Communication Sciences and Disorders

Degree Offered

• Doctor of Philosophy

Nature of the Program

The Ph.D. degree program in Communication Sciences and Disorders provides a rigorous course of study along with mentored research and teaching experiences to enable students to become high-quality researchers and serve effectively as leaders in the discipline. Graduates of the program are prepared to assume careers as researchers and scholars at colleges, universities, hospitals, industrial settings, and research facilities. The program is not designed to provide an advanced clinical degree in either audiology or speech-language pathology. Rather, the Ph.D. degree will be conferred in recognition of the attainment of the highest academic excellence and productive scholarship. As doctoral programs are an integral step on a life-long journey of learning and scholarship, the Department of Communication Sciences and Disorders has established the Ph.D. program in Communication Sciences and Disorders to support students in developing knowledge, judgment, skills, and attitudes to facilitate their growth and learning throughout their careers as researchers, scholars, and teachers.

The Ph.D. program in Communication Sciences and Disorders is a highly individualized experience that includes prescribed and selected coursework designed to meet the objectives of the program, ongoing participation in research and other scholarly activities, and the independent completion of a dissertation under the mentorship of a research advisor. As such, the time needed to complete the program will vary to ensure sufficient time for the building of adequate teaching and research skills and a creditable curriculum vitae. Some diligent and highly motivated students may be able to complete their work in less time, whereas others may require more time to achieve independence as a scholar and researcher.

Admissions

A Ph.D. Advisory Committee composed of one member from each of the major areas of study will screen the applications and make admissions decisions based on the following criteria, in consultation with the faculty in their area of emphasis. In particular, applicants must have the following:

1. An entry-level clinical degree for the profession of speech-language pathology (i.e., M.A. or M.S.) or audiology (i.e., M.A., M.S., or Au.D.)
2. A cumulative grade point average of 3.25 or higher (A=4.0) upon completion of a graduate degree
3. An official copy of the results of the Graduate Record Examination (GRE) taken within the past 5 years.
4. A TOEFL score of at least 79 (internet version), 213 (computer-based), 550 (paper-based) or an IELTS score of at least 6.5, if English is not the applicant’s native language
5. An interview with the Ph.D. advisory committee that may include the writing of an essay on an assigned topic to be evaluated by program faculty
6. Three letters of recommendation, two of which must come from previous instructors or professors who can comment meaningfully on the applicant’s potential for Ph.D. study
7. A personal statement that addresses the applicant’s professional goals within speech and language sciences and disorders or within hearing science and disorders.

Au.D./Ph.D. Option

Doctor of Audiology (Au.D.) students who are attending WVU may apply to the Ph.D. program no earlier than the spring semester of the second year to begin the fall of the third year. This will be a competitive application process and is reserved for highly-qualified and motivated Au.D. students. The applicant must have requirements 2-7 listed above. Students who intend to enroll in two graduate programs simultaneously (dual enrollment) must obtain permission in writing from the dean.

Doctor of Philosophy (Ph.D.) Program

PROGRAM REQUIREMENTS

Theoretical Foundations Core

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<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>CSAD 750</td>
<td>Information Literacy in Communication Sciences and Disorders</td>
<td>3</td>
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<tr>
<td>CSAD 752</td>
<td>Research Design in Communication Sciences and Disorders</td>
<td>3</td>
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<tr>
<td>CSAD 754</td>
<td>Teaching and Supervision in Communication Sciences and Disorders</td>
<td>3</td>
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<tr>
<td>Select one of the following:</td>
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<tr>
<td>C&amp;I 707</td>
<td>Theories, Models and Research of Teaching</td>
<td>3</td>
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<tr>
<td>EDP 640</td>
<td>Instructional Design</td>
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<tr>
<td>EDP 700</td>
<td>Psychological Foundations of Learning</td>
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Research Core

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<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>EDP 613</td>
<td>Statistical Methods 1</td>
<td>3</td>
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RESIDENCY COMMITMENT

The Ph.D. degree program in communication sciences and disorders requires a full-time commitment. Each student who is accepted into the program works on a daily basis with faculty who will help to hone skills and to sharpen the research focus. Furthermore, each student will be expected to conduct research and pursue scholarship activities that will inform classroom teaching and lead to meaningful presentations and publications. Consequently, applicants are required to sign a statement confirming their commitment to full-time status before they may be admitted to the program.

CURRICULUM

Upon admission to the Ph.D. program, students enroll in a series of required courses in the doctoral core, in the research core, and in the area of specialization. Ph.D. students are expected to maintain a cumulative GPA of at least 3.25 each semester. Upon completion of coursework, students must successfully complete written and oral comprehensive examinations to be eligible for candidacy.

Ph.D. students enroll in a minimum of six credits of research (CSAD 797), extending over at least two semesters, under the supervision of their mentor and/or other faculty researcher/s working in related areas. Typically, the focus of the independent study will be on the development of independent research skills through involvement with ongoing or forthcoming projects in the mentor’s research program. Each student will be expected to present at one or more scientific meetings and submit one or more manuscripts for publication in relevant peer-reviewed journals before graduating. It is also expected that the student will submit at least one external grant before graduating.

In addition to the teaching and pedagogy courses listed in the course requirements, students are required to teach or co-teach at least one academic course before graduating. Teaching responsibilities also may include clinical supervision.

Major Learning Outcomes

COMMUNICATION SCIENCES AND DISORDERS

The primary objective of the Ph.D. degree program is to assist students to develop in-depth mastery of subject matter in a narrow and specific area within the broad discipline of communication sciences and disorders and, simultaneously, to broaden one’s knowledge base in other fields related to the special area of interest, such as health, linguistics, education, and the physical, biological, and socio-behavioral sciences. With the intent to prepare high-quality researchers to serve as leaders in the discipline of communication sciences and disorders, graduates of the program will be prepared to assume independent careers as researchers and scholars at colleges, universities, and hospitals, as well to become key personnel at leading private and public research institutes. Specifically, the learning goals of the Ph.D. program in Communication Sciences and Disorders include:

- The development of independent research skills through sequential experiences that involve the planning and conduct (or implementation) of research projects, the writing of grants, and the dissemination of research findings through the presentation of papers at scientific and other professional conferences and publication in peer-reviewed journals in the discipline;
- The preparation of academicians equipped to teach the university students of tomorrow through guided coursework in educational methods and evaluation, instructional technologies including online course delivery, international and intercultural experiences, and classroom practice; and
• The acquisition of advanced knowledge and understanding of a specialized area with the ability to apply this understanding to research, teaching, and scholarship.

COURSES

CSAD 602. Communication Disorders. 3 Hours.
Survey of normal processes and communication disorders of speech, language, and hearing in children and adults; professions of speech language pathology and audiology; and job opportunities, designed for students not majoring in speech pathology and audiology.

CSAD 604. Seminars Clinical Practice 1. 1 Hour.
PR: Consent. Includes topics necessary for successful completion of clinical practicum.

CSAD 605. Seminars Clinical Practice 3. 1 Hour.
Examines professional issues in Speech-Language pathology. Will be graded on a Pass/Fail basis.

CSAD 606. Seminars Clinical Practice 2. 1 Hour.
PR: Consent. Includes topics to enhance clinical skills of the beginning clinician.

CSAD 607. Seminars Clinical Practice 4. 1 Hour.
Explores employment settings and service delivery in Speech-Language pathology including medical and educational settings. Will be graded on a Pass/Fail basis.

CSAD 608. Audiological Foundations. 2 Hours.
Study of the knowledge and skills in audiology that speech-language pathologists need to treat individuals with hearing impairment.

CSAD 610. Advanced Practice Speech-Language Disorders 1. 1,2 Hour.
PR: Consent. Supervised clinical practicum that concerns the evaluation and treatment of children and adults with speech-language disorders.

CSAD 611. Advanced Practice/Audiology 1. 1,2 Hour.
PR: Consent. Supervised clinical practicum that concerns the evaluation and treatment of children and adults with hearing disorders.

CSAD 612. Advanced Practice Speech-Language Disorders 2. 1-3 Hours.
PR: CSAD 610 or consent. Supervised clinical practicum that concerns the evaluation and treatment of children and adults with speech language disorders.

CSAD 613. Advanced Practice/Audiology 2. 3 Hours.
PR: CSAD 611 or consent. Supervised clinical practicum that concerns the evaluation and treatment of children and adults with speech-language disorders.

CSAD 614. Advanced Practice Speech-Language Disorders 3. 1-4 Hours.
PR: CSAD 612 or consent. Supervised clinical practicum that concerns the evaluation and treatment of children and adults with speech-language disorders.

CSAD 615. Advanced Practice/Audiology 3. 4 Hours.
PR: CSAD 613 or consent. Supervised clinical practicum that concerns the evaluation and treatment of children and adults with hearing disorders.

CSAD 616. Advanced Practice Speech-Language Disorders 4. 1-4 Hours.
PR: CSAD 614 or consent. Supervised clinical practicum that concerns the evaluation and treatment of children and adults with speech-language disorders.

CSAD 617. Advanced Practice/Audiology 4. 4 Hours.
PR: CSAD 615 or consent. Supervised clinical practicum that concerns the evaluation and treatment of children and adults with hearing disorders.

CSAD 618. Evidence-Based Practice in Communication Sciences and Disorders. 3 Hours.
An overview of evidence-based clinical practice in communication sciences and disorders with strategies for implementation. Application of the scientific method to clinical practice and critical review of the research literature is emphasized.

CSAD 620. Neurophysics of Speech and Language. 3 Hours.
PR: CSAD 320 and CSAD 424 or consent. General and typographic anatomy and physiology of CNS, with special attention to motor and sensory systems as they apply to speech, hearing, and language.

CSAD 622. Advanced Voice Disorders. 3 Hours.
PR: CSAD 422 or consent. Advanced study of the vocal and respiratory mechanisms; epidemiology, classification, etiology, symptomatology, assessment, prevention, and remediation of voice disorders.

CSAD 624. Phonological Disorders. 3 Hours.

CSAD 625. Child Language and Literacy Disorders. 3 Hours.
Course provides skills to characterize, prevent, evaluate, and manage childhood communication disorders in collaboration with families, educators, and other service providers. Application of evidence-based practice and implementation of appropriate care to enhance language and literacy development is emphasized. Family, cultural, and linguistic diversity are addressed.
Communication Sciences and Disorders

CSAD 626. Experimental Phonetics. 3 Hours.
PR: CSAD 320 and CSAD 340 or consent. Discussion of contemporary topics in the speech and hearing sciences, including acoustic, physiological, and perceptual phonetics.

CSAD 628. Advanced Stuttering Disorders. 3 Hours.
PR: CSAD 422 or consent. Advanced study of the symptomatology, epidemiology, etiology, research findings, assessment, prevention, and remediation of stuttering and related fluency disorders.

CSAD 630. Adult Neurogenic Communication Disorders. 3 Hours.
PR: CSAD 620. Explores normal adult language processes and the effect of normal aging on communication. Advanced investigation of the etiology, diagnosis, nature, and therapeutic approaches of aphasia, agnosia, apraxia, dysarthria, dementia, right hemisphere impairment, and traumatic brain injury.

CSAD 632. Craniofacial Anomalies. 3 Hours.
PR: CSAD 624 or consent. Investigation of the etiology, diagnosis, nature, and therapy approaches of communicative disorders in persons with cleft palate.

CSAD 634. Language Disorders in Children: Assessment. 2 Hours.
PR: CSAD 324. Assessment procedures utilized to identify children with language disorders. Standardized tests and non-standardized analysis procedures are introduced.

CSAD 635. Language Disorders in Children: Treatment. 2 Hours.
PR: CSAD 634 or consent. Treatment procedures for children with language disorders are presented. Clinician- oriented and client-oriented approaches are emphasized.

CSAD 636. Augmentative/Alternative Communication. 3 Hours.
Discussion of augmentative/alternative communication options for persons who are unable to meet their daily needs through natural modes of verbal, manual, or written communication. Demographics, assessment, and treatment of candidates for AAC interventions.

CSAD 648. Central Auditory Disorders. 3 Hours.
PR: CSAD 642 or consent. Pathology and audiometric site-of-lesion testing of the central auditory nervous system.

CSAD 658. Auditory Processing Disorders. 3 Hours.
PR: Consent. A transidisciplinary approach to evaluation and management of auditory processing disorders in children and adults is presented. This course is for graduate students in speech- language pathology and audiology and professional speech- language pathologists and audiologists.

CSAD 660. Neuropathology of Speech and Language. 3 Hours.
PR: CSAD 620. Explores methods of identifying and treating speech and language problems associated with nonprogressive and progressive neurological disorders.

CSAD 662. Dysphagia. 3 Hours.
PR: Must be CSAD major. Assessment and treatment of feeding and swallowing disorders in children and adults.

CSAD 664. Diagnostics in Speech Language Pathology. 3 Hours.
PR: Consent. Discussion of issues related to the diagnosis of speech and language disorders, including interviewing, etiological factors, and the assessment process. Supervised clinical practicum that concerns the diagnosis of speech and language disorders.

CSAD 666. Updating Trends in Augmentative and Alternative Communication. 2 Hours.
Recent research in augmentative and alternative communication assessment and intervention.

CSAD 668. Clinical Experience in AAC. 2 Hours.
Hands on AAC and AAC assessment and intervention experience at Camp Gizmo in Romney, West Virginia.

CSAD 691. Advanced Topics. 1-6 Hours.
PR: Consent. Investigation of advanced topics not covered in regularly scheduled courses.

CSAD 692. Directed Study. 1-6 Hours.
Directed study, reading, and/or research.

CSAD 693. Special Topics. 1-6 Hours.
A study of contemporary topics selected from recent developments in the field.

CSAD 694. Seminar. 1-6 Hours.
Special seminars arranged for advanced graduate students.

CSAD 695. Independent Study. 1-6 Hours.
Faculty supervised study of topics not available through regular course offerings.

CSAD 696. Graduate Seminar. 1 Hour.
PR: Consent. Each graduate student will present at least one seminar to the assembled faculty and graduate student body of his or her program.

CSAD 697. Research. 1-15 Hours.
PR: Consent. Research activities leading to thesis, problem report, research paper or equivalent scholarly project, or a dissertation. (Grading may be S/ U.).
CSAD 698. Thesis or Dissertation. 1-6 Hours.
PR: Consent. This is an optional course for programs that wish to provide formal supervision during the writing of student reports (698), or dissertations (798). Grading is normal.

CSAD 702. Anatomy/Physiology of the Ear. 3 Hours.
PR: Consent. Detailed study of the anatomy and physiology of the auditory and vestibular systems, and detailed investigation of physiological aspects of auditory and vestibular sensitivity.

CSAD 704. Instrumentation in Audiology. 3 Hours.
PR: Consent. A study of instrumentation utilized in the evaluation of hearing disorders, including calibration, maintenance, minor repair, and use of such instrumentation. The course includes foundational study of electricity and electrical components.

CSAD 706. Advanced Audiological Assessment 1. 4 Hours.
PR: CSAD 440 or consent. Audiological test procedures utilized in the evaluation of hearing loss including differential diagnosis, test administration and interpretation.

CSAD 709. Audiology Clinic 1. 2 Hours.
PR: Consent. Supervised clinical practicum that concerns the evaluation and treatment of children and adults with hearing disorders.

CSAD 710. Psychoacoustics. 3 Hours.
PR: Consent. Advanced study of the psychology of hearing.

CSAD 711. Audiological Assessment 2. 4 Hours.
PR: CSAD 706. An advanced study of evaluation procedures utilized in the evaluation of hearing disorders, including adaptation of test procedures for varying clinical populations.

CSAD 713. Advanced Audiological Rehabilitation. 3 Hours.
PR: CSAD 442 or consent. Identification of candidates for aural rehabilitation; evaluating degree of handicap; introduction to speech, language, education, and academic achievement of hearing impaired children; auditory, visual, and combined methods of rehabilitation; aural rehabilitation counseling.

CSAD 714. Neuroanatomy and Physiology. 3 Hours.
PR: CSAD 702. Advanced study of the structures of the auditory system and their function.

CSAD 715. Amplification 1. 3 Hours.
PR: CSAD 706 and Coreq: CSAD 716. A study of amplification systems including assistive listening devices, hearing aid evaluation procedures, and outcome measures.

CSAD 716. Amplification Lab 1. 1 Hour.
PR: CSAD 706 and Coreq: CSAD 715. Demonstration and introductory experience selecting, fitting and servicing basic hearing aids for individuals with hearing impairment.

CSAD 717. Pathology of the Auditory System. 3 Hours.
PR: CSAD 702. Detailed study of the nature and etiology of auditory system pathologies from the external ear to the auditory cortex and their audiological manifestation.

CSAD 718. Externship in Speech Pathology/Audiology. 1-9 Hours.
Supervised clinical practicum in selected work settings to provide students with a concentrated orientation to the professional work place. Coordination and evaluation is under the direction of faculty.

CSAD 720. Audiology Communication Skills. 3 Hours.
PR: CSAD 711 or consent. Introduction to communicating within the discipline of audiology. Emphasis is placed in treating special needs individuals with hearing/balance disorders and their families/caregivers.

CSAD 721. Amplification 2. 3 Hours.

CSAD 722. Amplification Lab 2. 1 Hour.
PR: CSAD 715 and CSAD 716 and Coreq: CSAD 721. Demonstrations and introductory experience selecting and fitting amplification systems for individuals with hearing impairment.

CSAD 723. Pediatric Audiology. 3 Hours.
PR: CSAD 706 or consent. A study of the development of the auditory response and hearing problems of early childhood. Students will learn the construction and application of specialized assessment techniques suitable for the pediatric patient.

CSAD 725. Physiological Measures. 3 Hours.
PR: CSAD 702 and CSAD 711 and CSAD 714 and Coreq: CSAD 726. Advanced study of the principles, methods and applications of otoacoustic emission and evoked potential measurements of auditory function.

CSAD 726. Physiological Measures Lab. 1 Hour.
PR: CSAD 711 and CSAD 714 and Coreq: CSAD 725. Demonstration and introductory experiences with otoacoustic emissions and evoked potential test procedures.
CSAD 729. Audiology Clinic 2. 2 Hours.
PR: Consent. Supervised clinical practicum that concerns the evaluation and treatment of children and adults with hearing disorders.

CSAD 731. Developmental Effects of Hearing Loss. 1 Hour.
This course addresses developmental speech, language, and other communicative disorders caused by hearing impairment. The role of the audiologist in the diagnosis and treatment of children with hearing loss is discussed.

CSAD 734. Auditory Processing Disorders. 3 Hours.
PR: CSAD 725. A study of auditory processing disorders, including evaluation methods and procedures, remediation theories and practices, as well as collaboration with other professions in management of the disorders.

CSAD 736. Vestibular Evaluation and Rehabilitation. 3 Hours.
PR: CSAD 702 and CSAD 714 and Coreq: CSAD 737. Advanced study of balance system function and dysfunction, the principles and methods of evaluating balance, and rehabilitation techniques.

CSAD 737. Vestibular Evaluation and Rehabilitation Lab. 1 Hour.

CSAD 738. Professional Issues. 2 Hours.
PR: Consent. Discussion of contemporary professional issues in audiology.

CSAD 739. Audiology Clinic 3. 2 Hours.
PR: CSAD 729. Supervised clinical practicum that concerns the evaluation and treatment of children and adults with hearing disorders.

CSAD 741. Audiology Business Management Practices. 3 Hours.
PR: Consent. This course is intended to provide an overview of concepts involved in the development and management of audiology practices. Specific attention will be paid to business planning, financial and managerial accounting, marketing, human resources management, and other audiology practice management topics involved in daily operations.

CSAD 743. Industrial Audiology. 3 Hours.
PR: CSAD 704. A study of various noise parameters and measurement techniques. Industrial hearing conversation procedures and the effects of noise on man.

CSAD 745. Clinic Supervision Seminar. 2 Hours.
An investigation into methods and techniques for clinical supervision in audiology.

CSAD 747. Cochlear and Brainstem Implants. 3 Hours.
PR: CSAD 711 and CSAD 722 and admission to the audiology program. This course includes information related to the role and responsibilities of the audiologist on the cochlear and auditory brainstem implants team, including theoretical principles, pre-implant assessments, programming, implant orientation and troubleshooting, and other follow-up services.

CSAD 749. Audiology Clinic 4. 3 Hours.
PR: CSAD 739. Supervised clinical practicum that concerns the evaluation and treatment of children and adults with speech-language disorders.

CSAD 750. Information Literacy in Communication Sciences and Disorders. 3 Hours.
PR: Consent. Practical and theoretical issues in the use of the professional literature to advance research and practice in audiology and speech-language pathology.

CSAD 752. Research Design in Communication Sciences and Disorders. 3 Hours.
PR: Consent. Practical and theoretical issues in the selection and implementation of quantitative and qualitative research designs common in communication sciences and disorders.

CSAD 754. Teaching and Supervision in Communication Sciences and Disorders. 3 Hours.
PR: Consent. Principles, concepts, and processes involved in effective classroom instruction and clinical supervision of students in audiology and speech-language pathology programs.

CSAD 759. Audiology Clinic 5. 5 Hours.
PR: CSAD 749. Supervised clinical practicum that concerns the evaluation and treatment of children and adults with hearing disorders.

CSAD 769. Audiology Clinic 6. 5 Hours.
PR: CSAD 759. Supervised clinical practicum that concerns the evaluation and treatment of children and adults with hearing disorders.

CSAD 770. Cultural Diversity in Communication Sciences and Disorders. 1 Hour.
PR: Consent and Suggested as CoReq: CSAD 771. Issues and differences related to communication sciences and disorders within diverse subcultures in the USA and Canada.

CSAD 771. Cultural Diversity Lab. 1 Hour.
PR: Consent. Suggested CoReq: CSAD 770. Hands-on experience related to practice in communication sciences and disorders within diverse cultural settings in the USA and Canada.

CSAD 779. Audiology Clinic 7. 6 Hours.
PR: CSAD 769. Supervised clinical practicum that concerns the evaluation and treatment of children and adults with hearing disorders.
CSAD 780. Global Initiatives in Communication Sciences and Disorders. 1 Hour.
PR: Consent and Suggested CoReq: CSAD 781. Issues and differences related to communication sciences and disorders in settings outside the United States and Canada.

CSAD 781. Global Initiatives Lab. 1 Hour.
PR: Consent and Suggested CoReq: CSAD 780. Hands-on experiences related to professional practices and perspectives in communication sciences and disorders outside the United States and Canada.

CSAD 789. Audiology Residency. 6-9 Hours.
PR: CSAD 779. A semester placement in a clinical facility supervised by a certified audiologist, performing all aspects of audiology as applicable to the facility.

CSAD 793. Special Topics. 1-6 Hours.
A study of contemporary topics selected from recent developments in the field.

CSAD 794. Seminar. 1-6 Hours.
Special seminars arranged for advanced graduate students.

CSAD 795. Independent Study. 1-9 Hours.
Faculty supervised study of topics not available through regular course offerings.

CSAD 797. Research. 1-15 Hours.
PR: Consent. Research activities leading to thesis, problem report, research paper or equivalent scholarly project, or a dissertation. (Grading may be S/U).

CSAD 798. Thesis or Dissertation. 1-6 Hours.
PR: Consent. This is an optional course for programs that wish to provide formal supervision during the writing of student reports (698), or dissertations (798). Grading is normal.

CSAD 799. Graduate Colloquium. 1-6 Hours.
PR: Consent. For graduate students not seeking coursework credit but who wish to meet residency requirements, use the University's facilities, and participate in its academic and cultural programs. Note: Graduate students who are not actively involved in coursework or research are entitled, through enrollment in their department's 699/799 Graduate Colloquium to consult with graduate faculty, participate in both formal and informal academic activities sponsored by their program, and retain all of the rights and privileges of duly enrolled students. Grading is S/U; colloquium credit may not be counted against credit requirements for masters programs. Registration for one credit of 699/799 graduate colloquium satisfies the University requirement of registration in the semester in which graduation occurs.

CSAD 900. Professional Development. 1-6 Hours.
Professional development courses provide skill renewal or enhancement in a professional field or content area (e.g. education, community health, geology.) The continuing education courses are graded on a pass/fail grading scale and do not apply as graduate credit toward a degree program.

CSAD 930. Professional Development. 1-6 Hours.
Professional development courses provide skill renewal or enhancement in a professional field or content area (e.g., education, community health, geology.) These tuition-waived continuing education courses are graded on a pass/fail grading scale and do not apply as graduate credit toward a degree program.