

# NORTHWESTERN CONNECTICUT COMMUNITY COLLEGE

## COURSE SYLLABUS

**Course Title:** Principles of Pharmacology LAB      **Course #**MED 250L

**Course Description:** Required laboratory to accompany MED\* 250 Principles of Pharmacology. Lab activities cover general principles of medication administration including determination of dosage, preparation, safe administration, and documentation of multiple forms of pharmaceuticals. Systems of measurement and mathematical equivalents used in pharmacology dosage calculations will be covered. Students will participate in lab simulations covering injection techniques, administration of oral, nasal, ophthalmic, otic, topical, transdermal, and metered dose inhaler medications.

**Credits/Contact Hours:**      1 credit/1 contact hour

**Pre-requisite/Co-requisite:** Prerequisite: MED\* 125.  
Must be taken concurrently with MED\* 250

**Goals:** The student will develop a working knowledge of pharmacology necessary for a career in an allied health profession. The student will be able to perform basic mathematical calculations of drug dosages and safely perform the administration and documentation of medications.

**Outcomes:** After completion of this Lab course, the student will be able to:

- Identify the classifications of medications, including desired effects, side effects and adverse reactions. (I.C.11)
- Calculate medication dosages for adults, children and infants
  - Demonstrate knowledge of basic math computations (II.C .1)
  - Apply mathematical computations to solve equations (II.C .2)
  - Identify measurement systems (II.C.3)
  - Convert among measurement systems (II.C.5)
  - Define basic units of measurement in metric, apothecary and household systems. (II.C.4)
  - Identify both abbreviations and symbols used in calculating medication dosages. (II.C.6)
- Verify order and dosage prior to administration
- Prepare proper dosages of medication for administration
  - Identify various supplies used in the preparation and administration of medications
  - Withdraw medication from an ampule and a vial
  - Reconstitute a powder medication
  - Mix two medications in one syringe
- Explain safe administration of vaginal and rectal medications
- Compare the following medication administration techniques: IV push, IV infusion, and IV piggyback
- Administer oral medications
  - Differentiate among the various drug forms: sublingual tablet versus buccal tablet, solution versus suspension, syrup versus elixir, enteric-coated tablet versus scored tablet, and timed-release capsule versus lozenge
- Administer parenteral medications including optic, otic, ID, SC, IM, and transdermal medications as well as inhalation therapy
  - Select proper sites for administering SC, IM and ID injections

- Perform Z-Track IM injection technique
- Demonstrate the use of an Epinephrine Auto-injector
- Explain how the following types of injections differ in administration and absorption rate: IV, IM, SC, and ID
- Document all administered medications into simulated patient charts and maintain medication and immunization records

## **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 [cwoodcock@nwcc.edu](mailto:cwoodcock@nwcc.edu).

**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 [www.nwcc.edu](http://www.nwcc.edu). 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 trauma-informed 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:**

Ruth Gonzalez, Ph.D.	860-738-6315	Green Woods Hall Room 207
Susan Berg	860-738-6342	Green Woods Hall Room 223
Kathleen Chapman	860-738-6344	Green Woods Hall Room 110
Michael Emanuel	860-738-6389	Founders Hall Annex Room 308
Seth Kershner	860-738-6481	Library
Jane O’Grady	860-738-6393	Founders Hall Annex Room 212
Robin Orlomski	860-738-6416	Business Office Room 201
Patricia Bouffard, Ex-Officio	860-738-6319	Founders Hall Room 103
Savannah Schmitt		Student Representative