Instructor permission. Corequisite: SPHP 228A)
- (1) SPHP 248A* Methods: Audiology (Instructor permission. Corequisite: SPHP 249A)
- (2) SPHP 249A* Practice: Audiology (SPHP 231; instructor permission. Corequisite: SPHP 248A)

B. Second Semester (16 units)

- (1) SPHP 224 Technology in Communication Disorders (Knowledge of word processing on either IBM or Macintosh computers and knowledge of primary operating systems)
- (1) SPHP 242A* Methods: Language Disorders I (SPHP 130, SPHP 131, SPHP 133, SPHP 137, SPHP 145, SPHP 146, SPHP 148 or equivalents; instructor permission. Corequisite: SPHP 243A)

- (2) SPHP 243A* Practice: Language Disorders I (Instructor permission. Corequisite: SPHP 242A)
- (1) SPHP 248A* Methods: Audiology (Instructor permission. Corequisite: SPHP 249A)
- (2) SPHP 249A* Practice: Audiology (SPHP 231, instructor permission. Corequisite: SPHP 248A)
- (9) Audiology Rotation courses

C. Third Semester (13-15 units)

- (9) Audiology Rotation courses
- (1) SPHP 248B* Methods: Aural Rehabilitation (Instructor permission. Corequisite: SPHP 249B)
- (2) SPHP 249B* Practice: Aural Rehabilitation (Instructor permission. Corequisite: SPHP 248B)
- (1-3) SPHP 295A* Internship: Audiology (Instructor permission)

D. Fourth Semester (4-8 units)

- (1) SPHP 248A* Methods: Audiology (Instructor permission. Corequisite: SPHP 249A and/or SPHP 295A)
- (1-3) SPHP 295A* Internship: Audiology (Instructor permission)
- (2-4) SPHP 500A Culminating Experience
SPHP 500B (Advancement to Candidacy)
SPHP 500C

* Instructor permission.

Audiology Rotation Courses

| | |
|----------|---|
| SPHP 231 | Cochlear and Retrocochlear Hearing Loss (Instructor permission) |
| SPHP 232 | Central Auditory Disorders (Instructor permission) |
| SPHP 233 | Amplification (SPHP 130, SPHP 131, SPHP 133, SPHP 134; or instructor permission) |
| SPHP 234 | Industrial Audiology (SPHP 130, SPHP 131, SPHP 133, SPHP 134; or instructor permission) |
| SPHP 235 | Pediatric Audiology |
| SPHP 236 | Advanced Amplification |
| SPHP 237 | Medical Audiology |
| SPHP 238 | Neurophysiological Audiology |

Note: All of the above courses must be taken during the first three semesters of the program for a total of 24 units. Students must meet clock hour requirements for the CCC and License.

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 practice 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 PRAXIS 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 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 profes-

sional experience (one year) and pass the appropriate PRAXIS 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 specialist 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

SPHP 097. 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. **Note:** May be repeated. Graded Credit/No Credit. 1 unit.

Upper Division Courses

SPHP 101. Improving English Voice and Pronunciation Skills. Helps students who speak English as a foreign language (EFL) to speak English intelligibly. Emphasizes accurate English pronunciation and ideal voice production for successful communication in the American business environment. 3 units.

SPHP 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.

SPHP 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.

SPHP 111L. Anatomy and Physiology of the Speech Mechanism Laboratory. Designed to facilitate learning anatomy and physiology of the speech mechanism. Opportunities to use equipment to obtain measurements for respiration and phonation, to examine oral-motor structures, and to visualize neural structures. **Corequisite:** SPHP 111. 1 unit.

SPHP 112. Introduction to the Evaluation of Language Development. Overview and comparison of normal and abnormal child language development from infancy through upper elementary school. Establishes a framework for understanding language disorders including autism and pervasive developmental delay. Includes theories of language acquisition, basic principles of language sampling, systems of language, elements of grammar, and preparation for informal and standardized assessment of language

disorders. Introduces students to the impact of variables such as attention deficit disorder, poverty, bilingualism on developing language skills. **Prerequisite:** Child Development course, introductory course in psychology. 3 units.

SPHP 116. Speech and Hearing Sciences. Introduction to physiological acoustics, psychoacoustics, acoustic phonetics, perception of speech including voice, resonance and individual speech segments; instrumentation for acoustic and perceptual analysis of speech. **Prerequisite:** Senior status, SPHP 110, SPHP 111. 3 units.

SPHP 120. Introduction to Language, Speech and Hearing Problems. Review of normal speech and language development. Overview of language, speech, and hearing development and disorders including multicultural issues. Introduction to professional issues and ethics. Fall only. 3 units.

SPHP 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.

SPHP 125. Language Disorders Across the Life Span. Language disorders including the dynamic and reciprocal relationship of the problem among the child, his/her family, and the environment. Language disorders from infancy through adulthood will be covered. **Prerequisite:** SPHP 122. Spring only. 3 units.

SPHP 126. Clinical Phonology. Study of normal articulatory-phonological development in children. Discussion of etiologies and specific characteristics of articulatory-phonological disorders. Description of specific assessment and treatment procedures and materials. Analyzes case studies. **Prerequisite:** SPHP 110. Spring only. 4 units.

SPHP 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. **Prerequisite:** SPHP 111, senior status. Spring only. 4 units.

SPHP 130. Hearing. Introduction to audiology; anatomy, physiology and pathology of the ear; physics of sound and tuning fork tests as they relate to hearing measurement. Interrelations between hearing and speech. Fall only. 3 units.

SPHP 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 130. Spring only. 3 units.

SPHP 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. **Prerequisite:** SPHP 125, SPHP 126, SPHP 131. Fall only. 2 units.

SPHP 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. **Prerequisite:** SPHP 130, SPHP 131. 3 units.

SPHP 137. Auditory Processing Disorders. 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. **Prerequisite:** SPHP 125, SPHP 130, SPHP 131. Fall only. 2 units.

SPHP 143. Communication Disorders in Multicultural Populations. Identification, evaluation, and treatment of multicultural, multilingual clients with communication disorders. Discussion of normal second language acquisition, bilingual development, and cultural values related to effective service delivery for multicultural clients. **Prerequisite:** SPHP 110, SPHP 125, SPHP 126. Fall only. 3 units.

SPHP 145. Supervised Field Observations. Directed observations of speech and hearing testing (screening and diagnostic); therapy and case staffing in schools, service clinics and hospitals. **Note:** Student must furnish transportation and must obtain liability insurance. Graded Credit/No Credit. 1 unit.

SPHP 146. Introduction to Clinical Methods, Ethical Practices and Legal Issues. Methods and materials used in clinical procedures are introduced. Work with graduate students and clients provides introduction to actual procedures and ethical practices. Introduction to ASHA Code of Ethics 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. **Prerequisite:** SPHP 145; Senior status, fulfill requirements under "Admission to supervised clinical practice". 3 units.

SPHP 147. Assessment Procedures. Current principles, methods and materials used by the speech-language pathologist to assess communication disorders are presented. Issues related to a model of assessment, informal and formal testing, dynamic assessment, interview techniques, administration, scoring and interpretation of test results, report writing and related issues will be discussed. **Prerequisite:** SPHP 125, SPHP 126, SPHP 145. Spring only. 3 units.

SPHP 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. **Prerequisite:** Introductory course in statistics or consent of instructor; senior status. 3 units.

SPHP 196. Experimental Offerings in Speech Pathology and Audiology. Undergraduate offered on some phase of Speech Pathology or Audiology when warranted by student interest and faculty availability. 1-3 units.

SPHP 196I. Speech and Hearing Sciences. Introduction to physiological acoustics, psychoacoustics, acoustic phonetics, perception of speech including voice, resonance and individual speech segments. Students are introduced to instrumentation for acoustic and perceptual analysis of speech. **Prerequisite:** Senior status, SPHP 110, SPHP 111. 3 units.

SPHP 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. **Note:** May be repeated. Graded Credit/No Credit. 1 unit.

SPHP 199. Special Problems. Individual projects or directed reading. Open only to students competent to carry on individual work. **Note:** Departmental petition required. 1-3 units.

Graduate Courses

SPHP 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.

SPHP 219. Counseling Techniques for Speech Pathologists and Audiologists. Development of strategies for counseling and interviewing clients with communication disorders and their families. Development of specific skills such as effective listening, dealing constructively with emotions, working with families, and leading support groups. Students will learn to deal effectively with the affective side of communication disorders to help clients benefit maximally from assessment and treatment. 3 units.

SPHP 221. Neurogenic Language Disorders. In-depth study of language and cognitive disorders in adult, secondary to cerebrovascular accident, dementia, and/or traumatic brain injury. Assessment and intervention strategies are covered with particular emphasis on functional outcomes. Fall only. 4 units.

SPHP 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 interactions among speech-language intervention and curricula areas including mathematics, spelling, handwriting, social studies and language arts; and various service delivery models, including collaborative consultation and learning centers. **Prerequisite:** Instructor permission. Spring only. 3 units.

SPHP 223. Advanced Seminar in Child Language Disorders. In-depth study of childhood language disorders to help define and delimit the language problems associated with congenital syndromes including: chromosomal abnormalities, genetic syndromes including dyslexia; toxin related and language disorders of unknown etiology including Landau Kleffner and specific developmental language disorders, specific learning disabilities and the autism spectrum. **Prerequisite:** SPHP 125 or equivalent. Fall only. 3 units.

SPHP 224. Technology In Communication Disorders. Computer lab 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. **Prerequisite:** Knowledge of word processing on either IBM or Macintosh computers and knowledge of primary operating systems. Spring only. Graded Credit/No Credit. 1 unit.

SPHP 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. Includes both theoretical and experiential components. **Prerequisite:** SPHP 218, SPHP 221, instructor permission. Fall only. 2 units.

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

SPHP 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. **Note:** May be repeated. **Prerequisite:** SPHP 123, SPHP 127 or equivalents; SPHP 228A, instructor permission. **Corequisite:** SPHP 229B. 1 unit.

SPHP 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. **Note:** May be repeated. **Prerequisite:** SPHP 218, SPHP 228B; SPHP 221 may be concurrent; instructor permission. **Corequisite:** SPHP 229C. 1 unit.

SPHP 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:** Instructor permission. **Corequisite:** SPHP 228A. 2 units.

SPHP 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. **Note:** May be repeated. **Prerequisite:** Instructor permission. **Corequisite:** SPHP 228B. 2 units.

SPHP 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. **Note:** May be repeated. **Prerequisite:** Instructor permission. **Corequisite:** SPHP 228C. 2 units.

SPHP 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:** Instructor permission. 3 units.

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

SPHP 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. **Prerequisite:** SPHP 130, SPHP 131, SPHP 133, SPHP 134; or instructor permission. 3 units.

SPHP 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. **Prerequisite:** SPHP 130, SPHP 131, SPHP 133, SPHP 134; or instructor permission. 3 units.

SPHP 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.

SPHP 236. Advanced Amplification. Review of hearing aid characteristics; electroacoustics; and coupling systems; hearing aid fitting and dispensing. Overview of assistive listening devices and cochlear implants. 3 units.

SPHP 237. Medical Audiology. Overview of pathologies of the ear including infections, trauma and neoplasms. Disorders of circulation, innervation, metabolism, aging and multiple causes will be covered. Presentations on imaging, neuropathology, pharmacology, and related topics. 3 units.

SPHP 238. Neurophysiological Audiology. Emphasis on advanced neurophysiological testing techniques, such as electronystagmography, otoacoustic emissions and auditory brainstem response. Includes both theory and practice. 3 units.

SPHP 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 130, SPHP 131, or instructor permission. Graded Credit/No Credit. 1 unit.

SPHP 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. **Prerequisite:** SPHP 130, SPHP 131, SPHP 133, SPHP 137, SPHP 145, SPHP 146, SPHP 148 or equivalents; instructor permission. **Corequisite:** SPHP 243A. 1 unit.

SPHP 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. **Note:** May be repeated. **Prerequisite:** SPHP 223, SPHP 242A; instructor permission. **Corequisite:** SPHP 243B. 1 unit.

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

SPHP 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). **Note:** May be repeated. **Prerequisite:** Instructor permission. **Corequisite:** SPHP 242A. 2 units.

SPHP 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. **Note:** May be repeated. **Prerequisite:** SPHP 242B; instructor permission. **Corequisite:** SPHP 242B. 2 units.

SPHP 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, traumatic brain injury, or other neurological disorders. **Note:** May be repeated. **Prerequisite:** SPHP 243B; instructor permission. **Corequisite:** SPHP 242C. 2 units.

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

SPHP 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:** Instructor permission. **Corequisite:** SPHP 244. 1 unit.

SPHP 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. **Note:** May be repeated. **Prerequisite:** Instructor permission. **Corequisite:** SPHP 249A. 1 unit.

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

SPHP 249A. Practice: Audiology. Supervised clinical practice in the administration of diagnostic hearing tests. Three clock hours per week. **Note:** May be repeated. **Prerequisite:** SPHP 231; instructor permission. **Corequisite:** SPHP 248A. 2 units.

SPHP 249B. Practice: Aural Rehabilitation. Supervised clinical practice in aural habilitation/rehabilitation. Three hours per week. **Note:** May be repeated. **Prerequisite:** Instructor permission. **Corequisite:** SPHP 248B. 2 units.

SPHP 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. **Prerequisite:** Completion of all required practice. **Corequisite:** 8 units of SPHP 295B and SPHP 295C or SPHP 295D. 3 units.

SPHP 295. Fieldwork. Supervised clinical experience. Students will have directed observation and experience with evaluation, developing remedial plans, providing remedial training, and/or charting behavior as appropriate for the placement. Students must provide their own transportation to the setting. Requires approval of the instructor. **Note:** May be repeated for up to 6 units credit. **Prerequisite:** Graduate status. Graded Credit/No Credit. 1-3 units.

SPHP 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:** Instructor permission. May be repeated for credit. Graded Credit/No Credit. 1-3 units.

SPHP 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. **Prerequisite:** 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.

SPHP 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:** Instructor permission. **Corequisite:** SPHP 250. Graded Credit/No Credit. 4 units.

SPHP 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. **Prerequisite:** Approval of the Department's Credential Committee, a passing score on the CBEST, completion of all required graduate clinics. **Corequisite:** SPHP 250. Graded Credit/No Credit. 4 units.

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

SPHP 299. Special Problems. Individual projects or directed reading. Open only to students who appear competent to carry on individual work. **Note:** Departmental petition required. 1-3 units.

SPHP 500A. Culminating Experience. Completion of a thesis, project or comprehensive exam. Should be taken after completion of all other requirements for the degree. Students may choose from three options which they must declare when they advance to candidacy: Thesis, student must have permission from first reader. **Prerequisite:** Advanced to candidacy. Graded Credit/No Credit. 2-4 units.

SPHP 500B. Culminating Experience. Completion of a thesis, project or comprehensive exam. Should be taken after completion of all other requirements for the degree. Students may choose from three options which they must declare when they advance to candidacy: Project. **Prerequisite:** Advanced to candidacy. Graded Credit/No Credit. 2-4 units.

SPHP 500C. Culminating Experience. Completion of a comprehensive exam. Should be taken after completion of all other requirements for the degree. Students may choose from three options which they must declare when they advance to candidacy: Comprehensive Examination. **Prerequisite:** Advanced to candidacy. Graded Credit/No Credit. 2-4 units.