



# Wayne County Community College District

## COURSE SYLLABUS

### PHT 100 Introduction to Pharmacy Technology

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**CREDIT HOURS:** 3.00

**CONTACT HOURS:** 45.00

**COURSE DESCRIPTION:**

Introduction to Pharmacy Technology will provide students with an overview of the role of a Pharmacy Technician in today's health care setting. Ethical and legal aspects of the pharmacy practice will be discussed. A review of the necessary math skills to perform the duties of a pharmacy technician will be emphasized. Drug classification, drug processes and development will be introduced as well.

**PREREQUISITES:** *NONE*

**EXPECTED COMPETENCIES:**

- (Comprehension) Explain how state laws and regulations determine what activities associated with receiving and screening prescription/medication orders for completeness and authenticity can be delegated by pharmacists to technicians. (ASPH 2.1)
- (Application) Follow policies and procedures for sanitation management, hazardous waste handling (e.g., needles), and infection control (e.g., protective clothing). (ASPH 12.1)
- (Application) Clean laminar flow biological safety cabinets using approved technique. (ASPH 12.2)
- (Application) Maintain a clean and neat work environment. (ASPH 12.3)
- (Application) Given a weighing or counting device, fluid compounder, or syringe pump used at a specific site, accurately calibrate the device, compounder or pump. (ASPH 12.4)
- (Application) Follow manufacturers' guidelines in troubleshooting, maintaining, and repairing electronic devices used by the pharmacy in the preparation and dispensing of medications. (ASPH 12.5)
- (Organization) Take the initiative in identifying changes within one's own work processes which would improve the delivery of direct patient care. (ASPH 16.1)
- (Characterization) Act ethically in the conduct of all job-related activities. (ASPH 17.1)
- (Application) Dress in attire that follows the site's dress code. (ASPH 18.1)
- (Application) Maintain personal hygiene. (ASPH 18.2)
- (Characterization) consistently maintain personal self-control and professional decorum. (ASPH 18.3)
- (Application) Use effective negotiation skills to resolve conflicts. (ASPH 19.1)
- (Comprehension) Explain why dealing with change is an important skill for the pharmacy technician. (ASPH 20.1)
- (Comprehension) Explain the principles of change management. (ASPH 20.2)



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- (Comprehension) Explain the need to adapt direct patient care for diversity (e.g., culture, religion, race, age, gender, sexual orientation, disability, economic status). (ASPH 21.1)
- (Comprehension) Explain some typical adaptations made in direct patient care plans to accommodate diversity. (ASPH 21.2)
- (Comprehension) Explain the benefits of membership in the range of local, state, and national pharmacy organizations. (ASPH 22.1)
- (Knowledge) Describe the local, state, and national pharmacy organizations which offer value for the pharmacy technician. (ASPH 22.2)
- (Comprehension) Explain the benefits of obtaining technician certification. (ASPH 23.1)
- (Comprehension) Explain the process by which one can become a nationally certified pharmacy technician. (ASPH 23.2)
- (Comprehension) Explain technician certification processes other than the national process and how they may be pursued. (ASPH 23.3)
- (Comprehension) Explain the necessity for technicians to stay current with advances in pharmacy practice. (ASPH 24.1)
- (Comprehension) Discuss resources (e.g., journals, newsletters, educational conferences) for staying current with advances in pharmacy practice (e.g., automation, medication therapy, devices). Information pharmacists use in making direct patient care decisions. (ASPH 24.2)
- (Application) Organize all written or oral communication in a logical manner. (ASPH 25.1)
- (Application) Address all communication on the level appropriate for the audience. (ASPH 25.2)
- (Application) Pronounce technical terms correctly. (ASPH 25.4)
- (Application) Use listening skills effectively in performing job functions. (ASPH 25.5)
- (Application) Use effective strategies for communicating with patients who are non-English speakers or who are impaired (e.g., blind, deaf, cognitively impaired, illiterate). (ASPH 25.6)
- (Synthesis) Devise an effective plan for minimizing stress while attending to personal needs, maintaining relationships, and meeting professional obligations. (ASPH 33/10)
- (Comprehension) Explain the use and side effects of prescription medications, nonprescription medications, and alternative therapies (e.g., herbal products, dietary supplements, homeopathy, lifestyle modification) commonly used to treat diseases affecting the cardiovascular system. (ASPH 34.1)
- (Comprehension) Explain the use and side effects of prescription medications, nonprescription medications, and alternative therapies (e.g., herbal products, dietary supplements, homeopathy, lifestyle modification) commonly used to treat diseases affecting the respiratory system. (ASPH 34.2)
- (Comprehension) Explain the use and side effects of prescription medications, nonprescription medications, and alternative therapies (e.g., herbal products, dietary supplements, homeopathy, lifestyle modification) commonly used to treat diseases affecting the gastrointestinal system. (ASPH 34.3)



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- (Comprehension) Explain the use and side effects of prescription medications, nonprescription medications, and alternative therapies (e.g., herbal products, dietary supplements, homeopathy, lifestyle modification) commonly used to treat diseases affecting the renal system. (ASPH 34.4).
- (Comprehension) Explain the use and side effects of prescription medications, nonprescription medications, and alternative therapies (e.g., herbal products, dietary supplements, homeopathy, lifestyle modification) commonly used to treat diseases affecting the nervous system. (ASPH 34.5)
- (Comprehension) Explain the use and side effects of prescription medications, nonprescription medications, and alternative therapies (e.g., herbal products, dietary supplements, homeopathy, lifestyle modification) commonly used to treat diseases affecting the endocrine system. (ASPH 34.6)
- (Comprehension) Explain the use and side effects of prescription medications, nonprescription medications, and alternative therapies (e.g., herbal products, dietary supplements, homeopathy, lifestyle modification) commonly used to treat diseases affecting the reproductive systems. (ASPH 34.7)
- (Comprehension) Explain the use and side effects of prescription medications, nonprescription medications, and alternative therapies (e.g., herbal products, dietary supplements, homeopathy, lifestyle modification) commonly used to treat diseases affecting the immune system. (ASPH 34.8)
- (Comprehension) Explain the use and side effects of prescription medications, nonprescription medications, and alternative therapies (e.g., herbal products, dietary supplements, homeopathy, lifestyle modification) commonly used to treat diseases of the skeletal system (bones and joints). (ASPH 34.9)
- (Comprehension) Explain the use and side effects of prescription medications, nonprescription medications, and alternative therapies (e.g., herbal products, dietary supplements, homeopathy, lifestyle modification) commonly used to treat disorders of the eyes, ears, nose and throat. (ASPH 34.10)
- (Comprehension) Explain the use and side effects of prescription medications, nonprescription medications, and alternative therapies (e.g., herbal products, dietary supplements, homeopathy, lifestyle modification) commonly used to treat diseases affecting the dermatologic system. (ASPH 34.11)
- (Comprehension) Explain the use and side effects of prescription medications, nonprescription medications, and alternative therapies (e.g., herbal products, dietary supplements, homeopathy, lifestyle modification) commonly used to treat diseases affecting the hematologic system. (ASPH 34.12)
- (Comprehension) Explain the use and side effects of prescription medications, nonprescription medications, and alternative therapies (e.g., herbal products, dietary supplements, homeopathy, lifestyle modification) commonly to treat diseases of the muscular system. (ASPH 34.13)
- (Application) Accurately count or measure finished dosage forms as specified by the prescription/medication order. (ASPH 3.5)



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- (Application) Accurately determine the correct amounts of ingredients for a compounded product. (ASPH 3.7)
- (Application) Given mathematical problems using Roman numerals, Arabic numerals, fractions, apothecary symbols, and decimals, perform the mathematical steps to solve for the correct answer.
- (Application) Given mathematical problems involving conversion of weights and measures and direct ratio and proportion, perform the mathematical steps to solve for the correct answer.
- (Application) Given mathematical problems involving reducing and enlarging formulas, perform the mathematical steps to solve for the correct answer.
- (Application) Given mathematical problems involving specific gravity, percent strength, weight-in-volume, weight-in-weight, and volume-in-volume, perform the mathematical steps to solve for the correct answer.
- (Application) Given mathematical problems involving ratio strength calculations for pharmaceutical preparations, perform the mathematical steps to solve for the correct answer.
- (Application) Given mathematical problems involving dilution and concentration, perform the mathematical steps to solve for the correct answer.
- (Application) Given mathematical problems involving dilution and concentration, perform the mathematical steps to solve for the correct answer using the alligation method.
- (Application) Given mathematical problems involving milliequivalents, perform the mathematical steps to solve for the correct answer.
- (Application) Given mathematical problems involving compounded products that require an overfill, perform the mathematical steps to solve for the correct volume to be added.

### **ASSESSMENT METHODS:**

Student performance may be assessed by examination, quizzes, case studies, oral conversation, group discussion, oral presentations. The instructor reserves the option to employ one or more of these assessment methods during the course.

### **GRADING SCALE:**

90%-100% = A

80%-89.9% = B

70%-79.9% = C

60%-69.9% = D

<60% = E