

RCTC PROGRAM PLAN

CLINICAL NEUROPHYSIOLOGY TECHNOLOGY

Associate in Applied Science

An Affiliated Program with the Mayo Clinic School of Health Sciences

I. MINNESOTA TRANSFER CURRICULUM (MNTC)/

GENERAL EDUCATION REQUIREMENTS 25 CREDITS

GOAL 1: WRITTEN AND ORAL COMMUNICATION 7 CR

COMM 1114, Fundamentals of Public Speaking, 3 cr **OR**

COMM 1130, Interpersonal Communication, 3 cr

ENGL 1117, Reading and Writing Critically I, 4 cr

GOAL 3: NATURAL SCIENCES 12 CR

BIOL 1110, Human Biology, 4 cr

BIOL 1216, Anatomy and Physiology of the Nervous and Respiratory Systems, 2 cr

CHEM 1101, Elements of Chemistry, 3 cr **OR** Higher

PHYS 1103, Principles of Physics, 3 cr **OR** Higher

GOAL 5: HISTORY AND THE SOCIAL AND BEHAVIORAL SCIENCES 3 CR

PSYC 1611, Psychology of Adjustment, 3 cr **OR**

PSYC 2618, General Psychology, 4 cr

GOAL 6: HUMANITIES - THE ARTS, LITERATURE AND PHILOSOPHY 3 CR

RECOMMENDED:

PHIL 1135, Bioethics, 3 cr

II. MAYO CLINIC CNT CORE REQUIREMENTS.....56 CREDITS

The following courses are offered through the Mayo Clinic School of Health Sciences:

CNT 1101, Orientation to CNT, 3 cr

CNT 1102, CNT Techniques EEG, 2 cr

CNT 1103, CNT Techniques NCS, 2 cr

CNT 1104, CNT Techniques EP, 1 cr

CNT 1105, CNT Techniques Autonomic, 1 cr

CNT 1106, CNT Techniques PSG, 2 cr

CNT 1109, CNT Professional Development I, 1 cr

CNT 1110, CNT Instrumentation, 2 cr

CNT 1112, Applied Concepts I EEG, 3 cr

CNT 1113, Applied Concepts II NCS, 3 cr

CNT 1114, Orientation to the Clin Lab /Prof Dev II, 2 cr

CNT 2210, Neurophysiology Lecture Series, Part I, 1 cr

CNT 2211, Neurophysiology Lecture Series, Part II, 3 cr

CNT 2220, Clinical Practice EEG I, 3 cr

CNT 2221, Clinical Practice EEG II, 3 cr

CNT 2222, Clinical Practice EEG III, 3 cr

CNT 2230, Clinical Practice NCS I, 3 cr

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CNT 2231, Clinical Practice NCS II, 3 cr
CNT 2240, Clinical Practice EP/NCS, 3 cr
CNT 2250, Clinical Practice Autonomic, 3 cr
CNT 2260, Clinical Practice PSG I, 3 cr
CNT 2261, Clinical Practice PSG II, 3 cr
CNT 2270, Clinical Practice Elective, 3 cr

TOTAL.....81 CREDITS

PROGRAM OUTCOMES:

Upon completion of the Clinical Neurophysiology Technology program at RCTC, students will achieve the following outcomes:

- Know the practical applications and principles of clinical neurophysiology technology, including structure and function of the nervous system, instrumentation, and neurological disorders diagnosed by neurodiagnostic testing
- Demonstrate knowledge of electroencephalography (EEG), nerve conduction studies (NCS), evoked potentials (EP), polysomnography (PSG) and autonomic testing at a level which will meet requirements for passing national registry/certification examinations
- Acquire practical skills in EEG, NCS, EP, PSG and autonomic testing and apply these skills to provide compassionate, safe and appropriate patient care and understand their role as part of a clinical team providing comprehensive care for patients
- Acquire skills of self-directed learning so as to update their knowledge of neurophysiology after completion of their formal studies
- Understand the use of quality improvement techniques to enhance the accuracy and appropriateness of neurodiagnostic testing
- Commit to practice according to the ethical principles and legal requirements of the profession of clinical neurophysiology technology and the values of Mayo Clinic
- Demonstrate cultural competency and respect for diversity in all professional interactions
- Exhibit appropriate and professional skills of interpersonal communication with all patients and other members of the healthcare team
- Understand the responsibilities of all healthcare workers to contribute to enhancing the health and welfare of society

ADDITIONAL NOTES:

PURPOSE: Mayo Clinic School of Health Sciences (MCSHS) offers a 24-month program in neurodiagnostics (EEG, NCS, EP, PSG and autonomic testing). Neurodiagnostics is an exciting and challenging career involving the use of sophisticated equipment to perform tests that assist physicians in the diagnosis and evaluation of diseases of the brain, peripheral and autonomic nervous system and disorders of sleep and wakefulness. The technologist must be able to analyze data online making certain that it is viable and interpretable. Studies are performed in a laboratory, emergency room, operating room, intensive care unit, special monitoring units or at the patient's bedside.

Revised: 12/30/2022

Implementation: Fall 2023