

PHARMACY PROFESSIONAL PROGRAM COURSE SYLLABUS

COURSE TITLE:	Pharmacy-Based Point-of-Care Testing Certificate Program
CREDIT HOURS:	One (1) semester hour
REQUIRED/ELECTIVE:	Elective
PREREQUISITES:	P-2 Standing (with permission); P-3 or P-4 Standing Each 4-hour program is limited to _____ (list class limit). If more than _____ (list class limit) students participate in the reading and discussion portion of the course, there will be a second 4-hour program offered to allow for certificate completion.
DESCRIPTION:	This course is intended to help pharmacy students earn a point-of-care (POC) testing certificate, such as the one offered by the National Association of Chain Drug Stores. It includes pre-reading from current literature and governmental agencies, a 4-hour program and a skills assessment. Students will learn how to perform four types of specimen collection (oral swab, nasal swab, throat swab and finger stick); the legal and management issues associated with point-of-care testing and follow-up care; and using infectious disease models, will learn to assess patients, evaluate vital signs and physical findings to determine if POC testing is appropriate.
INSTRUCTORS:	_____ (list instructors)
COURSE OBJECTIVES:	To provide students with the knowledge of assessment, testing, follow-up care and management principles necessary to operate a successful point-of-care testing program in community pharmacies.
PROGRAMMATIC OUTCOMES:	_____ (list school name) Doctor of Pharmacy (PharmD) Program Learning Outcomes and Competencies

I. PHARMACEUTICAL CARE. Provide pharmaceutical care in cooperation with patients, prescribers, and other members of an interprofessional health care team based upon sound physical, chemical, biological, and therapeutic principles and evidence-based data, taking into account relevant legal, ethical, social, economic, and professional issues, emerging technologies, and evolving biomedical, sociobehavioral, and clinical sciences that may impact therapeutic outcomes.

Provide patient-centered care

Foundational learning outcomes:

- **Health behavior** – Describe how patient characteristics (e.g., age, gender, income, race, ethnicity, family status) can influence the patient’s health-related beliefs, attitudes, expectations, and behaviors {for mapping: Lecture, Discussion, Reading Assignment}

- **Law and Ethics** - Recognize the pharmacist's professional obligation to patients. Differentiate between legal and ethical duties related to patient rights, including patient confidentiality {for mapping: Lecture, Discussion}

Applied competencies:

- Retrieve, analyze, and interpret the professional, lay, and scientific literature to provide drug information to patients, their families, and other involved health care providers
- Provide information regarding disease prevention and detection {for mapping: Lecture, Discussion, Reading assignments, knowledge based testing}
 - Design, implement, monitor, evaluate, and adjust pharmaceutical care plans that are patient-specific and evidence based which ensure effective, safe, and economical care.
 - Compile and evaluate patient-specific information (for mapping: skills assessment)
 - Recommend medications and /or laboratory tests in accordance with established standards of practice and available clinical data (for mapping: lecture, discussion, knowledge based testing, skills assessment)

Provide population-based care

Foundational learning outcomes:

- Define the concept of public trust {for mapping: lecture, discussion}

II. SYSTEMS MANAGEMENT. Manage and use resources of the health care system, in cooperation with patients, prescribers, other health care providers, and administrative and supportive personnel, to promote health, provide, assess, and coordinate safe, accurate, and time-sensitive medication distribution, and to improve therapeutic outcomes of medication use

Manage human, physical, medical, informational, and technological resources

Applied competencies:

- Establish a mission statement, strategic plan, and management plan with component goals and actions to enhance the delivery of care to patients {for mapping: lecture and discussion}
- Manage medication use systems

Applied competencies:

- Employ practice guidelines and standards, including:
 - o Participate in developing critical pathways, clinical practice guidelines, and disease management protocols in the delivery of pharmaceutical care
 - o Use appropriate critical pathways, clinical practice guidelines, and disease management protocols in the delivery of pharmaceutical care {for mapping: reading assignments, knowledge based examination, lecture, discussion}

III. PUBLIC HEALTH. Promote health improvement, wellness, and disease prevention in cooperation with patients, communities, at-risk populations, and other members of an interprofessional health care team. Assure the availability of effective, quality health and disease prevention services.

Applied competencies:

- Provide health screening/early detection and intervention services to the public
- Participate in pharmacoepidemiologic and pharmacosurveillance programs {for mapping: reading assignments, lecture, discussion, skills assessment}

INSTRUCTIONAL METHODS:

Instructional methods will include a combination of reading assignments, lecture, discussion, active learning, and case studies. Students will be required to complete a skills assessment in addition to a knowledge assessment.

Required Text: All reading materials will be provided online or by the course instructors.

ASSESSMENT MEASURES:

Examinations and skills assessment

Students must prove successful completion of the knowledge-based examinations prior to attending the 4-hour certificate program with skills assessment. Knowledge-based examinations are electronic and will follow the completion of readings and discussions: there are 12 knowledge-based assessments, one after each of the learning modules, in addition to a cumulative assessment.

GRADING METHODS:

Pass – Fail

70% is required to pass the online, knowledge-based assessments – 3 attempts will be allowed for each of the 12 module assessments, and for the cumulative assessment

90% is required to pass the skills assessment – multiple attempts will be allowed

Must pass both the knowledge-based assessment and the skills assessment to pass the course

NOTE: This template syllabus was created by the developers of the Certificate Program as an example and has been modified and utilized for program implementation in the past.

INSTRUCTIONAL OBJECTIVES:

At the completion of this course, the student will be able to:

- Identify at least three opportunities for expanding patient-centered services in the community pharmacy setting, using point of care testing.
- Discuss the value and limitations of patient reported symptoms, medical history, and drug allergies.
- Describe and perform the following physical assessments, when appropriate to patient care:
 - Blood Pressure
 - Pulse
 - Respiratory Rate
 - Oxygenation
 - Cervical Lymph Node Inspection
 - Body Temperature
- Describe and perform the following specimen collections used in point of care testing:
 - Throat Swab
 - Oral Fluid Collection
 - Nasal Swab
 - Finger Stick
- Identify characteristics of the four exemplar infectious diseases (influenza, Group A Streptococcus, Human Immunodeficiency Virus, Hepatitis C) regarding:
 - Causative Agents
 - Transmission
 - Immunizations
 - Symptoms and Presentation
 - Appropriate Therapy
 - Point-of-care Testing
- Define and contrast the following terms as they relate to point-of-care testing in community pharmacies:
 - Clinical Laboratory Improvement Amendments (CLIA)
 - CLIA-waived
 - Collaborative Agreement
 - Protocol
 - Prescribe
 - Diagnose
- Explain the value and limitations of point-of-care tests, including rapid diagnostic tests and list the steps a pharmacist can take to improve test performance.
- Apply all information to patient-specific cases based on common community pharmacy-based patient interactions.