Maryland CTE Programs of Study

Pharmacy Technician II (2025)

GENERAL REQUIREMENTS. This course is recommended for students in Grades 10-12, and Pharmacy Technician I is the prerequisite. 1

1 GENERAL REQUIREMENTS. This course is recommended for students in Grades 10-12, and Pharmacy Technician I is the prerequisite. 1

INTRODUCTION 2

A Career and Technical Education (CTE) instruction provides content aligned with challenging academic standards and relevant technical knowledge and skills for students to further their education and succeed in current or emerging professions. 2.A

B The Health and Human Services Career Cluster promotes whole health in individuals and communities through diverse services. This sector includes technical, mental, and therapeutic services and personal care supported by medical and social sciences. By addressing social determinants of health and leveraging health data and science, this Cluster aims to enhance the overall health and resilience of individuals, families, and communities. 2.B

C The Pharmacy Technician Program of Study equips high school students with the knowledge and skills needed for careers in pharmacy and healthcare. Through a sequence of courses, students learn healthcare systems, pharmacology, prescription processing, and patient care practices, with hands-on training in compounding, inventory management, and pharmacy technology. The program includes a minimum of 160 hours of work-based learning, internships, or apprenticeships in licensed pharmacy settings, meeting Maryland Board of Pharmacy requirements. Students are prepared to achieve national certification as Certified Pharmacy Technicians (CPhT) and transition into entry-level roles or advanced healthcare pathways. 2.C

D Pharmacy Technician II builds on foundational skills with advanced training in pharmacy law, prescription processing, sterile and non-sterile compounding, and inventory management. A required 160-hour work-based learning experience and preparation for the Certified Pharmacy Technician (CPhT) exam ensure students are ready to meet Maryland Board of Pharmacy certification standards. 2.D

E Students will participate in at least two Career-Connected Education and Work-Based Learning experiences in this course, which might include informational interviews or job shadowing relevant to the program of study. 2.E

Skip to main content

F **Students are encouraged to participate in extended learning experiences through aligned Career and Technical Student Organizations (CTSOs). CTSOs are a co-curricular requirement in the Carl D. Perkins Act, and alignment to CTSO activities is an expectation for CTE programs in the state of Maryland.** 2.F

KNOWLEDGE AND SKILLS 3

A **The student demonstrates the necessary skills for career development, maintenance of employability, and successful completion of course outcomes. The student is expected to:** 3.A

1. Identify and demonstrate positive work behaviors that enhance employability and job advancement, such as regular attendance, promptness, proper attire, maintenance of a clean and safe work environment, and pride in work. 3.A.1
2. Demonstrate positive personal qualities such as flexibility, open-mindedness, initiative, active listening, and a willingness to learn. 3.A.2
3. Employ effective reading, writing, and technical documentation skills. 3.A.3
4. Solve problems using critical thinking techniques and structured troubleshooting methodologies. 3.A.4
5. Demonstrate leadership skills and collaborate effectively as a team member. 3.A.5
6. Implement safety procedures, including proper use of software and following privacy guidelines. 3.A.6
7. Exhibit an understanding of legal and ethical responsibilities in the healthcare field, following copyright laws and regulations. 3.A.7
8. Demonstrate time-management skills and the ability to prioritize tasks in a technical setting. 3.A.8

B **The student identifies various career pathways in the healthcare field. The student is expected to:** 3.B

1. Develop a career plan that includes the necessary education, certifications, job skills, and experience for specific roles in healthcare. 3.B.1
2. Create a professional resume and portfolio that reflect skills, projects, certifications, and recommendations. 3.B.2
3. Demonstrate effective interview skills for roles in healthcare fields. 3.B.3

C **The student develops technology and digital literacy skills. The student is expected to:** 3.C

1. Use technology as a tool for research, organization, communication, and problem-solving. 3.C.1
2. Use digital tools, including computers, mobile devices, collaboration platforms, and cloud services, to access, manage, and create information. 3.C.2
3. Demonstrate proficiency in using emerging and industry-standard technologies. 3.C.3
4. Understand ethical and legal considerations for technology use, including the principles of data protection, copyright, and responsible technology use. 3.C.4

Skip to main content

D **The student integrates core academic skills into healthcare practices. The student is expected to:** 3.D

1. Demonstrate the use of clear communication techniques, both written and verbal, that are consistent with industry standards. 3.D.1
2. Apply English concepts such as writing informative texts when documenting the procedures and articulating goals. 3.D.2
3. Use mathematical concepts for measurement and conversion (Fahrenheit vs. Celsius), ratios and proportions as well as fraction and decimal conversions. 3.D.3

E **The student demonstrates nonsterile compounding competency per USP <795> (simulation). The student is expected to:** 3.E

1. Complete Master Formulation Records (MFR) and Compounding Records (CR) with zero critical omissions; execute trituration, levigation, geometric dilution, and alligation with ±3% final yield. 3.E.1
2. Assign BUDs aligned to USP criteria and justify choices in writing using at least three decision factors (ingredient stability, water activity, packaging). 3.E.2
3. Package and label compounded products with 100% label compliance and document cleaning logs per schedule. 3.E.3

F **The student demonstrates sterile compounding simulations aligned to USP <797> (simulation only). The student is expected to:** 3.F

1. Perform garbing and hand hygiene per checklist with no critical failures over two consecutive evaluations. 3.F.1
2. Complete gloved-fingertip and media-fill demonstrations (educational only); analyze any growth/positivity and submit a corrective-action memo. 3.F.2
3. Calculate IV admixture concentrations and infusion rates from case orders with ≥90% accuracy; identify two incompatibilities using given references. 3.F.3

G **The student demonstrates controlled-substance handling and compliance (simulation). The student is expected to:** 3.G

1. Maintain a mock perpetual inventory and reconcile a seeded discrepancy to zero using a documented audit trail. 3.G.1
2. Explain DEA 222/CSOS workflows; complete a sample Form 222 packet free of critical errors. 3.G.2
3. Detect fraudulent or altered prescriptions using red-flag indicators (e.g., quantities, wording, multiple erasures) and execute the site procedure: hold prescription, notify pharmacist/manager, document and, when directed, contact prescriber/pharmacy/authorities. 3.G.3

H **The student demonstrates community and health-system dispensing operations (simulation). The student is expected to:** 3.H

1. Prepare unit-dose packages with correct NDC/lot/exp placeholders and barcode; achieve ≥95% scan readability across a 20-item batch. 3.H.1

Skip to main content

2 Perform a mini cart-fill and ADC restock emulation; resolve 100% of seeded bin discrepancies with documentation. 3.H.2

I The student demonstrates reimbursement and documentation procedures (simulation). The student is expected to: 3.I

1 Process claims with DAW codes and produce a reversal/COB record that meets a 10-field documentation standard. 3.I.1

2 Draft a prior authorization outline with 3 clinical justification elements and attach formulary/tiers evidence. 3.I.2

3 Compare Maryland Medicaid vs. MCO policies in case scenarios (e.g., coverage lists, 30-day supply limits, fill-within-30-days rule), and complete claim/reversal artifacts that reflect these requirements. 3.I.3

J The student supports vaccine workflow within technician scope (simulation). The student is expected to: 3.J

1 Maintain cold-chain documentation with no temperature excursions across a two-week lab; complete VIS packet, lot/exp tracking, and billing template. 3.J.1

2 Route clinical questions and administration to licensed personnel; record pharmacist verification 100% of the time. 3.J.2

3 Demonstrate needlestick-prevention behaviors (no recapping, safety device activation) in simulation and dispose of sharps correctly; complete a mock exposure report with zero critical omissions. 3.J.3

4 Differentiate immunization vs. immunity and identify at least three factors that affect immunity (e.g., age, prior doses, immunocompromise). 3.J.4

5 Apply CDC immunization schedule tables to determine age-appropriate eligibility for at least six retail vaccines. 3.J.5

6 List the most common retail vaccines (e.g., influenza, COVID-19, Tdap, zoster, pneumococcal, hepatitis, HPV) and state age minima/conditions used in retail protocols (state policy and pharmacist direction govern final eligibility). 3.J.6

7 Recognize signs of allergic reactions and anaphylaxis (e.g., hives, wheeze, hypotension) and execute escalation: activate emergency response, notify pharmacist immediately, locate epinephrine per site protocol, and document the event. 3.J.7

K The student demonstrates the necessary skills for assembling a professional portfolio and readiness artifacts that align with pharmacy technician technical competencies and quality documentation requirements. The student is expected to: 3.K

1 Assemble a readiness portfolio (MFR/CR samples, logs, audit memos, calculation exams ≥90%) mapped to national exam domains. 3.K.1

2 Complete a mock supervisor evaluation meeting or exceeding proficiency on ≥80% of role competencies. 3.K.2

Skip to main content

L **The student demonstrates the necessary skills for legal, ethical, and regulatory documentation in pharmacy settings. The student is expected to:** 3.L

1. Protect PHI in all classroom/science-lab artifacts (labels, logs, records) by using de-identified data; complete HIPAA privacy acknowledgment and Notice of Privacy Practices templates with no critical omissions. 3.L.1
2. Assemble a controlled-substance documentation packet that includes sample invoices/receipts, DEA 222/CSOS exemplars, perpetual inventory pages, transfer/return forms, and a biennial inventory summary; maintain chain-of-custody records per site SOP. 3.L.2
3. Detect and document suspected fraudulent prescriptions using red-flag indicators (quantity, wording alterations, prescriber inconsistencies) and execute the site procedure: hold prescription, escalate to the pharmacist, document actions, and, when directed, contact the prescriber/other pharmacy/authorities. 3.L.3
4. Compile a mock audit binder for regulatory review (DEA/Board/USP) containing policy/SOP index, training/competency records, temperature and cleaning logs, controlled-substance records, and receiving/storage documentation; submit for evaluation using the program rubric. 3.L.4
5. Record medication incidents, near-misses, and adverse events on program forms; route to the pharmacist for review; propose corrective and preventive actions (CAPA) and file completed documentation. 3.L.5
6. Document technician scope and pharmacist verification by obtaining required pharmacist initials/signatures on forms that require licensed review (e.g., final product verification, clinical recommendations, regulatory attestations). 3.L.6
7. Maintain hazardous-drug records (simulation) aligned to program SOPs (receiving logs, storage/segregation, labeling/transport, disposal manifests) and complete a spill report and decontamination checklist following a simulated event. 3.L.7