NORTHWESTERN CONNECTICUT COMMUNITY COLLEGE

COURSE SYLLABUS

Course Title: Clinical Laboratory Procedures

Course #: MED* 245

Course Description:

This course provides an introduction to clinical laboratory procedures and equipment. The course focuses on medical and surgical asepsis, sterilization techniques, basic diagnostic ambulatory tests, evaluations, treatments and nutrition. Theory and practice of the clinical skills used by medical assistants to perform various diagnostic tests including specimen collection, hematology, blood chemistry, routine urinalysis, and electrocardiograms are emphasized. Students are required to purchase a lab coat or scrubs to be worn in class. A physical examination and proof of immunization is also required. 4 Credit Hours

Pre-requisite:

Eligible for English 101, MED* 125 and MED* 133

Goals:

- To prepare competent entry-level medical assistants in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains.
- To develop the clinical laboratory competencies necessary to be a competent medical assistant.
- To examine the roles and responsibilities of a clinical medical assistant in healthcare.
- To apply logical, critical and analytical processes in identifying problems, alternative solutions and making informed decisions related to the clinical healthcare environment
- To analyze, research and apply disease prevention information
- To develop verbal and nonverbal communication skills necessary in the healthcare setting
- To promote a positive image as a Medical Assistant

Outcomes:

With the satisfactory completion of this course, the student will be able to perform entry level competencies as a Medical Assistant. This course includes the following competencies:

Applied Microbiology/Infection Control

III.C2 Define Asepsis

III.C5 List major types of infectious agents

- **III.C6** Compare different methods of controlling the growth of microorganisms
- **III.C8** Differentiate between medical and surgical asepsis used in ambulatory care settings, identifying when each is appropriate

III.C9 Discuss quality control issues related to handling microbiological specimens

III.C10 Identify disease processes that are indications for CLIA waived tests

Protective Practices

XI.C2 Identify safety techniques that can be used to prevent accidents and maintain a safe work environment

XI.C4 Identify safety signs, symbols and labels

Entry Level Competencies for Medical Assistants

Taken from the 2008 Standards and Guidelines for the Medical Assisting Educational Programs

This course includes the following competencies:

I. Anatomy & Physiology

- P.2. Perform venipuncture
- P.3. Perform capillary puncture
- P.4. Perform pulmonary function testing
- P.5. Perform electrocardiography
- P.11. Perform quality control measures
- P.12. Perform CLIA-Waived hematology testing
- P.13. Perform CLIA-Waived chemistry testing
- P.14. Perform CLIA-Waived urinalysis
- P.15. Perform CLIA-Waived immunology testing
- P.16. Screen test results
- A.2(18). Use language/verbal skills that enable patients' understanding

II. Applied Mathematics

P.2. Maintain laboratory test results using flow sheets

A.2(5). Distinguish between normal and abnormal test results

III. Applied Microbiology/Infection Control

- P.2. Practice Standard Precautions
- P.5. Prepare items for autoclaving
- P.6. Perform sterilization procedures
- P.7. Obtain specimens for microbiological testing
- P.8. Perform CLIA waived microbiology testing
- A.1(9). Display sensitivity to patient rights and feelings in collecting specimens

A.3(11). Show awareness of patients' concerns regarding their perceptions related to the procedure being performed

IV. Concepts of Effective Communication

P.2. Report relevant information to others succinctly and accurately

P.5. Instruct patients according to their needs to promote health maintenance and disease prevention

- P.6. Prepare a patient for procedures and/or treatments
- P.9. Document patient education

V. Administrative Functions

P.9. Perform routine maintenance of office equipment with documentation

XI. Protective Practices

- P.1. Comply with safety signs, symbols and labels
- P.2. Evaluate the work environment to identify safe vs. unsafe working conditions

Types of Assessments meeting Core Competencies

Demonstration of skills/competencies Online interactive adaptive activities using McGraw Hill LearnSmart

Online interactive McGraw Hill ActivSim skill & patient interaction simulations

Online electronic medical record and practice management software using Medisoft Online Quizzes Discussion Board Unit tests, Midterm and Final exams

Practical Final: A "live" comprehensive simulation to pull it all together. The final practical will include the Cognitive, Psychomotor and Affective content covered in this course. A nonstudent patient volunteer will role play various common scenarios with the student. The student brings the patient from the waiting room through the intake process, performs vital signs and measurements, urinalysis, ekg and capillary puncture with CLIA waived test, correctly documents findings and sets up the exam room so that the "patient" is ready to see the physician.

"Students must pass ALL (100%) of the psychomotor and affective domain competencies taught in this course prior to the date of the final exam. These competencies must EACH INDIVIDUALLY be passed with a grade of 80% or better in order to pass the course, complete the program and graduate. If this standard is not met the student will not pass the course and will have to repeat the entire course to graduate." CAAHEP accreditation requires 100% of all Medical Assisting graduates pass 100% of all competencies.

MEDICAL ASSISTING STUDENTS - 74% is an estimated figure which is considered a minimum level of achievement. Any student who receives a final grade score below 74% WILL NOT PASS the course. Failure to receive a grade of 'C' or better will necessitate this course being repeated and passed successfully.

College Policies

Plagiarism: Plagiarism and Academic Dishonesty are not tolerated at Northwestern Connecticut Community College. Violators of this policy will be subject to sanctions ranging from failure of the assignment (receiving a zero), failing the course, being removed/expelled from the program and/or the College. Please refer to your "Student Handbook" under "Policy on Student Rights," the Section entitled "Student Discipline," or the College catalog for additional information.

Americans with Disabilities Act (ADA): The College will make reasonable accommodations for persons with documented learning, physical, or psychiatric disabilities. Students should notify Dr. Christine Woodcock, the Counselor for Students with Disabilities. She is located at Green Woods Hall, in the Center for Student Development. Her phone number is 860-738-6318 and her email is <u>cwoodcock@nwcc.edu</u>.

School Cancellations: If snowy or icy driving conditions cause the postponement or cancellation of classes, announcements will be made on local radio and television stations and posted on the College's website at <u>www.nwcc.edu</u>. Students may also call the College directly at **(860) 738-6464** to hear a recorded message concerning any inclement weather closings. Students are urged to exercise their own judgment if road conditions in their localities are hazardous.

Use of Electronic Devices: Some course content as presented in Blackboard Learn is not fully supported on mobile devices at this time. While mobile devices provide convenient access to check in and read information about your courses, they should not be used to perform work such as taking tests, quizzes, completing assignments, or submitting substantive discussion posts.

Sexual Assault and Intimate Partner Violence Resource Team: NCCC is committed to creating a community that is safe and supportive of people of all gender and sexual identities. This pertains to the entire campus community, whether on ground or virtual, students, faculty, or staff.

Sexual assault and intimate partner violence is an affront to our national conscience, and one we cannot ignore. It is our hope that no one within our campus community will become a victim of these crimes. However, if it occurs, NCCC has created the SART Team - Sexual Assault and Intimate Partner Violence Resource Team - to meet the victim's needs.

SART is a campus and community based team that is fully trained to provide traumainformed compassionate service and referrals for comprehensive care. The team works in partnership with The Susan B. Anthony Project to extend services 24 hours a day, 7 days a week throughout the year.

The NCCC team members are:

860-738-6315
860-738-6342
860-738-6344
860-738-6389
860-738-6481
860-738-6393
860-738-6416
860-738-6319

Green Woods Hall Room 207 Green Woods Hall Room 223 Green Woods Hall Room 110 Founders Hall Annex Room 308 Library Founders Hall Annex Room 212 Business Office Room 201 Founders Hall Room 103 Student Representative

At NCCC we care about our students, staff and faculty and their well-being. It is our intention to facilitate the resources needed to help achieve both physical and emotional health.