NEURODIAGNOSTIC TECHNOLOGY (NDT)

NDT A110 **5 Units (54 lecture hours; 108 lab hours)**
Basic Electroencephalography
Prerequisite(s): Acceptance into the Neurodiagnostic Technology program.

Grading Mode: Standard Letter
Transfer Credit: CSU.

Fundamentals of EEG, including application of electrodes, basic wave forms, artifacts, and introduction to the EEG machine. All enrollees must be accepted into the Neurodiagnostic program.

NDT A115 **4 Units (54 lecture hours; 54 lab hours)**
Advanced Electroencephalography
Prerequisite(s): NDT A110.

Grading Mode: Standard Letter
Transfer Credit: CSU.

Introduction to the abnormal electroencephalogram (EEG), maturational changes, and the basic electronic principles upon which successful electroencephalographic techniques are based.

NDT A116 **5.5 Units (18 lecture hours; 256 lab hours)**
Clinical Experience 1
Prerequisite(s): NDT A110 and ALH A115.

Grading Mode: Pass/No Pass
Transfer Credit: CSU.

Beginning clinical practice of electroencephalographic testing on patients at various affiliated neurodiagnostic labs. This will include observation, application of electrodes, performance of EEG testing on clinical patients, medical recordkeeping, and clinical history reporting. Students must purchase a uniform for this course. Offered on a pass-no pass basis only.

NDT A117 **4.5 Units (256 lab hours)**
Clinical Experience 2
Prerequisite(s): NDT A115 and NDT A116.

Grading Mode: Pass/No Pass
Transfer Credit: CSU.

Continued clinical experience in Electroencephalography at a selected Neurodiagnostic Lab in an affiliated health care facility, under the direct supervision of a physician and/or EEG technologist. This clinical will build on skills attained in NDT A116, and will include performance of EEG testing on clinical patients, medical record keeping, and clinical history taking. Offered on a pass-no pass basis only.

NDT A190 **3 Units (54 lecture hours)**
Introduction to Neuro Anatomy and Physiology
Prerequisite(s): BIOL A221; or BIOL A220 and BIOL A225.

Grading Mode: Standard Letter
Transfer Credit: CSU.

An introduction to the anatomy and physiology of the central and peripheral nervous systems with correlation to related symptoms and pathology as needed by a Neurodiagnostic and/or Polysomnographic technologist. This course may also be offered online.

NDT A191 **1 Unit (18 lecture hours)**
EEG Record Review-Normal
Co-requisite(s): NDT A115.

Grading Mode: Standard Letter
Transfer Credit: CSU.

Practice in electroencephalograph (EEG) record review of normal adult and pediatric patients. Technical description of normal EEG patterns.

NDT A200 **1 Unit (54 lab hours)**
Neurodiagnostic Lab Practice
Prerequisite(s): NDT A110.

Grading Mode: Standard Letter
Transfer Credit: CSU.

Laboratory course for the NDT student to apply foundational technical skills to successfully record routine EEG procedures according to published ACNS guidelines in preparation for first clinical experience.

NDT A279 **2 Units (36 lecture hours)**
Pediatric Electroencephalography
Grading Mode: Standard Letter
Transfer Credit: CSU.

An analysis of neonatal, and pediatric electroencephalography. This course will cover the evolution of EEG waveforms starting from the premature brain to adolescence as well as common neurological pediatric diseases and epileptic syndromes.

NDT A280 **3 Units (54 lecture hours)**
Neurologic Disorders
Prerequisite(s): NDT A115 and NDT A190.

Grading Mode: Standard Letter
Transfer Credit: CSU.

Clinical and electroneurodiagnostic correlations to various physical conditions and disease states which are commonly dealt with in neurodiagnostic technology. Relationship of technologists to various medical specialties: neurology, neurosurgery, pathology, radiology, internal medicine, and psychiatry.

NDT A282 **1 Unit (24 lecture hours)**
NDT ABRET Registry Exam Prep
Prerequisite(s): NDT A115.

Grading Mode: Standard Letter
Transfer Credit: CSU.

Comprehensive review of Neurodiagnostic Technology concepts in preparation for the ABRET National Registry Board Exam (R.EEG T.)

NDT A284 **1 Unit (18 lecture hours)**
Introduction to Transcranial Doppler
Prerequisite(s): NDT A190.

Grading Mode: Standard Letter
Transfer Credit: CSU.

An introduction to Transcranial Doppler (TCD) procedures and recording techniques.

NDT A285 **1 Unit (18 lecture hours)**
Introduction to Nerve Conduction Velocity
Prerequisite(s): NDT A190.

Grading Mode: Standard Letter
Transfer Credit: CSU.

An introduction to nerve conduction velocity (NCV) testing procedures and recording techniques.

NDT A286 **4.5 Units (256 lab hours)**
Clinical Experience 3
Prerequisite(s): NDT A117.

Grading Mode: Pass/No Pass
Transfer Credit: CSU.

Continued clinical experience in EEG at an affiliated health care facility under the direct supervision of an EEG technologist or physician. This clinical will build on skills attained in NDT A117. There will also be opportunities to observe and possibly perform evoked potential studies. Offered on a pass-no pass basis only.

NDT A287 **1 Unit (18 lecture hours)**
EEG Record Review-Abnormal
Co-requisite(s): NDT A115 and NDT A191.

Grading Mode: Standard Letter
Transfer Credit: CSU.

Continued practice in electroencephalography (EEG) record review of neurological subjects covered in NDT A115. Classification of abnormal EEG patterns with correlation to clinical disorders.

NDT A288 **4 Units (54 lecture hours; 54 lab hours)**
Evoked Potentials
Prerequisite(s): NDT A115 and NDT A190.

Grading Mode: Standard Letter
Transfer Credit: CSU.

Concepts, terminology, and techniques of Evoked Potential (EP) recording with testing modalities of visual, auditory, and somatosensory systems to be individually discussed. An overview of EP instrumentation and technical concepts. Analyze the clinical correlations of evoked potential testing and will focus on waveform analysis correlating to common neurological diseases.

NDT A289 **3.5 Units (192 lab hours)**
Clinical Experience 4
Prerequisite(s): NDT A286 and NDT A288.

Grading Mode: Pass/No Pass
Transfer Credit: CSU.

Clinical practice in neurodiagnostic testing with an emphasis on evoked potential and more specialized neurodiagnostic testing procedures. This clinical also further develops advanced skills in electroencephalographic recording and analysis. Offered on a pass-no pass basis only.

NDT A296 **1.5 Units (18 lecture hours; 27 lab hours)**
Introduction to Intraoperative Monitoring
Prerequisite(s): NDT A288.

Grading Mode: Standard Letter
Transfer Credit: CSU.

An introduction to Intraoperative neurophysiologic monitoring recording strategies. Analysis of signal changes during an operation will be correlated with anesthetic agents, metabolic effects, and/or the effects of surgical trauma. Intraoperative monitoring scenarios will be demonstrated and practiced in the classroom laboratory.

NDT A297 **1.5 Units (27 lecture hours)**
Microcomputer Applications in Neurodiagnostics
Prerequisite(s): NDT A115.

Grading Mode: Standard Letter
Transfer Credit: CSU.

Computer applications in Neurodiagnostic Technology including testing modalities of Electroencephalography, epilepsy monitoring, and automated diagnostic techniques for long term epilepsy monitoring. This course covers epilepsy treatments as well as surgical intervention and the digital applications used in the field.

NDT A298 **2 Units (128 other hours)**
Clinical Internship
Prerequisite(s): NDT A286.

Co-requisite(s): NDT A289.

Grading Mode: Pass/No Pass
Transfer Credit: CSU.

Specialized neurodiagnostic clinical internship at an affiliate hospital site. Specialized areas may include intraoperative neurophysiologic monitoring, neonatal testing, long-term epilepsy monitoring, pediatric testing, transcranial Doppler studies, nerve conduction studies and others. Offered on a pass-no pass basis only.