



Proposed Program Description and Proposed Program Outcomes Neurodiagnostic Technician

2 Year Associate Degree

Program Description

Neurodiagnostic technology is the scientific field devoted to recording and studying the electrical activity of the brain and nervous system. Neurodiagnostic technologists possess the knowledge, attributes, and skills to obtain interpretable recordings of patients' nervous system function. They work in collaboration with the electroencephalographer. The neurodiagnostic technologist is skilled in the following functions: communicating with patients, family and other health care personnel; taking and abstracting histories; applying adequate recording electrodes and using EEG, EP, and PSG techniques; documenting the clinical condition of patients; and understanding and employing the optimal use of EEG, EP and PSG equipment.

Program Outcomes

- Interpret diagnostically acceptable ND test in hospital or clinical
- Apply neuroscience knowledge to ND recordings and diagnosis of disease conditions
- Interpret the electrical display of EEG-PSG-EP recordings
- Practice patient-entered care in accordance with the ethical and legal framework of the NDT
- Collaborate as a member of the health care team to ensure clinical effectiveness
- Evaluate ND tests (e.g., intraoperative monitoring, nerve condition studies, ambulatory recordings, long-term video, EEG monitoring)
- Operate ND diagnostic instrumentation
- Prepare written summary reports for neurologists
- Practice infection control
- Apply theoretical knowledge to relate the ND recordings to diagnosis of disease conditions

PROPOSED - CURRICULUM PLAN

Program Title: Proposed- Neurodiagnostic Technician Associate Degree **Program Code:** 10-525-x

Course #	Status	Course Title	Description	Credits
Proposed Technical Studies				
10-525-xxx	New	Basic EEG	Fundamentals of evoked potentials will be introduced including sensory pathways, digital instrumentation, obligate wave forms and technical reporting.	5 credits
10-525-xxx	New	Basic Neuroscience	Advanced neuroanatomy of the central nervous system. Identify the brainstem role in controlling the body functions and maintaining equilibrium. Includes functions of the musculoskeletal system. Analyze the nervous control of cardiac muscles including the autonomic nervous system.	2 credits
10-525-xxx	New	NDT Clinical 1	Performing clinical EEG's and EPs along with recognizing and understanding the test result displayed.	4 credits
10-525-xxx	New	Advanced EEG	This course will broaden the students' knowledge of EEG findings in neurological diseases. Demonstrate long term epilepsy monitoring, assess meds and treatments for epilepsy, assess and analyze diffuse encephalopathics, organic brain syndromes, dementias and tumors. Assess EEG findings in the neonates.	4 credits
10-525-xxx	New	EP Basic	Fundamentals of evoked potentials will be introduced including sensory pathways, digital instrumentation, obligate wave forms and technical writing.	2 credit
10-525-xxx	New	NDT Clinical 2	Provides clinical experience in performing basic EEG and EP recordings.	4 credit
10-525-xxx	New	NDT Theory	An introduction to other electroneurodiagnostic recording used in the neurological area. Emphasis will be placed on sleep disorders, long term epilepsy monitoring, EMG, NCV and IOM.	3 credit
10-525-xxx	New	NDT Practicum 1	Students will perform EEGs and Eps with minimal supervision. Perform supervised PSGs, IOMs, EMGs, and LTEMs, all within the clinical setting.	4 credits
10-525-xxx	New	Clinical Correlates	Explores the clinical correlates for intraoperative monitoring, including indications for intraoperative neurophysiological changes intraoperative monitoring. Classify pharmacological agents according to their use in the surgical environment. Analyze the effects of anesthetic agents.	3 credit
10-525-xxx	New	NDT Registry Review	Comprehensive review of theory pertaining to EEGs, EPs, IOMs, LTEMs and PSGs in preparation for the national exams. Complete resumes, review interviewing techniques and practice skills for employment.	1 credits
10-525-xxx	New	NDT Practicum II	Emphasis will be placed on the techniques of recording quality IOM procedures, PSGs, LETMs, EMG/NCV, and EPs within clinical settings.	8 Credits
10-501-101	APPR	Medical Terminology	Focuses on the component parts of medical terms: Prefixes, suffixes and word roots. Students practice formation, analysis and reconstruction of terms. Emphasis on	3 credit

Course #	Status	Course Title	Description	Credits
			spelling, definition and pronunciation. Introduction to operative, diagnostic, therapeutic and symptomatic terminology of all body systems, as well as systemic and surgical terminology.	
10-501-xxx	New	Introduction to Computing for Healthcare		2 Credit
	APPR	General Education Courses	Provides an introduction to basic computer functions and applications utilized in contemporary healthcare settings. Students are introduced to the hardware and software components of modern computer systems and the application of computers in the workplace. Emphasizes the use of common software packages, operating systems, file management, word processing, spreadsheet, database, Internet, and electronic mail.	21 Credits
TOTAL CREDITS				66

STATUS:

APPR = Approved course, currently offered MOD = Modification of currently approved course NEW = New course created for this program