

Communication Sciences and Disorders (CSCD)

Course information contained within the Bulletin is accurate at the time of publication in August 2023 but is subject to change. For the most up-to-date course information, please refer to the Course Catalog.

CSCD 0815. Language in Society. 3 Credit Hours.

How did language come about? How many languages are there in the world? How do people co-exist in countries where there are two or more languages? How do babies develop language? Should all immigrants take a language test when applying for citizenship? Should English become an official language of the United States? In this course we will address these and many other questions, taking linguistic facts as a point of departure and considering their implications for our society. Through discussions and hands-on projects, students will learn how to collect, analyze, and interpret language data and how to make informed decisions about language and education policies as voters and community members. NOTE: This course fulfills the Human Behavior (GB) requirement for students under GenEd and Individual & Society (IN) for students under Core. Students cannot receive credit for this course if they have successfully completed any of the following: ANTH 0815/0915, Asian Studies 0815, Chinese 0815, EDUC 0815/0915, English 0815, Italian 0815, PSY 0815, Russian 0815, or Spanish 0815.

Course Attributes: GB

Repeatability: This course may not be repeated for additional credits.

CSCD 0816. The World of Sign Languages. 3 Credit Hours.

"But isn't sign language universal??" Nope! Sign languages are as different from - and similar to - each other as spoken languages are. Likewise, the lives of d/Deaf and hard-of-hearing (DHH) people around the world can look very different from one another, but often also share key similarities. How much of this is due to deafness itself, and how much is due to the ways that different societies respond to deafness? What do DHH people in different countries view as the most significant issues they face? Whose priorities are reflected in the policies and practices that shape what DHH people's lives look like? What kinds of changes would have the greatest beneficial impact? We'll examine these questions on a global scale through a framework that emphasizes the core principle of disability justice: nothing about us without us.

Course Attributes: GG

Repeatability: This course may not be repeated for additional credits.

CSCD 0841. The Attentive Mind. 3 Credit Hours.

In today's society, we are bombarded daily with more information than our brains can possibly process. It is widely accepted that attention plays a critical role in our ability to manage this information overload. In this course, we will review recent advances in understanding how attention works - how it determines the content of our conscious awareness and impacts our learning, problem-solving, interpersonal interaction, and social behavior. We will review common influences known to impede attention and examine how attention is compromised in certain clinical disorders. Given that Attention-Deficit/Hyperactivity Disorder (ADHD) is a widely known yet often misunderstood entity, we will review in some detail the fascinating historical origins and evolution of the diagnosis and examine the key controversies that have surrounded its conceptualization, identification, biological basis, and treatment. As there is no scientific consensus for some of the topics to be covered, the course will encourage critical thinking with the aim of separating fact and myth. We will then discuss techniques for improving attention as well as approaches to avoid.

Course Attributes: GB

Repeatability: This course may not be repeated for additional credits.

CSCD 1001. American Sign Language I. 3 Credit Hours.

The linguistic structure of American Sign Language is taught in this course. Students learn about American deaf culture and the history of the deaf in the United States. This course assumes no prior knowledge of American Sign Language or deaf culture. NOTE: Check school/college policy regarding the use of this course to fulfill the degree's foreign language requirements, if applicable.

Repeatability: This course may not be repeated for additional credits.

CSCD 1002. American Sign Language II. 3 Credit Hours.

This is the second semester of a two semester sequence in American Sign Language. This class teaches students to reach an advanced beginner level of proficiency in providing and understanding American Sign Language. The course also discusses deaf culture in a global framework. Students must have successfully completed American Sign Language I (CSCD 1001) to enroll in this course. NOTE: Check school/college policy regarding the use of this course to fulfill the degree's foreign language requirements, if applicable.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (CSCD 1001 or 'Y' in CRCS04)

CSCD 1003. American Sign Language III. 3 Credit Hours.

This intermediate level ASL course focuses on interactive experiences with language structures, functions, and vocabulary necessary for building narrative and conversational skills that enable efficient communication in ASL and Deaf Cultural contexts. The course also aims to expand students' range of cultural and personal topics of discussion, and to use the target language meaningfully and creatively.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in (CSCD 1002 or CSCD 1902)

CSCD 1004. American Sign Language IV. 3 Credit Hours.

This is the fourth in a sequence of ASL courses, which focuses on expanded interactive experiences with language structures, functions, and vocabulary necessary for efficient communication in ASL and Deaf Cultural contexts. Particular attention is given to enhanced fluency in the use of ASL classifiers, non-manuals, role shift, and spatial mapping within both conversational and more formal situations. Attention is also given to expanding the range of cultural and personal topics of discussion in meaningful and creative ways.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C- in CSCD 1003.

CSCD 1107. Introduction to Communication Disorders. 3 Credit Hours.

This undergraduate course provides a basic introduction to the profession of speech-language pathology and audiology, and a broad survey of the myriad of communication disorders within the field. An overview of the biology, physics and typical developmental milestones of speech and language will provide the background necessary for understanding and discussion of communication disorders and deviations. Assessment and treatment of communication disorders will be considered within the context of linguistic and cultural diversity, evidence-based practice and case studies.

Repeatability: This course may not be repeated for additional credits.

CSCD 1108. Introduction to Linguistics. 3 Credit Hours.

A survey of methods and results in the study of natural language syntax, phonology, semantics, historical change, and dialect variation. English is the primary language of investigation, but facts from other languages are introduced as appropriate. NOTE: Only one of the following two courses may be credited toward the baccalaureate degree: CSCD 1108 (0108); English 2821 (0111).

Repeatability: This course may not be repeated for additional credits.

CSCD 1222. Indigenous Languages: Introduction to Language Diversity, Discrimination, and Endangerment. 3 Credit Hours.

UNESCO projects that 50-90% of the approximately 7,000 languages spoken around the world will become extinct in less than 100 years. This course explores theoretical issues such as nativeness, linguistic diversity and discrimination, and language endangerment and revitalization by considering such questions as: What causes extinction of a language? Should all endangered languages be protected? What can be done to save indigenous languages from becoming extinct? How will the loss of indigenous languages affect its speakers and the world? What is the impact of mass media in portraying and perpetuating stereotypes related to languages and their speakers?

Course Attributes: SI

Repeatability: This course may not be repeated for additional credits.

CSCD 1296. Studies in Psycholinguistics. 3 Credit Hours.

This course leads students through the domains of psycholinguistic research and study with particular emphasis on how subconscious knowledge of linguistic systems is put into use in the comprehension and production of language. Topics such as language acquisition, literacy, and multilingualism are also addressed as they fit into the larger topic of language in the mind. This course is writing intensive and its assignments are designed for students to practice and revise writing in the language sciences. Specifically, students are instructed on, and practice themselves, methods of scientific thinking, critical examination of primary literature, and written argumentation. Students will acquire information literacy skills and be familiarized with the American Psychological Association (APA) writing style and relevant professional terminology.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Spch Lang Hearing Science.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (CSCD 1108 or 'Y' in CRCS01)

CSCD 1901. Honors American Sign Language 1. 3 Credit Hours.

This is an introductory course in American Sign Language that emphasizes beginning receptive and expressive skills. The linguistic structure of American Sign Language (ASL) is emphasized as students gain practical skills. The honors course also emphasizes the ways in which ASL differs from other signed languages used around the world and explores Deaf culture and history. This course assumes no prior knowledge of American Sign Language or Deaf culture. NOTE: Check school/college policy regarding the use of this course to fulfill the degree's foreign language requirements, if applicable.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

CSCD 1902. Honors American Sign Language 2. 3 Credit Hours.

This is the second semester of a two-semester Honors sequence in American Sign Language. Students in this class achieve an advanced beginner level of expressive and receptive skills in American Sign Language. This course emphasizes genetic and social factors that lead to and follow from a high incidence of deafness within selected communities. Students must have successfully completed Honors American Sign Language 1 (CSCD 1901) to enroll in this course. NOTE: Check school/college policy regarding the use of this course to fulfill the degree's foreign language requirements, if applicable.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (CSCD 1901 or 'Y' in CRCS06)

CSCD 2011. American Deaf Culture. 3 Credit Hours.

This course addresses the difference between the medical view of deafness as a disability, focusing on hearing loss, and the cultural view, focusing on the language and culture of the Deaf. The course explores the relation between language and culture, the history of the Deaf in America, Deaf art, literature and folklore in addition to issues surrounding deaf education, bilingualism, and how cochlear implants are viewed by the Deaf community. Students need not have any experience with American Sign Language to take this course.

Repeatability: This course may not be repeated for additional credits.

CSCD 2022. Medical American Sign Language. 1 Credit Hour.

This elective course is designed to teach students, who have already learned basic American Sign Language (ASL), how to communicate with Deaf individuals regarding commonly-occurring health conditions. The course reinforces basic rules of grammar, fingerspelling, and cultural behaviors of the Deaf community, and goes on to focus on ASL vocabulary and phrases needed in a variety of medical situations. We will take information written about specific health conditions, identify the important elements and organize the information into symptoms, causes, and treatments.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (CSCD 1001, CSCD 1901, 'Y' in CRCS04, or 'Y' in CRCS06)

CSCD 2049. Language and the Brain. 3 Credit Hours.

This course introduces students to the major issues and results in neurolinguistics, the study of the representation of language in the brain. Major topics include localization of language function in the brain, the use of linguistic knowledge in producing and comprehending words and sentences, and the effects of brain damage on language behavior.

Repeatability: This course may not be repeated for additional credits.

CSCD 2108. Phonetics. 3 Credit Hours.

This course is a comprehensive introduction to phonetics, the branch of linguistics concerned with the mechanics of pronunciation and the notation used to record it. Learning outcomes of the course include: (1) acquisition of a body of knowledge relating to phonetic taxonomy, (2) mastery of techniques of data description and analysis in phonetics (the study of speech production and perception), and to a certain extent (3) honing of analytical reasoning skills. Upon successful completion of this course, the student will be equipped with phonetic transcription tools for use in professional settings, as well as for more advanced coursework in phonetic analysis in a clinical research setting, and for future coursework in theoretical phonology.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (CSCD 1108 or 'Y' in CRCS01)

CSCD 2202. Sociolinguistics. 3 Credit Hours.

Sociolinguistics connects languages with the societies and social situations in which they are used. We study regional and social dialects and the judgments listeners make when they hear language and its variations. This course includes the study of African American Vernacular English as well as other dialects and variants of English. We also study pidgins and creoles and the social situations in which they evolve and their relation to so-called "full-fledged" languages.

Repeatability: This course may not be repeated for additional credits.

CSCD 2203. Anatomy and Physiology of the Speech and Hearing Mechanism. 3 Credit Hours.

In order to understand how speech is produced and perceived, it is critical to have knowledge of the anatomy (structure) and understanding of the physiology (function) of the speech and hearing mechanism. This course provides students with the information. The course content is vital as a foundation for the study of speech science, hearing science, and human neuroscience. Together, these courses are vital to the understanding of typical and atypical (delayed/disordered) speech, language, and hearing.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Spch Lang Hearing Science.

Repeatability: This course may not be repeated for additional credits.

CSCD 2204. The Linguistic Structure of Sign Language. 3 Credit Hours.

This 3-credit course examines the grammatical of American Sign Language (ASL) and other sign languages of the world in light of linguistic theory and research. The course will focus on iconicity, arbitrariness, and basic parameters of sign description, as well as ASL phonology, morphology, syntax, semantics and pragmatics. This course will also examine the historical development of ASL and its "genetic" relationship to other languages; its artistic use; the many sociolinguistic factors influencing its dialect variation by region, ethnicity, and social factors unique to the deaf experience, as well as the effects of bimodal bilingualism and other forms of contact with spoken, written and signed English.

Repeatability: This course may not be repeated for additional credits.

CSCD 2301. Development of Speech and Language. 3 Credit Hours.

This is an introductory course on normal language development from birth through adolescence. Child speech and language acquisition in this course is investigated and related to broader issues in cognitive science, development, and the theory of knowledge. Theories of language acquisition and cognitive and social foundations for language and communication will be explored. Biological, neurological, sensory, psychological, developmental, and cultural influences on language development will be discussed. We will also consider other topics in less detail: the nature and extent of individual and cross-linguistic differences in the course of acquisition (including bilingual/second language acquisition), the nature of deficits and delays in language acquisition, the development of reading, and changes in linguistic competence and performance at times of life following the primary acquisition period for language.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Spch Lang Hearing Science.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (CSCD 1108 or 'Y' in CRCS01)

CSCD 2303. Foundations in Hearing Science. 3 Credit Hours.

This course provides an overview of the scientific foundations and current understanding of the sense of hearing. Following a review of the physics of sound, sound measurement and basic psychoacoustics, students review and extend their knowledge of the anatomy, physiology and function of the peripheral and central auditory system. Through this exploration, students acquire an understanding of how the auditory system decodes variations in sound parameters in the process of mediating sensory/perceptual experience and a variety of auditory perceptual phenomena. Students learn how damage or maldevelopment of various components of the auditory system may lead to a variety of impairments in hearing, localizing and recognizing sounds.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Spch Lang Hearing Science.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in CSCD 2203.

CSCD 3203. Audiology. 3 Credit Hours.

An introductory course in the field of audiology, including assessment of disorders of the auditory system, acoustic measurements, testing environment and testing protocol, electrophysical measurements, test interpretation, and professional development. The Audiology course is an intermediate level study of hearing, the assessment of hearing impairment, and hearing disorders. Knowledge of basic concepts in the physics of sound and anatomy and physiology of the auditory system is assumed (CSCD 2403 Foundations in Hearing Science is prerequisite).

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Spch Lang Hearing Science.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in CSCD 2303.

CSCD 3222. Introduction to Aphasia. 1 Credit Hour.

Approximately one million Americans have aphasia, which is a language and communication impairment that sometimes results from strokes. This course will explore multiple facets of aphasia, including treatment approaches for this population. Students will learn about the etiology, characteristics, and types of aphasia as well as evidence-based strategies that can be used to facilitate communication with this population. Permission of instructor is required to register.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Undergraduate.

Degree Restrictions: Must be enrolled in one of the following Degrees: Bachelor of Arts, Non-Degree Undergrad.

Co-requisites: CSCD 3287.

Repeatability: This course may not be repeated for additional credits.

CSCD 3225. Syntax of Natural and Machine Languages. 3 Credit Hours.

In this course, we will explore sentence structure (syntax) while comparing and contrasting the language of humans and the language of machines. Both types of language systems have the goal of communication and make use of structure. However, differences are also significant as aspects of natural language are not programmable in currently available machine languages. In this course, you will be exposed to and will utilize the syntactic, semantic, morphological, and sometimes, phonological tests that argue for the modules that comprise contemporary syntactic theory and that underlie the development of programming languages.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (CSCD 1108 or 'Y' in CRCS01)

CSCD 3232. Introduction to Aphasia and Evidence-Based Communicative Interventions. 3 Credit Hours.

Approximately one million Americans have aphasia, which is a language and communication impairment that sometimes results from strokes. This course will provide the opportunity to learn about aphasia, including treatment approaches for this population. Students will learn about the etiology, characteristics, and types of aphasia as well as evidence-based strategies that can be used to facilitate communication with this population. Students will complete a field project in which they will work with people who have aphasia. Students will be assigned to specific field projects based on availability, schedules, and preferences. All field projects will be carried out on Temple's campus at sites such as The Philadelphia Aphasia Community at Temple (PACT) and Temple's Speech-Language-Hearing Center (TUSLHC). Registration is by permission only; registration is restricted to students with an overall GPA of 3.0 and above.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Repeatability: This course may not be repeated for additional credits.

CSCD 3235. Human Neuroscience. 4 Credit Hours.

Introduction to the anatomy, organization, and function of the human nervous system, with an emphasis on the disorders that result from damage to the brain.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Cognitive Neuroscience, Linguistics, Spch Lang Hearing Science.

Repeatability: This course may not be repeated for additional credits.

CSCD 3236. Cultural and Linguistic Diversity: Focus on Autism. 3 Credit Hours.

Autism occurs across all cultural and linguistic groups, but services to diverse populations are notably limited. This course will provide the opportunity to learn about autism, including treatment approaches for this population, and about service to the under-served immigrant community in Philadelphia. We will begin the semester by covering information about cultural and linguistic competence and the services provided by a range of professionals. We will also discuss the types of strategies that can be used to facilitate communication. Students will complete field projects in which they will work with families where a child has been diagnosed with autism. These projects will occur in community settings and at Temple University.

Repeatability: This course may not be repeated for additional credits.

CSCD 3287. Aphasia Field Project. 2 Credit Hours.

Approximately one million Americans have aphasia, which is a language and communication impairment that sometimes results from strokes. This course is designed to be taken at the same time as "Introduction to Aphasia." Students will complete a field project in which they will work with people who have aphasia. Students will be assigned to specific field projects based on availability, schedules, and preferences. All field projects will be carried out on Temple's campus at sites such as The Philadelphia Aphasia Community at Temple (PACT) and Temple's Speech-Language-Hearing Center (TUSLHC). Registration is by permission only.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Undergraduate.

Co-requisites: CSCD 3222.

Repeatability: This course may not be repeated for additional credits.

CSCD 3304. Clinical Phonetics. 3 Credit Hours.

This course engages students in the scientific study of speech sounds with a focus on clinical application. The course will involve transcription of different types of speech, including adult and child speech, and typical and disordered speech. The emphasis will be on English (including its dialectal variants), but other languages will also be discussed at various points. The course will include both lecture format and lab format. Lectures will cover important knowledge relevant to clinical phonetics. Class activities will be devoted to transcription practice and further illustration of concepts discussed in lecture.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (CSCD 2209 or 'Y' in CRCS03)

CSCD 3305. Teaching and Learning: The Preceptor Experience. 2 Credit Hours.

This course offers students the opportunity to learn about both teaching and learning in a hands-on environment. Each student is assigned to work as a preceptor for an undergraduate class in which the student has previously earned an 'A.' Preceptors will provide review sessions and tutoring support (during preceptor office hours) to students enrolled in the class. In addition, preceptors will attend all meetings of the class for which they are precepting, as well as weekly 1-hour lectures focusing on learning styles, pedagogical methods (such as collaborative learning), and ways of modifying information presented to different individuals. These skills are critical to working with people with communication disorders.

Department Restrictions: Must be enrolled in one of the following Departments: CPH:Communication Science.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: minimum GPA of 3.5 in: courses numbered 0700 to 4999.

CSCD 3382. Independent Study in Communication Sciences. 1 to 3 Credit Hour.

Creative projects, including research and design, which are supervised on an individual basis and which fall outside the scope of formal courses.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Linguistics, Spch Lang Hearing Science.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Repeatability: This course may be repeated for additional credit.

CSCD 3403. Foundations in Speech Science. 3 Credit Hours.

This course provides students with an in-depth knowledge of speech acoustics and speech analysis, focusing on typical speakers, with an introduction to those with delays and disorders. In addition to the study of segmental aspects of speech, the course also addresses sources of variability including coarticulation, speaking rate, stress, syllable organization, etc. Further understanding of the content is enhanced by the inclusion of lab work in which students record, analyze, and explain acoustic characteristics of speech.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Spch Lang Hearing Science.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in CSCD 2108, CSCD 2203, and CSCD 2303.

CSCD 3421. Multilingualism. 3 Credit Hours.

This course explores multilingualism through discussion of topics such as K-12 education, cognitive development, and code-switching. A variety of language pairings are incorporated into the course, including both spoken and signed languages. Students have the opportunity to complete a more comprehensive set of asynchronous modules on multilingualism or select a research-based learning experience. Core course content is the same for all students. Those selecting a research-based learning experience will complete a lab-based practical experience or research project providing students with the opportunity to experience real research ongoing in the Department of Communication Sciences and Disorders. Those choosing the comprehensive asynchronous modules on multilingualism will investigate the readings and topics in greater details through response papers and investigations of related literature. Students do not need to be multilingual to take this course. Research-based experiences require instructor approval.

Repeatability: This course may not be repeated for additional credits.

CSCD 3503. Foundations in Human Neuroscience. 3 Credit Hours.

This course will provide a broad overview of human neuroscience beginning with an overview of historical aspects proceeding through the neuron doctrine and ultimately covering the anatomy and physiology of the human brain. Students will learn about neurological disorders and neural measurement techniques. It is strongly recommended that you also complete a biology course before taking this course.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Spch Lang Hearing Science.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in CSCD 3403.

CSCD 3730. Topics in Linguistics. 3 Credit Hours.

CSCD 3730 is a 3-credit undergraduate elective that will challenge students to think critically and analytically about pressing issues and questions in Linguistics. Topics will change from semester to semester, enabling students to take the course up to 3 times in order to explore the range of offerings. This course will be of special interest to students in Speech-Language-Hearing, Linguistics, Foreign Languages, English, and Anthropology. The course is also open to those in other disciplines.

Class Restrictions: Must be enrolled in one of the following Classes: Junior 60 to 89 Credits, Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C in (CSCD 1108, ENG 2821, 'Y' in CRCS01, or 'Y' in CREN01)

CSCD 3900. Honors Special Topics in Communication Sciences and Disorders. 3 Credit Hours.

This Honors Elective course in CSCD will challenge students to think critically and analytically about pressing issues and questions in Communication Sciences and Disorders. The topics will change from semester to semester, enabling students to take the course up to 3 times in order to explore different topics.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may be repeated for additional credit.

CSCD 4221. Speech and Language Disorders: Children. 3 Credit Hours.

This class focuses on pediatric speech and language disorders that are treated by Speech Language Pathologists. This class will attempt to provide both breadth and depth of exposure to the field of speech language pathology. To that end, the course will cover speech and language disorders in children. However, the specific disorders covered may vary from semester to semester. Within each disorder, we will discuss the clinical presentation, diagnosis, and treatment of the disorder with a focus on evidence-based practices. Aspects of interprofessional education will be addressed.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Spch Lang Hearing Science.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (CSCD 1107 or 'Y' in CRCS05), CSCD 2108, and CSCD 2301.

CSCD 4222. Speech and Language Disorders: Adults. 3 Credit Hours.

This class focuses on speech and language disorders in adults. Within each disorder, we will discuss the clinical presentation, diagnosis, and treatment of the disorder with a focus on evidence-based practices. Aspects of inter-professional education will be addressed.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Spch Lang Hearing Science.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (CSCD 1107 or 'Y' in CRCS05), CSCD 2108, and CSCD 2301.

CSCD 4302. Aural Rehabilitation. 3 Credit Hours.

This course reviews basic communication sciences and their role in the development of (re)habilitative strategies for use with both adults and children with hearing impairment. Students will have an introduction to theories and procedures used to provide aural and audiological rehabilitation. This course will provide an overview of the rehabilitation available for both adults and children with hearing impairment and the impact of new technologies on therapy and teaching. Current research and theory in aural rehabilitation and counseling will be presented.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Spch Lang Hearing Science.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in CSCD 2303 and CSCD 3203.

CSCD 4496. Diagnosis and Treatment in Speech-Language Pathology. 3 Credit Hours.

CSCD 4496 is the capstone course for communication sciences and disorders majors. This is a writing intensive course designed to provide information about the principles underlying the diagnostic and therapeutic processes in the area of communication disorders and to help the student develop writing skills needed for clinical documentation and report writing. Throughout the semester, students will participate in guided observations of clients in a professional setting with an ASHA-certified Speech-Language Pathologist (i.e., CCC-SLP).

Field of Study Restrictions: Must be enrolled in one of the following Majors: Spch Lang Hearing Science.

Class Restrictions: Must be enrolled in one of the following Classes: Senior 90 to 119 Credits, Senior/Fifth Year 120+ Credits.

Course Attributes: WI

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in CSCD 1296, CSCD 2108, and CSCD 2301.

CSCD 4730. Topics in Communication Sciences and Disorders. 1 to 3 Credit Hour.

Special topics in Communication Sciences and Disorders will change from semester to semester. Topics and instructors for a specific semester will be announced by the department and posted on the CSCD Department's web site and undergraduate listserv. This course is variable credit ranging from 1 to 3 credits.

Repeatability: This course may be repeated for additional credit.

CSCD 4979. Honors in Communication Sciences. 3 Credit Hours.

Students are expected to write and support a major paper under the supervision of a designated honors advisor. The work must be of honors quality and accepted by the honors advisor and a second reader. Students who complete this course satisfactorily, perform 20 hours of volunteer work in consultation with the departmental honors advisor, and meet the other requirements described in the Bulletin about CSCD programs will graduate with distinction in Communication Sciences and Disorders. NOTE: Registration in CSCD 4979 requires a GPA is 3.50 or better both within the major and overall, and having no grade below B in the major. Eligible seniors should consult the Undergraduate Program Director, Dr. Krakow, for details.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Linguistics, Spch Lang Hearing Science.

Cohort Restrictions: Must be enrolled in one of the following Cohorts: SCHONORS, UHONORS, UHONORSTR.

Course Attributes: HO

Repeatability: This course may not be repeated for additional credits.

CSCD 5411. Psycholinguistics. 3 Credit Hours.

This course presents information about the processing and use of language including language acquisition, lexical retrieval, syntactic parsing, and language production in children and adults with normal and disordered communication systems.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

CSCD 5505. Issues in Linguistics. 3 Credit Hours.

This course critically investigates major intellectual trends in the recent history of linguistics and their relationship to contemporary issues in philosophy, psychology, and anthropology.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

CSCD 5511. Bilingualism: A Lifespan Perspective. 1 Credit Hour.

In the field of speech and language pathology, culturally and linguistically diverse (CLD) children have a higher rate of misdiagnosis than monolingual Mainstream American English (MAE) speaking children of the same age, due to biased standardized assessments and the need for more culturally-competent clinicians to evaluate and treat these populations. This course is designed to provide students with a survey of the typical bilingual experience across the lifespan. Students will learn how bilingualism is understood across contexts, including different language parameters (i.e., semantics, phonology, syntax), as well as acquisition, disorder and typical aging. Content will be presented from clinical, developmental, neurolinguistic and sociolinguistic perspectives.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

CSCD 5521. Foundations in Child Language Disorders. 3 Credit Hours.

This course reviews theory, research and clinical issues concerning disorders of language in young children. Major categories of language disorder such as emotional disturbance, mental retardation, hearing loss, and specific language impairment are considered. Treatment and assessment techniques are reviewed and evaluated.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Spch Lang Hearing Science.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites:

CSCD 3301|Minimum Grade of C|May not be taken concurrently.

CSCD 5522. Foundations and Management in Phonological Disorders. 3 Credit Hours.

This course presents information and experiences to prepare students to assess and treat individuals with phonological disorders.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Spch Lang Hearing Science.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

CSCD 5524. Foundations and Management of Motor Speech Disorders. 3 Credit Hours.

This course covers assessment, diagnosis, and management of motor speech disorders such as dysarthria and apraxia of speech in children and adults.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Spch Lang Hearing Science.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in CSCD 5522.

CSCD 5525. Foundations and Management in Fluency. 3 Credit Hours.

This course surveys the characteristics and theories on the nature of stuttering and reviews the principles and practices of assessment and intervention strategies.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites:

CSCD 3233|Minimum Grade of C|May not be taken concurrently.

CSCD 5527. Foundations and Rehabilitation of Language and Cognitive Disorders in Aphasia. 3 Credit Hours.

This course provides an overview of acquired neurogenic language disorders and the ways in which these disorders have historically been described and explained. Approaches to diagnosis and treatment of adult language disorders and the evolution from neuroanatomical to cognitive and social models are discussed. The course begins with a review of the etiology and neuroanatomy underlying aphasic syndromes. The classical, neuroanatomical view of acquired language disorder is described, followed by an overview of syndrome classification. This is followed by a detailed review of cognitive-psycholinguistic models of language and communication disorders as well as the life participation approach to rehabilitation of communication disorders. The remainder of the course provides a review of specific language disorders associated with neurological etiologies (especially stroke-based aphasia), their effects on comprehension and production of oral and written language and specific intervention approaches. The course also offers a review of current research that focuses on impairments of cognitive processes that support language processing such as short-term memory (STM) and executive processing.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Spch Lang Hearing Science.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

CSCD 5528. Voice Disorders: Theory and Analysis. 3 Credit Hours.

This course acquaints the student with the symptomatology and disorder complexes related to phonation and with the philosophies and methods used in the treatment of voice disorders, including cleft palate and alaryngeal voice.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Spch Lang Hearing Science.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites:

(CSCD 3233|Minimum Grade of C|May not be taken concurrently
AND CSCD 3235|Minimum Grade of C|May not be taken concurrently)

CSCD 5531. Applications in Audiology. 1 Credit Hour.

Practical labwork with audiometric equipment, test procedures, administration interpretation, and principles of case management and report writing.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Spch Lang Hearing Science.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites:

CSCD 4301|Minimum Grade of C|May not be taken concurrently.

CSCD 5532. Foundations and Management in Hearing Disorders. 3 Credit Hours.

This course reviews basic communication sciences and their role in the development of (re)habilitative strategies for use with both adults and children with hearing impairment.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites:

CSCD 4301|Minimum Grade of C|May not be taken concurrently.

CSCD 5533. Principles of Audiology. 3 Credit Hours.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

CSCD 5534. American Sign Language I. 3 Credit Hours.

This introductory course provides the necessary skills for basic communication in American Sign Language (ASL). The relationship between manual and oral systems and the implications of deafness on communication are considered.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

CSCD 5546. Research Methods in Communication Sciences and Disorders. 3 Credit Hours.

Science and clinical practice require the ability to review, analyze, understand, evaluate, and synthesize information from the scientific literature. The purpose of this course is to introduce you to the scientific process and research methods used in speech, language, and hearing sciences. The major goal of this course is to prepare you to be a critical consumer of the research literature and become familiar with evidence-based practice in communication sciences and disorders. The course will focus on the types of research, research designs, and research methods that are commonly used to investigate normal and disordered human communication.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Spch Lang Hearing Science.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

CSCD 5634. American Sign Language II. 3 Credit Hours.

This course continues the basic introduction to American Sign Language (ASL) through exploration of the language used by Deaf people in America, including the syntax, grammar, and vocabulary necessary in ASL. In addition various aspects of Deaf culture will also be discussed.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in CSCD 5534.

CSCD 5729. Language and Deafness. 3 Credit Hours.

This introduction to deaf studies explores the linguistic structure of American Sign Language, how modality of production-perception shapes language organization (comparisons of signed and spoken languages), deaf culture, deafness and minority cultures, deafness and child development, issues and options in deaf education, deafness in old age.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

CSCD 5730. Topics in Speech, Language and Hearing. 1 to 3 Credit Hour.

Special topics in the area of Speech Language Pathology which change from semester to semester are presented. Topics and instructors for a specific semester are announced by the department and posted on the CSCD Department's listserv and web site.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may be repeated for additional credit.

CSCD 8147. Basic Practicum in Audiology. 1 Credit Hour.

Basic practicum in audiology at Temple University Speech and Language Center or one of the field placements with emphasis on basic audiologic testing and interpretation.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Spch Lang Hearing Science.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

CSCD 8187. Basic Practicum in Diagnostic Processes. 1 to 3 Credit Hour.

This course introduces assessment of speech-language disorder, emphasizing assessment tools, procedures, rationales, and interpretation.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Spch Lang Hearing Science.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may be repeated for additional credit.

Pre-requisites:

CSCD 4396|Minimum Grade of C|May not be taken concurrently.

CSCD 8287. Basic Practicum in Therapy Processes. 1 to 3 Credit Hour.

This is an introduction to remediation of speech-language disorders, emphasizing therapy methodologies and techniques, procedures, and rationales based on evidence-based practice, and analysis and interpretation of therapy outcomes.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Spch Lang Hearing Science.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may be repeated for additional credit.

Pre-requisites:

CSCD 4396|Minimum Grade of C|May not be taken concurrently.

CSCD 8601. Advanced Syntax. 3 Credit Hours.

This course studies recent advances in syntactic theory, focusing on the tension between universal grammar and the properties of particular languages.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

CSCD 8721. Foundations and Management in Augmentative and Alternative Communication. 1 Credit Hour.

This course provides information on the identification of individuals who would benefit from Augmentative and Alternative Communication, on assessment of functional communication needs across environments, and on current regulations and documentation to obtain funding for a speech-generating device.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Spch Lang Hearing Science.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

CSCD 8722. Foundations and Management in Dysphagia. 3 Credit Hours.

An overview of swallowing processes and disorders specific to the adult and pediatric populations. Assessment and treatment will be discussed.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Spch Lang Hearing Science.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

CSCD 8723. Seminar in Speech Language Hearing. 1 to 3 Credit Hour.

This course provides students with in-depth and advanced information and experiences in a variety of topics in Speech, Language, Hearing. Students will review the foundation of anatomy, physiology or function of speech, language or hearing, its etiologies, and have hands on practice with professions in the field. Topics change from semester to semester and are presented in an intensive seminar format over a weekend (Friday half day and Saturday all day).

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may be repeated for additional credit.

CSCD 8725. Disorders of Articulation and Phonology: Special Populations. 2 Credit Hours.

This course presents information and experiences to prepare the speech and language specialist to assess, diagnose and treat persons with articulation disorders associated with cleft palate, apraxia, dysarthria and oral myofunctional disorders.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

CSCD 8726. Management of Child Language Disorders. 3 Credit Hours.

This course presents information and specific skills to prepare the speech and language specialist to function in the educational setting in a variety of roles.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Spch Lang Hearing Science.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in CSCD 5521.

CSCD 8727. Written Language Development and Disorders. 2 Credit Hours.

This course focuses on the developmental processes of written language acquisition and written language disorders (dyslexia). Special attention to phonological awareness and the cognitive processes underlying this awareness.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Spch Lang Hearing Science.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

Pre-requisites: Minimum grade of C in (CSCD 5521, CSCD 5522, and CSCD 8726)

CSCD 8728. Voice Disorders: Spec Pop. 2 Credit Hours.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

CSCD 8729. Neurocognitive Language Disorders. 3 Credit Hours.

This course will provide a broad introduction to neurocognitive deficits of language in dementia, traumatic brain injury, and right hemisphere damage. We will review neural substrates of human memory and executive functioning and examine how brain damage compromises language and cognition. We will examine assessments of language and memory and cover contemporary theories of neuropsychological rehabilitation.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Spch Lang Hearing Science.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

CSCD 8738. Proj in Spch Lang Hear. 1 Credit Hour.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

CSCD 8824. Assessment and Treatment of Diverse Populations. 2 Credit Hours.

This course offers concentrated study of language development and disorders in culturally and linguistically diverse populations. Less biased assessment and intervention approaches are discussed.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Spch Lang Hearing Science.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may not be repeated for additional credits.

CSCD 8830. Seminar In CSD. 1 Credit Hour.

This course focuses on preparing students to work with children from birth through six years in an interdisciplinary environment.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Spch Lang Hearing Science.

Class Restrictions: May not be enrolled in one of the following Classes: Graduate 0 to 17 Credits.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may be repeated for additional credit.

CSCD 9087. Practicum in Hearing. 1 Credit Hour.

This basic-level practicum exposes students to the problems and therapeutic measures experienced by and available for hearing impaired individuals from childhood through adulthood in various habilitative/rehabilitative settings.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may be repeated for additional credit.

CSCD 9187. Advanced Practicum in Voice. 1 Credit Hour.

This advanced-level practicum at a field affiliation or at Temple University Speech and Hearing Center (stuttering and voice disorders) focuses on in-depth diagnosis and treatment of a specific disordered population, e.g., L.D., M.R., post-CVA, stuttering, voice, and hearing impairment.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Spch Lang Hearing Science.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C in CSCD 5528.

CSCD 9287. Advanced Practicum in Fluency. 1 Credit Hour.

This advanced-level practicum offers an in-depth focus on assessing and treating persons who stutter.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Spch Lang Hearing Science.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C in CSCD 5525.

CSCD 9387. Advanced Field Practicum in Speech Language Pathology - Child. 3 Credit Hours.

This advanced-level practicum at a field affiliation focuses on in-depth diagnosis and treatment of communication and/or swallowing disorders in a specific disordered child population, i.e., SLL, L.D., M.R., stuttering, voice, hearing impairment, etc. On-site for three days or more.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Spch Lang Hearing Science.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C in CSCD 8726.

CSCD 9388. Capstone Field Practicum in Speech Language Pathology - Pediatric. 3 Credit Hours.

This capstone-level practicum at a field affiliated site focuses on in-depth diagnosis and treatment of communication and/or swallowing disorders in a specific disordered pediatric population, i.e., LD, MR, post CVA, stuttering, voice, hearing impairment, etc. Students can plan to be on-site for at least three days per week.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Spch Lang Hearing Science.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of B- in (CSCD 9387 or CSCD 9487)

CSCD 9487. Advanced Field Practicum in Speech Language Pathology - Adult. 3 Credit Hours.

Advanced level practicum at a field affiliation with focus on in-depth diagnoses and treatment of communication and/or swallowing disorders in a specific disordered adult population, e.g., L.D., M.R., post-CVA, stuttering, voice, and hearing impairment. The practicum takes place on-site for three days or more.

Field of Study Restrictions: Must be enrolled in one of the following Fields of study: Spch Lang Hearing Science.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C in CSCD 5527 and CSCD 8729.

CSCD 9488. Capstone Field Practicum in Speech Language Pathology - Adult. 3 Credit Hours.

This capstone-level practicum at a field affiliated site focuses on in-depth diagnosis and treatment of communication and/or swallowing disorders in a specific disordered adult population, i.e., LD, MR, post CVA, stuttering, voice, hearing impairment, etc. Students can expect to be on site for at least three days/week.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Spch Lang Hearing Science.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of B- in (CSCD 9387 or CSCD 9487)

CSCD 9582. Independent Study - Communication Sciences. 1 to 6 Credit Hour.

Qualified students are permitted to conduct investigations and/or in-depth study under supervision of department faculty.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may be repeated for additional credit.

CSCD 9587. Advanced Practicum in Aphasia. 2 Credit Hours.

This advanced-level practicum focuses on in-depth assessment and treatment of persons with aphasia and/or cognitive-linguistic deficits.

Field of Study Restrictions: Must be enrolled in one of the following Majors: Spch Lang Hearing Science.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Co-requisites: CSCD 5527.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of C in CSCD 4396.

CSCD 9980. Dissertation Seminar. 1 to 6 Credit Hour.

Current topics in speech-language-hearing research are explored.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may be repeated for additional credit.

CSCD 9994. Preliminary Examination Preparation. 1 to 6 Credit Hour.

This course guides study for exams preliminary to a dissertation. Prior to enrollment, students must have completed all required coursework for the Ph.D. and obtain the approval of the Ph.D. Program Director. Students must be enrolled to take the required preliminary examinations.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may be repeated for additional credit.

CSCD 9996. Thesis Seminar. 1 to 6 Credit Hour.

The preparation of a master's thesis is the goal of this course.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may be repeated for additional credit.

CSCD 9998. Pre-Dissertation Research. 1 to 6 Credit Hour.

Development of a dissertation proposal is undertaken. Registration is required each semester after preliminary examination while a student is researching the dissertation proposal.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of P in CSCD 9994.

CSCD 9999. Dissertation Research. 1 to 6 Credit Hour.

This course is limited to Ph.D. candidates who have completed and defended a dissertation proposal that is filed with the Graduate School by the last day to add a course in the semester. Continuous registration in 9999 fall and spring is required until the dissertation is successfully defended.

Level Registration Restrictions: Must be enrolled in one of the following Levels: Graduate.

Student Attribute Restrictions: Must be enrolled in one of the following Student Attributes: Dissertation Writing Student.

Repeatability: This course may be repeated for additional credit.

Pre-requisites: Minimum grade of P in CSCD 9998.