

Standards Correlations

Pharmacy Technician II (8306)

Task	SOL Correlations	HOSA Competitive Events (High School)	Pharmacy Technician Certification Board (PTCB) Examination Required Knowledge
Demonstrating Personal Qualities and Abilities			
Demonstrate creativity and innovation.	English: 6.1, 6.3, 6.4, 6.6, 6.7, 6.9, 7.1, 7.3, 7.4, 7.6, 7.7, 7.9, 8.1, 8.3, 8.4, 8.6, 8.7, 8.9, 9.1, 9.5, 9.6, 9.8, 10.1, 10.5, 10.6, 10.8, 11.1, 11.5, 11.6, 11.8, 12.1, 12.5, 12.6, 12.8 History and Social Science: CE.1, CE.4, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WG.4, WHI.1, WHII.1 Mathematics: 6.1, 6.2, 6.3, 6.4, 6.5, 6.6, 6.7, 6.10, 6.11, 6.12, 7.2, 7.3, 7.8, 7.9, 8.2, 8.4, 8.6, 8.7, 8.11, 8.12, 8.17, 8.18, A.9, AFDA.3, AFDA.4,		

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	AFDA.5, AFDA.6, AFDA.7, AFDA.8, AII.9, COM.1, COM.3, COM.4, COM.5, COM.8, DM.7, DM.1*, DM.10, DM.2*, DM.3*, PS.3*, PS.4*, PS.7*, PS.9*, PS.10* Science: 6.1, BIO.1, CH.1, ES.1, LS.1, PS.1		
Demonstrate critical thinking and problem solving.	English: 6.1, 6.3, 6.4, 6.5, 6.6, 6.7, 6.9, 7.1, 7.3, 7.4, 7.5, 7.6, 7.7, 7.9, 8.1, 8.3, 8.4, 8.5, 8.6, 8.7, 8.9, 9.1, 9.5, 9.6, 9.8, 10.1, 10.5, 10.6, 10.8, 11.1, 11.5, 11.6, 11.8, 12.1, 12.5, 12.6, 12.8 History and Social Science: CE.1, CE.4, CE.11, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WG.4, WHI.1, WHII.1 Mathematics: 6.1, 6.2, 6.3, 6.4, 6.5, 6.6, 6.10, 6.11, 7.2, 7.3,		

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	7.8, 7.12, 7.13, 8.2, 8.4, 8.8, 8.9, 8.10, 8.11, A.8, A.9, G.1, G.13, G.14, AFDA.3, AFDA.5, AFDA.8, AII.9, AII.10, AII.11, COM.1, COM.3, COM.4, COM.5, COM.8, DM.4, DM.7, DM.1*, DM.2*, DM.3*, DM.9*, PS.9*, PS.10* Science: 6.1, BIO.1, CH.1, ES.1, LS.1, PS.1		
Demonstrate initiative and self-direction.	English: 6.1, 6.4, 6.6, 6.7, 6.9, 7.1, 7.4, 7.6, 7.7, 7.9, 8.1, 8.4, 8.6, 8.7, 8.9, 9.1, 9.5, 9.6, 9.8, 10.1, 10.5, 10.6, 10.8, 11.1, 11.5, 11.6, 11.8, 12.1, 12.5, 12.6, 12.8 History and Social Science: CE.1, CE.4, CE.11, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1		

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Demonstrate integrity.	English: 6.1, 7.1, 8.1, 9.1, 9.5, 10.1, 10.5, 11.1, 11.5, 12.1, 12.5 History and Social Science: CE.1, CE.3, CE.4, GOVT.1, GOVT.16, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1		
Demonstrate work ethic.	English: 6.1, 7.1, 8.1, 9.1, 10.1, 11.1, 12.1 History and Social Science: CE.1, CE.4, CE.14, GOVT.1, GOVT.16, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1 Science: CH.1		
Demonstrating Interpersonal Skills			
Demonstrate conflict-resolution skills.	English: 6.1, 6.2, 6.4, 6.6, 6.7, 6.9, 7.1, 7.2, 7.4, 7.6, 7.7, 7.9, 8.1, 8.2, 8.4, 8.6, 8.7, 8.9, 9.1, 10.1, 11.1, 12.1 History and Social Science: CE.1, CE.4,		

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	GOVT.1, USI.1, VUS.1		
Demonstrate listening and speaking skills.	English: 6.1, 6.2, 6.4, 6.6, 7.1, 7.2, 7.4, 7.6, 8.1, 8.2, 8.4, 8.6, 9.1, 10.1, 11.1, 12.1 History and Social Science: CE.1, CE.4, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1		
Demonstrate respect for diversity.	English: 6.1, 7.1, 8.1, 9.1, 10.1, 11.1, 12.1 History and Social Science: CE.1, CE.3, CE.4, GOVT.1, GOVT.16, USI.1, USII.1, USII.9, VUS.1, VUS.13, WG.1, WHI.1, WHII.1		
Demonstrate customer service skills.	English: 6.1, 6.4, 6.7, 7.1, 7.4, 7.7, 8.1, 8.4, 8.7, 9.1, 9.5, 9.6, 10.1, 10.5, 10.6, 11.1, 11.5, 11.6, 12.1, 12.5, 12.6 History and Social Science: CE.1, CE.4,		

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	GOVT.1, GOVT.16, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1		
Collaborate with team members	English: 6.1, 7.1, 8.1, 9.1, 10.1, 11.1, 12.1 History and Social Science: CE.1, CE.3, CE.4, GOVT.1, GOVT.16, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1		
Demonstrating Professional Competencies			
Demonstrate big-picture thinking.	English: 6.1, 6.4, 7.1, 7.4, 8.1, 8.4, 9.1, 9.5, 10.1, 10.5, 11.1, 11.5, 12.1, 12.5 History and Social Science: CE.1, CE.4, CE.12, GOVT.1, GOVT.15, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1		
Demonstrate career- and life-management skills.	English: 6.1, 6.7, 7.1, 7.7, 8.1, 8.7, 9.1, 9.6, 10.1, 10.6, 11.1, 11.6, 12.1, 12.6		

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	History and Social Science: CE.1, CE.4, CE.12, CE.14, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1 Mathematics: 8.4		
Demonstrate continuous learning and adaptability.	English: 6.1, 6.4, 6.7, 6.9, 7.1, 7.4, 7.7, 7.9, 8.1, 8.4, 8.7, 8.9, 9.1, 9.5, 9.6, 9.8, 10.1, 10.5, 10.6, 10.8, 11.1, 11.5, 11.6, 11.8, 12.1, 12.5, 12.6, 12.8 History and Social Science: CE.1, CE.3, CE.4, CE.14, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1 Science: BIO.1, CH.1, LS.1, PH.1, PH.4, PS.1		
Manage time and resources.	English: 6.1, 6.2, 6.4, 6.7, 6.9, 7.1, 7.2, 7.4, 7.7, 7.9, 8.1, 8.2, 8.4, 8.7, 8.9, 9.1, 9.5, 9.6, 9.8, 10.1, 10.5, 10.6,		

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	10.8, 11.2, 11.5, 11.6, 11.8, 12.2, 12.5, 12.6, 12.8 History and Social Science: CE.1, CE.4, CE.11, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1 Mathematics: 6.10, 6.11, 6.12, 7.2, 7.3, 7.8, 7.9, 7.10, 7.11, 7.12, 7.13, 8.4, 8.11, 8.12, 8.13, 8.14, 8.17, 8.18, A.4, A.5, A.8, A.9, AFDA.3, AFDA.4, AFDA.5, AFDA.6, AFDA.7, AFDA.8, COM.1, COM.3, COM.5, COM.8		
Demonstrate information-literacy skills.	English: 6.1, 6.2, 6.4, 6.6, 6.7, 6.9, 7.1, 7.2, 7.3, 7.4, 7.6, 7.7, 7.9, 8.1, 8.2, 8.3, 8.4, 8.6, 8.7, 8.9, 9.2, 9.5, 9.6, 9.8, 10.2, 10.5, 10.6, 10.8, 11.2, 11.5, 11.6, 11.8, 12.2, 12.5, 12.6, 12.8		

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	History and Social Science: CE.1, CE.4, CE.14, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1 Mathematics: 6.10, 6.11, 7.8, 7.9, 8.11, 8.12, A.8, A.9, AFDA.3, AFDA.4, AFDA.6, AFDA.7, AFDA.8, DM.8, PS.1*, PS.2*, PS.3*, PS.4*, PS.7*, PS.8*, PS.9*, PS.10* Science: 6.1, BIO.1, CH.1, ES.1, LS.1, PH.1, PS.1		
Demonstrate an understanding of information security.	English: 6.1, 6.2, 6.3, 6.4, 6.6, 6.7, 6.8, 6.9, 7.1, 7.2, 7.3, 7.4, 7.6, 7.7, 7.8, 7.9, 8.1, 8.2, 8.3, 8.4, 8.6, 8.7, 8.8, 8.9, 9.1, 9.2, 9.5, 9.6, 9.8, 10.1, 10.2, 10.5, 10.6, 10.8, 11.1, 11.2, 11.5, 11.6, 11.8, 12.1, 12.2, 12.5, 12.6, 12.8 History and Social Science: CE.1, CE.4,		

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	CE.14, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1 Mathematics: COM.10		
Maintain working knowledge of current information-technology (IT) systems.	English: 6.1, 6.3, 6.4, 6.6, 6.9, 7.1, 7.3, 7.4, 7.6, 7.9, 8.1, 8.3, 8.4, 8.6, 8.9 History and Social Science: CE.1, CE.4, CE.14, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1 Mathematics: 7.8, COM.1, COM.2, COM.7, COM.9, COM.10, COM.11, COM.16, COM.18, PS.17 Science: BIO.1, CH.1, ES.1, PH.1		
Demonstrate proficiency with technologies, tools, and machines common to a specific occupation.	History and Social Science: CE.1, CE.4, CE.14, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1		

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	Mathematics: 6.10, 6.11, 7.9, 8.4, A.7, A.8, A.9, AFDA.1, AFDA.3, AFDA.5, AII.4, AII.7, AII.9, COM.1, COM.7, COM.10, COM.11, COM.12, COM.16 Science: CH.1, ES.1, LS.1, PH.1, PS.1		
Apply mathematical skills to job-specific tasks.	English: 6.4, 6.6, 6.7, 7.4, 7.6, 7.7, 8.4, 8.6, 8.7, 9.5, 9.6, 10.5, 10.6, 11.5, 11.6, 12.5, 12.6 History and Social Science: CE.1, CE.4, CE.14, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1 Mathematics: 6.1, 6.2, 6.5, 6.6, 6.12, 6.13, 6.14, 7.1, 7.2, 7.3, 7.4, 7.5, 7.6, 7.8, 7.9, 7.11, 7.12, 7.13, 8.4, 8.5, 8.6, 8.8, 8.9, 8.10, 8.11, 8.12, 8.13, 8.14, 8.15, 8.16, 8.17, 8.18, A.1, A.3, A.4,		

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	A.5, A.7, A.8, A.9, AFDA.1, AFDA.3, AFDA.5, AFDA.8, AII.3, AII.7, AII.9, AII.10, COM.1, COM.7 Science: 6.1, BIO.1, CH.1, ES.1, LS.1, PH.1, PS.1		
Demonstrate professionalism.	English: 6.1, 7.1, 8.1, 9.1, 10.1, 11.1, 12.1 History and Social Science: CE.1, CE.4, CE.14, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1		
Demonstrate reading and writing skills.	English: 6.1, 6.6, 6.7, 7.1, 7.6, 7.7, 8.1, 8.6, 8.7, 9.1, 9.5, 9.6, 9.7, 10.1, 10.5, 10.6, 10.7, 11.1, 11.5, 11.6, 11.7, 12.1, 12.5, 12.6, 12.7 History and Social Science: CE.1, CE.4, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1		

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	Science: 6.1, PH.1, PS.1		
Demonstrate workplace safety.	English: 6.4, 7.4, 8.4, 9.5, 10.5, 11.5, 12.5 History and Social Science: CE.1, CE.4, GOVT.1, USI.1, USII.1, VUS.1, WG.1, WHI.1, WHII.1 Science: CH.1		
Examining All Aspects of an Industry			
Examine aspects of planning within an industry/organization.	History and Social Science: GOVT.16		
Examine aspects of management within an industry/organization.			
Examine aspects of financial responsibility within an industry/organization.			
Examine technical and production skills required of workers within an industry/organization.			

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Examine principles of technology that underlie an industry/organization.			
Examine labor issues related to an industry/organization.	History and Social Science: GOVT.16		
Examine community issues related to an industry/organization.	History and Social Science: GOVT.16		
Examine health, safety, and environmental issues related to an industry/organization.	History and Social Science: GOVT.16		
Addressing Elements of Student Life			
Identify the purposes and goals of the student organization.			
Explain the benefits and responsibilities of membership in the student organization as a student and in professional/civic organizations as an adult.			
Demonstrate leadership skills			

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through participation in student organization activities, such as meetings, programs, and projects.			
Identify Internet safety issues and procedures for complying with acceptable use standards.			
Exploring Work-Based Learning			
Identify the types of work-based learning (WBL) opportunities.			
Reflect on lessons learned during the WBL experience.			
Explore career opportunities related to the WBL experience.			
Participate in a WBL experience, when appropriate.			
Assisting the Pharmacist in Serving Patients			
Receive prescription or medication orders.	English: 11.2, 12.2 Mathematics: A.1, A.4	Health Science Events o Pharmacology Health Professions Events	I. Assisting the Pharmacist in Serving Patients o I.1. Knowledge of federal, state, and/or practice site regulations, codes of ethics, and standards pertaining to the practice of pharmacy

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		<ul style="list-style-type: none"> o Pharmacy Science 	<ul style="list-style-type: none"> o I.2. Knowledge of pharmaceutical, medical, and legal developments which impact on the practice of pharmacy o I.3. Knowledge of state-specific prescription transfer regulations o I.4. Knowledge of pharmaceutical and medical abbreviations and terminology o I.5. Knowledge of generic and brand names of pharmaceuticals o I.6. Knowledge of therapeutic equivalence o I.7. Knowledge of epidemiology o I.12. Knowledge of drug interactions (such as drug-disease, drug-drug, drug-laboratory, drug-nutrient) o I.13. Knowledge of strengths/dose, dosage forms, physical appearance, routes of administration, and duration of drug therapy o I.14. Knowledge of effects of patient's age (for example, neonates, geriatrics) on drug and non-drug therapy o I.15. Knowledge of drug information sources including printed and electronic reference materials o I.16. Knowledge of pharmacology (for example, mechanism of action) o I.17. Knowledge of common and severe side or adverse effects, allergies, and therapeutic contraindications associated with medications o I.18. Knowledge of drug indications o I.19. Knowledge of relative role of drug and non-drug therapy (for example, herbal remedies, lifestyle modification, smoking cessation)

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			<ul style="list-style-type: none"> o I.20. Knowledge of practice site policies and procedures regarding prescriptions or medication orders o I.22. Knowledge of required prescription order refill information o I.23. Knowledge of formula to verify the validity of a prescriber's DEA number o I.24. Knowledge of techniques for detecting forged or altered prescriptions o I.25. Knowledge of techniques for detecting prescription errors (for example, abnormal doses, early refill, incorrect quantity, incorrect patient ID #, incorrect drug) o I.28. Knowledge of non-prescription (over-the-counter [OTC]) formulations o I.73. Knowledge of confidentiality requirements
<p>Assist in obtaining information from a patient/patient's representative, at the direction of the pharmacist.</p>	<p>English: 11.1, 11.5, 12.1, 12.5 History and Social Science: GOVT.16</p>	<p>Health Science Events</p> <ul style="list-style-type: none"> o Pharmacology <p>Health Professions Events</p> <ul style="list-style-type: none"> o Pharmacy Science 	<p>I. Assisting the Pharmacist in Serving Patients</p> <ul style="list-style-type: none"> o I.1. Knowledge of federal, state, and/or practice site regulations, codes of ethics, and standards pertaining to the practice of pharmacy o I.2. Knowledge of pharmaceutical, medical, and legal developments which impact on the practice of pharmacy o I.5. Knowledge of generic and brand names of pharmaceuticals o I.6. Knowledge of therapeutic equivalence o I.7. Knowledge of epidemiology o I.8. Knowledge of risk factors for disease o I.9. Knowledge of anatomy and physiology o I.11. Knowledge of standard and abnormal laboratory values

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			<ul style="list-style-type: none"> o I.12. Knowledge of drug interactions (such as drug-disease, drug-drug, drug-laboratory, drug-nutrient) o I.13. Knowledge of strengths/dose, dosage forms, physical appearance, routes of administration, and duration of drug therapy o I.14. Knowledge of effects of patient's age (for example, neonates, geriatrics) on drug and non-drug therapy o I.15. Knowledge of drug information sources including printed and electronic reference materials o I.16. Knowledge of pharmacology (for example, mechanism of action) o I.17. Knowledge of common and severe side or adverse effects, allergies, and therapeutic contraindications associated with medications o I.18. Knowledge of drug indications o I.19. Knowledge of relative role of drug and non-drug therapy (for example, herbal remedies, lifestyle modification, smoking cessation) o I.20. Knowledge of practice site policies and procedures regarding prescriptions or medication orders o I.21. Knowledge of information to be obtained from patient/patient's representative (for example, demographic information, allergy, third-party information) o I.25. Knowledge of techniques for detecting prescription errors (for example, abnormal doses, early refill, incorrect quantity, incorrect patient ID #, incorrect drug)

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			<ul style="list-style-type: none"> o I.28. Knowledge of non-prescription (over-the-counter [OTC]) formulations o I.40. Knowledge of techniques for assessing patient's compliance with prescription or medication order o I.41. Knowledge of action to be taken in the event of a missed dose o I.47. Knowledge of automatic stop orders o I.71. Knowledge of customer service principles o I.72. Knowledge of communication techniques o I.73. Knowledge of confidentiality requirements
Record data to assist the pharmacist in monitoring patient outcomes.	English: 11.6, 11.7, 12.6, 12.7	Health Science Events <ul style="list-style-type: none"> o Medical Terminology o Pharmacology Health Professions Events <ul style="list-style-type: none"> o Pharmacy Science 	I. Assisting the Pharmacist in Serving Patients <ul style="list-style-type: none"> o I.1. Knowledge of federal, state, and/or practice site regulations, codes of ethics, and standards pertaining to the practice of pharmacy o I.2. Knowledge of pharmaceutical, medical, and legal developments which impact on the practice of pharmacy o I.5. Knowledge of generic and brand names of pharmaceuticals o I.6. Knowledge of therapeutic equivalence o I.7. Knowledge of epidemiology o I.8. Knowledge of risk factors for disease o I.9. Knowledge of anatomy and physiology o I.10. Knowledge of signs and symptoms of disease states o I.12. Knowledge of drug interactions (such as drug-disease, drug-drug, drug-laboratory, drug-nutrient)

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			<ul style="list-style-type: none"> o I.13. Knowledge of strengths/dose, dosage forms, physical appearance, routes of administration, and duration of drug therapy o I.14. Knowledge of effects of patient’s age (for example, neonates, geriatrics) on drug and non-drug therapy o I.15. Knowledge of drug information sources including printed and electronic reference materials o I.16. Knowledge of pharmacology (for example, mechanism of action) o I.17. Knowledge of common and severe side or adverse effects, allergies, and therapeutic contraindications associated with medications o I.18. Knowledge of drug indications o I.19. Knowledge of relative role of drug and non-drug therapy (for example, herbal remedies, lifestyle modification, smoking cessation) o I.20. Knowledge of practice site policies and procedures regarding prescriptions or medication orders o I.25. Knowledge of techniques for detecting prescription errors (for example, abnormal doses, early refill, incorrect quantity, incorrect patient ID #, incorrect drug) o I.28. Knowledge of non-prescription (over-the-counter [OTC]) formulations o I.53. Knowledge of physical and chemical incompatibilities o I.71. Knowledge of customer service principles o I.72. Knowledge of communication techniques o I.73. Knowledge of confidentiality requirements

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Assist the pharmacist in collecting data.	English: 11.5, 12.5	Health Science Events o Pathophysiology o Pharmacology Health Professions Events o Pharmacy Science	I. Assisting the Pharmacist in Serving Patients o I.1. Knowledge of federal, state, and/or practice site regulations, codes of ethics, and standards pertaining to the practice of pharmacy o I.2. Knowledge of pharmaceutical, medical, and legal developments which impact on the practice of pharmacy o I.11. Knowledge of standard and abnormal laboratory values o I.12. Knowledge of drug interactions (such as drug-disease, drug-drug, drug-laboratory, drug-nutrient) o I.15. Knowledge of drug information sources including printed and electronic reference materials o I.16. Knowledge of pharmacology (for example, mechanism of action) o I.17. Knowledge of common and severe side or adverse effects, allergies, and therapeutic contraindications associated with medications o I.18. Knowledge of drug indications o I.20. Knowledge of practice site policies and procedures regarding prescriptions or medication orders o I.29. Knowledge of monitoring and screening equipment (for example, blood pressure cuffs, glucose monitors) o I.73. Knowledge of confidentiality requirements
Confirm a prescription or medication order.	English: 11.6, 11.7, 12.6, 12.7	Health Science Events o Pharmacology Health Professions Events	I. Assisting the Pharmacist in Serving Patients o I.1. Knowledge of federal, state, and/or practice site regulations, codes of ethics, and standards pertaining to the practice of pharmacy

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		<ul style="list-style-type: none"> o Pharmacy Science 	<ul style="list-style-type: none"> o I.2. Knowledge of pharmaceutical, medical, and legal developments which impact on the practice of pharmacy o I.4. Knowledge of pharmaceutical and medical abbreviations and terminology o I.5. Knowledge of generic and brand names of pharmaceuticals o I.6. Knowledge of therapeutic equivalence o I.15. Knowledge of drug information sources including printed and electronic reference materials o I.20. Knowledge of practice site policies and procedures regarding prescriptions or medication orders o I.22. Knowledge of required prescription order refill information o I.23. Knowledge of formula to verify the validity of a prescriber's DEA number o I.24. Knowledge of techniques for detecting forged or altered prescriptions o I.30. Knowledge of medical and surgical appliances and devices (for example, ostomies, orthopedic devices, pumps) o I.73. Knowledge of confidentiality requirements
Generate a patient profile.	English: 11.5, 12.5	Health Science Events <ul style="list-style-type: none"> o Pharmacology Health Professions Events <ul style="list-style-type: none"> o Pharmacy Science 	I. Assisting the Pharmacist in Serving Patients <ul style="list-style-type: none"> o I.1. Knowledge of federal, state, and/or practice site regulations, codes of ethics, and standards pertaining to the practice of pharmacy o I.2. Knowledge of pharmaceutical, medical, and legal developments which impact on the practice of pharmacy

Task	SOL Correlations	HOSA Competitive Events (High School)	Pharmacy Technician Certification Board (PTCB) Examination Required Knowledge
			<ul style="list-style-type: none"> o I.4. Knowledge of pharmaceutical and medical abbreviations and terminology o I.5. Knowledge of generic and brand names of pharmaceuticals o I.6. Knowledge of therapeutic equivalence o I.11. Knowledge of standard and abnormal laboratory values o I.12. Knowledge of drug interactions (such as drug-disease, drug-drug, drug-laboratory, drug-nutrient) o I.15. Knowledge of drug information sources including printed and electronic reference materials o I.16. Knowledge of pharmacology (for example, mechanism of action) o I.17. Knowledge of common and severe side or adverse effects, allergies, and therapeutic contraindications associated with medications o I.18. Knowledge of drug indications o I.20. Knowledge of practice site policies and procedures regarding prescriptions or medication orders o I.69. Knowledge of pharmacy-related computer software for documenting the dispensing of prescriptions or medication orders o I.73. Knowledge of confidentiality requirements
Process a prescription or medication order.	English: 11.5, 12.5 Mathematics: A.1, A.4, COM.1	Health Science Events <ul style="list-style-type: none"> o Pharmacology Health Professions Events <ul style="list-style-type: none"> o Clinical Specialty 	I. Assisting the Pharmacist in Serving Patients <ul style="list-style-type: none"> o I.1. Knowledge of federal, state, and/or practice site regulations, codes of ethics, and standards pertaining to the practice of pharmacy

Task	SOL Correlations	HOSA Competitive Events (High School)	Pharmacy Technician Certification Board (PTCB) Examination Required Knowledge
		<ul style="list-style-type: none"> o Pharmacy Science 	<ul style="list-style-type: none"> o I.2. Knowledge of pharmaceutical, medical, and legal developments which impact on the practice of pharmacy o I.4. Knowledge of pharmaceutical and medical abbreviations and terminology o I.5. Knowledge of generic and brand names of pharmaceuticals o I.6. Knowledge of therapeutic equivalence o I.12. Knowledge of drug interactions (such as drug-disease, drug-drug, drug-laboratory, drug-nutrient) o I.13. Knowledge of strengths/dose, dosage forms, physical appearance, routes of administration, and duration of drug therapy o I.14. Knowledge of effects of patient's age (for example, neonates, geriatrics) on drug and non-drug therapy o I.15. Knowledge of drug information sources including printed and electronic reference materials o I.16. Knowledge of pharmacology (for example, mechanism of action) o I.17. Knowledge of common and severe side or adverse effects, allergies, and therapeutic contraindications associated with medications o I.18. Knowledge of drug indications o I.20. Knowledge of practice site policies and procedures regarding prescriptions or medication orders o I.22. Knowledge of required prescription order refill information

Task	SOL Correlations	HOSA Competitive Events (High School)	Pharmacy Technician Certification Board (PTCB) Examination Required Knowledge
			<ul style="list-style-type: none"> o I.25. Knowledge of techniques for detecting prescription errors (for example, abnormal doses, early refill, incorrect quantity, incorrect patient ID #, incorrect drug) o I.31. Knowledge of proper storage conditions o I.32. Knowledge of automated dispensing technology o I.33. Knowledge of packaging requirements o I.34. Knowledge of NDC number components o I.35. Knowledge of purpose for lot numbers and expiration dates o I.36. Knowledge of information for prescription or medication order label(s) o I.49. Knowledge of quality improvement methods (for example, matching NDC number, double-counting narcotics) o I.52. Knowledge of drug stability o I.69. Knowledge of pharmacy-related computer software for documenting the dispensing of prescriptions or medication orders o I.73. Knowledge of confidentiality requirements
Compound a prescription or medication order.	English: 11.5, 11.6, 11.7, 12.5, 12.6, 12.7 History and Social Science: GOVT.16 Mathematics: A.1, A.4	Health Science Events <ul style="list-style-type: none"> o Medical Math o Pharmacology Health Professions Events <ul style="list-style-type: none"> o Pharmacy Science 	I. Assisting the Pharmacist in Serving Patients <ul style="list-style-type: none"> o I.1. Knowledge of federal, state, and/or practice site regulations, codes of ethics, and standards pertaining to the practice of pharmacy o I.2. Knowledge of pharmaceutical, medical, and legal developments which impact on the practice of pharmacy o I.4. Knowledge of pharmaceutical and medical abbreviations and terminology

Task	SOL Correlations	HOSA Competitive Events (High School)	Pharmacy Technician Certification Board (PTCB) Examination Required Knowledge
			<ul style="list-style-type: none"> o I.5. Knowledge of generic and brand names of pharmaceuticals o I.6. Knowledge of therapeutic equivalence o I.13. Knowledge of strengths/dose, dosage forms, physical appearance, routes of administration, and duration of drug therapy o I.14. Knowledge of effects of patient's age (for example, neonates, geriatrics) on drug and non-drug therapy o I.15. Knowledge of drug information sources including printed and electronic reference materials o I.20. Knowledge of practice site policies and procedures regarding prescriptions or medication orders o I.30. Knowledge of medical and surgical appliances and devices (for example, ostomies, orthopedic devices, pumps) o I.32. Knowledge of automated dispensing technology o I.35. Knowledge of purpose for lot numbers and expiration dates o I.36. Knowledge of information for prescription or medication order label(s) o I.50. Knowledge of pharmacy calculations (for example, algebra, ratio and proportions, metric conversions, IV drip rates, IV admixture calculations) o I.51. Knowledge of measurement systems (for example, metric and avoirdupois) o I.54. Knowledge of equipment calibration techniques

Task	SOL Correlations	HOSA Competitive Events (High School)	Pharmacy Technician Certification Board (PTCB) Examination Required Knowledge
			<ul style="list-style-type: none"> o I.55. Knowledge of procedures to prepare IV admixtures o I.56. Knowledge of procedures to prepare chemotherapy o I.57. Knowledge of procedures to prepare total parenteral nutrition (TPN) solutions o I.58. Knowledge of procedures to prepare reconstituted injectable and non-injectable medications o I.59. Knowledge of specialized procedures to prepare injectable medications (for example, epidurals and patient controlled analgesic [PCA] cassettes) o I.62. Knowledge of procedures to compound sterile non-injectable products (for example, eyedrops) o I.63. Knowledge of procedures to compound non-sterile products (for example, ointments, mixtures, liquids, emulsions) o I.65. Knowledge of aseptic techniques (for example, laminar flow hood, filters) o I.66. Knowledge of infection control procedures o I.67. Knowledge of requirements for handling hazardous products and disposing of hazardous waste o I.73. Knowledge of confidentiality requirements
Provide medication to a patient/patient's representative.	English: 11.5, 11.6, 11.7, 12.5, 12.6, 12.7	Health Science Events <ul style="list-style-type: none"> o Pharmacology Health Professions Events <ul style="list-style-type: none"> o Pharmacy Science	I. Assisting the Pharmacist in Serving Patients <ul style="list-style-type: none"> o I.1. Knowledge of federal, state, and/or practice site regulations, codes of ethics, and standards pertaining to the practice of pharmacy o I.2. Knowledge of pharmaceutical, medical, and legal developments which impact on the practice of pharmacy o I.5. Knowledge of generic and brand names of pharmaceuticals

Task	SOL Correlations	HOSA Competitive Events (High School)	Pharmacy Technician Certification Board (PTCB) Examination Required Knowledge
			<ul style="list-style-type: none"> o I.6. Knowledge of therapeutic equivalence o I.15. Knowledge of drug information sources including printed and electronic reference materials o I.20. Knowledge of practice site policies and procedures regarding prescriptions or medication orders o I.30. Knowledge of medical and surgical appliances and devices (for example, ostomies, orthopedic devices, pumps) o I.32. Knowledge of automated dispensing technology o I.35. Knowledge of purpose for lot numbers and expiration dates o I.36. Knowledge of information for prescription or medication order label(s) o I.42. Knowledge of requirements for mailing medications o I.43. Knowledge of delivery systems for distributing medications (for example, pneumatic tube, robotics) o I.44. Knowledge of requirements for dispensing controlled substances o I.45. Knowledge of requirements for dispensing investigational drugs o I.46. Knowledge of record-keeping requirements for medication dispensing o I.68. Knowledge of documentation requirements for controlled substances, investigational drugs, and hazardous wastes o I.73. Knowledge of confidentiality requirements

Task	SOL Correlations	HOSA Competitive Events (High School)	Pharmacy Technician Certification Board (PTCB) Examination Required Knowledge
Assist with data collection and analysis for quality assurance and for patient safety activities.	English: 11.3, 11.5, 11.6, 11.7, 11.8, 12.3, 12.5, 12.6, 12.7, 12.8 History and Social Science: GOVT.16 Mathematics: COM.1	Health Science Events <ul style="list-style-type: none"> o Pharmacology Health Professions Events <ul style="list-style-type: none"> o Pharmacy Science	I. Assisting the Pharmacist in Serving Patients <ul style="list-style-type: none"> o I.1. Knowledge of federal, state, and/or practice site regulations, codes of ethics, and standards pertaining to the practice of pharmacy o I.2. Knowledge of pharmaceutical, medical, and legal developments which impact on the practice of pharmacy o I.5. Knowledge of generic and brand names of pharmaceuticals o I.6. Knowledge of therapeutic equivalence o I.15. Knowledge of drug information sources including printed and electronic reference materials o I.20. Knowledge of practice site policies and procedures regarding prescriptions or medication orders o I.73. Knowledge of confidentiality requirements
Perform billing and accounting functions for pharmacy functions and goods.	English: 11.5, 11.6, 11.7, 11.8, 12.5, 12.6, 12.7, 12.8 Mathematics: A.1, A.4, COM.1		I. Assisting the Pharmacist in Serving Patients <ul style="list-style-type: none"> o I.1. Knowledge of federal, state, and/or practice site regulations, codes of ethics, and standards pertaining to the practice of pharmacy o I.2. Knowledge of pharmaceutical, medical, and legal developments which impact on the practice of pharmacy o I.5. Knowledge of generic and brand names of pharmaceuticals o I.6. Knowledge of therapeutic equivalence o I.13. Knowledge of strengths/dose, dosage forms, physical appearance, routes of administration, and duration of drug therapy

Task	SOL Correlations	HOSA Competitive Events (High School)	Pharmacy Technician Certification Board (PTCB) Examination Required Knowledge
			<ul style="list-style-type: none"> o I.14. Knowledge of effects of patient’s age (for example, neonates, geriatrics) on drug and non-drug therapy o I.15. Knowledge of drug information sources including printed and electronic reference materials o I.20. Knowledge of practice site policies and procedures regarding prescriptions or medication orders o I.73. Knowledge of confidentiality requirements o I.74. Knowledge of cash handling procedures o I.75. Knowledge of reimbursement policies and plans
Communicate with third-party payers to determine coverage, rejected claims, or prior authorizations.	English: 11.1, 11.5, 12.1, 12.5 History and Social Science: GOVT.16		<p>I. Assisting the Pharmacist in Serving Patients</p> <ul style="list-style-type: none"> o I.1. Knowledge of federal, state, and/or practice site regulations, codes of ethics, and standards pertaining to the practice of pharmacy o I.2. Knowledge of pharmaceutical, medical, and legal developments which impact on the practice of pharmacy o I.5. Knowledge of generic and brand names of pharmaceuticals o I.6. Knowledge of therapeutic equivalence o I.12. Knowledge of drug interactions (such as drug-disease, drug-drug, drug-laboratory, drug-nutrient) o I.15. Knowledge of drug information sources including printed and electronic reference materials o I.16. Knowledge of pharmacology (for example, mechanism of action)

Task	SOL Correlations	HOSA Competitive Events (High School)	Pharmacy Technician Certification Board (PTCB) Examination Required Knowledge
			<ul style="list-style-type: none"> o I.17. Knowledge of common and severe side or adverse effects, allergies, and therapeutic contraindications associated with medications o I.18. Knowledge of drug indications o I.20. Knowledge of practice site policies and procedures regarding prescriptions or medication orders o I.72. Knowledge of communication techniques o I.73. Knowledge of confidentiality requirements
Provide supplemental information, as permitted by state law and regulations.	English: 11.5, 12.5 History and Social Science: GOVT.9	Teamwork Events <ul style="list-style-type: none"> o Community Awareness o Health Education 	I. Assisting the Pharmacist in Serving Patients <ul style="list-style-type: none"> o I.1. Knowledge of federal, state, and/or practice site regulations, codes of ethics, and standards pertaining to the practice of pharmacy o I.2. Knowledge of pharmaceutical, medical, and legal developments which impact on the practice of pharmacy o I.5. Knowledge of generic and brand names of pharmaceuticals o I.6. Knowledge of therapeutic equivalence o I.13. Knowledge of strengths/dose, dosage forms, physical appearance, routes of administration, and duration of drug therapy o I.14. Knowledge of effects of patient’s age (for example, neonates, geriatrics) on drug and non-drug therapy o I.15. Knowledge of drug information sources including printed and electronic reference materials o I.20. Knowledge of practice site policies and procedures regarding prescriptions or medication orders

Task	SOL Correlations	HOSA Competitive Events (High School)	Pharmacy Technician Certification Board (PTCB) Examination Required Knowledge
			<ul style="list-style-type: none"> o I.26. Knowledge of effects of patient’s disabilities (for example, visual, physical) on drug and non-drug therapy o I.37. Knowledge of requirements regarding auxiliary labels o I.38. Knowledge of requirements regarding patient package inserts o I.39. Knowledge of special directions and precautions for patient/patient’s representative regarding preparation and use of medications o I.72. Knowledge of communication techniques o I.73. Knowledge of confidentiality requirements
<p>Communicate with a patient to determine whether the patient needs/wants counseling with the pharmacist.</p>	<p>English: 11.1, 12.1 History and Social Science: GOVT.7, GOVT.8, GOVT.9</p>	<p>Health Science Events</p> <ul style="list-style-type: none"> o Medical Law and Ethics 	<p>I. Assisting the Pharmacist in Serving Patients</p> <ul style="list-style-type: none"> o I.1. Knowledge of federal, state, and/or practice site regulations, codes of ethics, and standards pertaining to the practice of pharmacy o I.2. Knowledge of pharmaceutical, medical, and legal developments which impact on the practice of pharmacy o I.20. Knowledge of practice site policies and procedures regarding prescriptions or medication orders o I.26. Knowledge of effects of patient’s disabilities (for example, visual, physical) on drug and non-drug therapy o I.71. Knowledge of customer service principles o I.72. Knowledge of communication techniques o I.73. Knowledge of confidentiality requirements o I.76. Knowledge of legal requirements for pharmacist counseling of patient/patient’s representative

Task	SOL Correlations	HOSA Competitive Events (High School)	Pharmacy Technician Certification Board (PTCB) Examination Required Knowledge
Maintaining Medication and Inventory Control Systems			
Perform screening functions for drug administration under appropriate supervision, as permitted by state law and regulations.	English: 11.1, 11.5, 11.6, 11.7, 12.1, 12.5, 12.6, 12.7 History and Social Science: GOVT.11, GOVT.16	Health Science Events <ul style="list-style-type: none"> o Medical Spelling o Medical Terminology o Pharmacology Health Professions Events <ul style="list-style-type: none"> o Pharmacy Science 	I. Assisting the Pharmacist in Serving Patients <ul style="list-style-type: none"> o I.1. Knowledge of federal, state, and/or practice site regulations, codes of ethics, and standards pertaining to the practice of pharmacy o I.2. Knowledge of pharmaceutical, medical, and legal developments which impact on the practice of pharmacy o I.5. Knowledge of generic and brand names of pharmaceuticals o I.6. Knowledge of therapeutic equivalence o I.15. Knowledge of drug information sources including printed and electronic reference materials o I.20. Knowledge of practice site policies and procedures regarding prescriptions or medication orders o I.27. Knowledge of techniques, equipment, and supplies for drug administration (for example, insulin syringes and IV tubing) o I.73. Knowledge of confidentiality requirements
Identify pharmaceuticals, durable medical equipment, devices, and supplies to be ordered.	English: 11.5, 12.5	Health Science Events <ul style="list-style-type: none"> o Pharmacology Health Professions Events <ul style="list-style-type: none"> o Pharmacy Science 	II. Maintaining Medication and Inventory Control Systems <ul style="list-style-type: none"> o II.2. Knowledge of pharmaceutical industry procedures for obtaining pharmaceuticals o II.6. Knowledge of par and reorder levels and drug usage o II.12. Knowledge of products used in packaging and repackaging (for example, child-resistant caps and light-protective unit-dose packaging)

Task	SOL Correlations	HOSA Competitive Events (High School)	Pharmacy Technician Certification Board (PTCB) Examination Required Knowledge
			<ul style="list-style-type: none"> o II.17. Knowledge of legal and regulatory requirements and professional standards governing operations of pharmacies (for example, prepackaging, difference between compounding and manufacturing) o II.18. Knowledge of legal and regulatory requirements and professional standards (for example, FDA, DEA, state board of pharmacy, JCAHO) for preparing, labeling, dispensing, distributing, and administering medications o II.19. Knowledge of medication distribution and control systems requirements for the use of medications in various practice settings (for example, automated dispensing systems, bar coding, nursing stations, crash carts)
Place routine and emergency orders.	English: 11.1, 11.5, 11.6, 11.7, 12.1, 12.5, 12.6, 12.7	Health Science Events <ul style="list-style-type: none"> o Medical Law and Ethics o Pharmacology Health Professions Events o Pharmacy Science 	II. Maintaining Medication and Inventory Control Systems <ul style="list-style-type: none"> o II.2. Knowledge of pharmaceutical industry procedures for obtaining pharmaceuticals o II.6. Knowledge of par and reorder levels and drug usage o II.9. Knowledge of the use of DEA controlled substance ordering forms o II.12. Knowledge of products used in packaging and repackaging (for example, child-resistant caps and light-protective unit-dose packaging) o II.22. Knowledge of policies, procedures, and practices regarding storage and handling of hazardous materials and wastes (for example, Materials Safety Data Sheet [MSDS]) o II.23. Knowledge of medication distribution and control systems requirements for controlled

Task	SOL Correlations	HOSA Competitive Events (High School)	Pharmacy Technician Certification Board (PTCB) Examination Required Knowledge
			substances, investigational drugs, and hazardous materials and waste
Receive and verify purchases.	English: 11.5, 12.5 Mathematics: COM.1		<p>II. Maintaining Medication and Inventory Control Systems</p> <ul style="list-style-type: none"> o II.1. Knowledge of drug product laws and regulations and professional standards related to obtaining medication supplies, durable medical equipment, and products (for example, Food, Drug and Cosmetic Act; Controlled Substances Act; Prescription Drug Marketing Act; USP-NF; NRC standards) o II.2. Knowledge of pharmaceutical industry procedures for obtaining pharmaceuticals o II.7. Knowledge of inventory receiving process o II.19. Knowledge of medication distribution and control systems requirements for the use of medications in various practice settings (for example, automated dispensing systems, bar coding, nursing stations, crash carts)
Place purchases in inventory.		<p>Health Science Events</p> <ul style="list-style-type: none"> o Pharmacology 	<p>II. Maintaining Medication and Inventory Control Systems</p> <ul style="list-style-type: none"> o II.1. Knowledge of drug product laws and regulations and professional standards related to obtaining medication supplies, durable medical equipment, and products (for example, Food, Drug and Cosmetic Act; Controlled Substances Act; Prescription Drug Marketing Act; USP-NF; NRC standards) o II.7. Knowledge of inventory receiving process

Task	SOL Correlations	HOSA Competitive Events (High School)	Pharmacy Technician Certification Board (PTCB) Examination Required Knowledge
			<ul style="list-style-type: none"> o II.13. Knowledge of risk management opportunities (for example, dress code, personal protective equipment [PPE], needle recapping) o II.18. Knowledge of legal and regulatory requirements and professional standards (for example, FDA, DEA, state board of pharmacy, JCAHO) for preparing, labeling, dispensing, distributing, and administering medications o II.20. Knowledge of preparation, storage requirements, and documentation for medications compounded in anticipation of prescriptions or medication orders o II.21. Knowledge of repackaging, storage requirements, and documentation for finished dosage forms prepared in anticipation of prescriptions or medication orders o II.22. Knowledge of policies, procedures, and practices regarding storage and handling of hazardous materials and wastes (for example, Materials Safety Data Sheet [MSDS]) o II.23. Knowledge of medication distribution and control systems requirements for controlled substances, investigational drugs, and hazardous materials and waste
Distribute non-patient-specific inventory.		Health Science Events o Pharmacology	II. Maintaining Medication and Inventory Control Systems

Task	SOL Correlations	HOSA Competitive Events (High School)	Pharmacy Technician Certification Board (PTCB) Examination Required Knowledge
			<ul style="list-style-type: none"> o II.1. Knowledge of drug product laws and regulations and professional standards related to obtaining medication supplies, durable medical equipment, and products (for example, Food, Drug and Cosmetic Act; Controlled Substances Act; Prescription Drug Marketing Act; USP-NF; NRC standards) o II.13. Knowledge of risk management opportunities (for example, dress code, personal protective equipment [PPE], needle recapping) o II.17. Knowledge of legal and regulatory requirements and professional standards governing operations of pharmacies (for example, prepackaging, difference between compounding and manufacturing) o II.18. Knowledge of legal and regulatory requirements and professional standards (for example, FDA, DEA, state board of pharmacy, JCAHO) for preparing, labeling, dispensing, distributing, and administering medications o II.19. Knowledge of medication distribution and control systems requirements for the use of medications in various practice settings (for example, automated dispensing systems, bar coding, nursing stations, crash carts) o II.20. Knowledge of preparation, storage requirements, and documentation for medications compounded in anticipation of prescriptions or medication orders o II.21. Knowledge of repackaging, storage requirements, and documentation for finished dosage forms prepared in anticipation of prescriptions or medication orders

Task	SOL Correlations	HOSA Competitive Events (High School)	Pharmacy Technician Certification Board (PTCB) Examination Required Knowledge
			<ul style="list-style-type: none"> o II.22. Knowledge of policies, procedures, and practices regarding storage and handling of hazardous materials and wastes (for example, Materials Safety Data Sheet [MSDS]) o II.23. Knowledge of medication distribution and control systems requirements for controlled substances, investigational drugs, and hazardous materials and waste
Review inventory for possible removal of items.	English: 11.5, 12.5	Health Science Events <ul style="list-style-type: none"> o Pharmacology 	II. Maintaining Medication and Inventory Control Systems <ul style="list-style-type: none"> o II.1. Knowledge of drug product laws and regulations and professional standards related to obtaining medication supplies, durable medical equipment, and products (for example, Food, Drug and Cosmetic Act; Controlled Substances Act; Prescription Drug Marketing Act; USP-NF; NRC standards) o II.11. Knowledge of policies, procedures, and practices for inventory systems o II.14. Knowledge of the FDA’s classifications of recalls o II.15. Knowledge of systems to identify and return expired and unsalable products o II.16. Knowledge of rules and regulations for the removal and disposal of products o II.17. Knowledge of legal and regulatory requirements and professional standards governing operations of pharmacies (for example, prepackaging, difference between compounding and manufacturing) o II.18. Knowledge of legal and regulatory requirements and professional standards (for example, FDA, DEA, state board of pharmacy, JCAHO) for

Task	SOL Correlations	HOSA Competitive Events (High School)	Pharmacy Technician Certification Board (PTCB) Examination Required Knowledge
			preparing, labeling, dispensing, distributing, and administering medications <ul style="list-style-type: none"> o II.19. Knowledge of medication distribution and control systems requirements for the use of medications in various practice settings (for example, automated dispensing systems, bar coding, nursing stations, crash carts) o II.22. Knowledge of policies, procedures, and practices regarding storage and handling of hazardous materials and wastes (for example, Materials Safety Data Sheet [MSDS]) o II.23. Knowledge of medication distribution and control systems requirements for controlled substances, investigational drugs, and hazardous materials and waste o II.24. Knowledge of the written, oral, and electronic communication channels necessary to ensure appropriate follow-up and problem resolution (for example, product recalls, supplier shorts) o II.25. Knowledge of quality assurance policies, procedures, and practices for medication and inventory control systems
Manage changes in product availability.	English: 11.5, 12.5	Health Science Events <ul style="list-style-type: none"> o Pharmacology 	II. Maintaining Medication and Inventory Control Systems <ul style="list-style-type: none"> o II.5. Knowledge of formulary or approved stock list o II.8. Knowledge of bioavailability standards (for example, generic substitutes) o II.14. Knowledge of the FDA’s classifications of recalls

Task	SOL Correlations	HOSA Competitive Events (High School)	Pharmacy Technician Certification Board (PTCB) Examination Required Knowledge
			<ul style="list-style-type: none"> o II.22. Knowledge of policies, procedures, and practices regarding storage and handling of hazardous materials and wastes (for example, Materials Safety Data Sheet [MSDS]) o II.23. Knowledge of medication distribution and control systems requirements for controlled substances, investigational drugs, and hazardous materials and waste o II.24. Knowledge of the written, oral, and electronic communication channels necessary to ensure appropriate follow-up and problem resolution (for example, product recalls, supplier shorts) o II.25. Knowledge of quality assurance policies, procedures, and practices for medication and inventory control systems
<p>Explain policies and procedures to deter theft and/or drug diversion.</p>	<p>English: 11.5, 12.5 History and Social Science: GOVT.9</p>	<p>Health Science Events</p> <ul style="list-style-type: none"> o Medical Law and Ethics o Pharmacology <p>Health Professions Events</p> <ul style="list-style-type: none"> o Pharmacy <p>Science</p>	<p>II. Maintaining Medication and Inventory Control Systems</p> <ul style="list-style-type: none"> o II.22. Knowledge of policies, procedures, and practices regarding storage and handling of hazardous materials and wastes (for example, Materials Safety Data Sheet [MSDS]) o II.23. Knowledge of medication distribution and control systems requirements for controlled substances, investigational drugs, and hazardous materials and waste o II.24. Knowledge of the written, oral, and electronic communication channels necessary to ensure appropriate follow-up and problem resolution (for example, product recalls, supplier shorts)

Task	SOL Correlations	HOSA Competitive Events (High School)	Pharmacy Technician Certification Board (PTCB) Examination Required Knowledge
			<ul style="list-style-type: none"> o II.25. Knowledge of quality assurance policies, procedures, and practices for medication and inventory control systems
<p>Assist with the maintenance of a record of controlled substances received, stored, and removed from inventory, under the supervision of a pharmacist.</p>	<p>English: 11.5, 11.8, 12.5, 12.8 History and Social Science: GOVT.7, GOVT.8, GOVT.9, GOVT.15</p>	<p>Health Science Events</p> <ul style="list-style-type: none"> o Medical Law and Ethics o Pharmacology <p>Health Professions Events</p> <ul style="list-style-type: none"> o Pharmacy Science 	<p>II. Maintaining Medication and Inventory Control Systems</p> <ul style="list-style-type: none"> o II.1. Knowledge of drug product laws and regulations and professional standards related to obtaining medication supplies, durable medical equipment, and products (for example, Food, Drug and Cosmetic Act; Controlled Substances Act; Prescription Drug Marketing Act; USP-NF; NRC standards) o II.7. Knowledge of inventory receiving process o II.11. Knowledge of policies, procedures, and practices for inventory systems o II.14. Knowledge of the FDA’s classifications of recalls o II.16. Knowledge of rules and regulations for the removal and disposal of products o II.17. Knowledge of legal and regulatory requirements and professional standards governing operations of pharmacies (for example, prepackaging, difference between compounding and manufacturing) o II.18. Knowledge of legal and regulatory requirements and professional standards (for example, FDA, DEA, state board of pharmacy, JCAHO) for preparing, labeling, dispensing, distributing, and administering medications o II.19. Knowledge of medication distribution and control systems requirements for the use of medications in various practice settings (for example,

Task	SOL Correlations	HOSA Competitive Events (High School)	Pharmacy Technician Certification Board (PTCB) Examination Required Knowledge
			automated dispensing systems, bar coding, nursing stations, crash carts) <ul style="list-style-type: none"> o II.20. Knowledge of preparation, storage requirements, and documentation for medications compounded in anticipation of prescriptions or medication orders o II.21. Knowledge of repackaging, storage requirements, and documentation for finished dosage forms prepared in anticipation of prescriptions or medication orders o II.24. Knowledge of the written, oral, and electronic communication channels necessary to ensure appropriate follow-up and problem resolution (for example, product recalls, supplier shorts) o II.25. Knowledge of quality assurance policies, procedures, and practices for medication and inventory control systems
Perform required inventories.	English: 11.5, 11.6, 11.7, 12.5, 12.6, 12.7	Health Science Events <ul style="list-style-type: none"> o Pharmacology Health Professions Events <ul style="list-style-type: none"> o Pharmacy Science 	II. Maintaining Medication and Inventory Control Systems <ul style="list-style-type: none"> o II.1. Knowledge of drug product laws and regulations and professional standards related to obtaining medication supplies, durable medical equipment, and products (for example, Food, Drug and Cosmetic Act; Controlled Substances Act; Prescription Drug Marketing Act; USP-NF; NRC standards) o II.10. Knowledge of regulatory requirements regarding record-keeping for repackaged products, recalled products, and refunded products o II.11. Knowledge of policies, procedures, and practices for inventory systems

Task	SOL Correlations	HOSA Competitive Events (High School)	Pharmacy Technician Certification Board (PTCB) Examination Required Knowledge
			<ul style="list-style-type: none"> o II.14. Knowledge of the FDA’s classifications of recalls o II.17. Knowledge of legal and regulatory requirements and professional standards governing operations of pharmacies (for example, prepackaging, difference between compounding and manufacturing) o II.18. Knowledge of legal and regulatory requirements and professional standards (for example, FDA, DEA, state board of pharmacy, JCAHO) for preparing, labeling, dispensing, distributing, and administering medications o II.19. Knowledge of medication distribution and control systems requirements for the use of medications in various practice settings (for example, automated dispensing systems, bar coding, nursing stations, crash carts) o II.20. Knowledge of preparation, storage requirements, and documentation for medications compounded in anticipation of prescriptions or medication orders o II.21. Knowledge of repackaging, storage requirements, and documentation for finished dosage forms prepared in anticipation of prescriptions or medication orders o II.24. Knowledge of the written, oral, and electronic communication channels necessary to ensure appropriate follow-up and problem resolution (for example, product recalls, supplier shorts) o II.25. Knowledge of quality assurance policies, procedures, and practices for medication and inventory control systems

Task	SOL Correlations	HOSA Competitive Events (High School)	Pharmacy Technician Certification Board (PTCB) Examination Required Knowledge
Maintain record-keeping systems for inventory activities.	English: 11.6, 11.7, 12.6, 12.7 Mathematics: COM.1	Health Science Events <ul style="list-style-type: none"> o Medical Spelling o Medical Terminology o Pharmacology 	II. Maintaining Medication and Inventory Control Systems <ul style="list-style-type: none"> o II.10. Knowledge of regulatory requirements regarding record-keeping for repackaged products, recalled products, and refunded products o II.14. Knowledge of the FDA’s classifications of recalls o II.16. Knowledge of rules and regulations for the removal and disposal of products o II.19. Knowledge of medication distribution and control systems requirements for the use of medications in various practice settings (for example, automated dispensing systems, bar coding, nursing stations, crash carts) o II.20. Knowledge of preparation, storage requirements, and documentation for medications compounded in anticipation of prescriptions or medication orders o II.21. Knowledge of repackaging, storage requirements, and documentation for finished dosage forms prepared in anticipation of prescriptions or medication orders o II.22. Knowledge of policies, procedures, and practices regarding storage and handling of hazardous materials and wastes (for example, Materials Safety Data Sheet [MSDS]) o II.23. Knowledge of medication distribution and control systems requirements for controlled substances, investigational drugs, and hazardous materials and waste

Task	SOL Correlations	HOSA Competitive Events (High School)	Pharmacy Technician Certification Board (PTCB) Examination Required Knowledge
			<ul style="list-style-type: none"> o II.24. Knowledge of the written, oral, and electronic communication channels necessary to ensure appropriate follow-up and problem resolution (for example, product recalls, supplier shorts) o II.25. Knowledge of quality assurance policies, procedures, and practices for medication and inventory control systems
Compound medications in anticipation of prescription/medication orders.	English: 11.5, 11.6, 11.7, 12.5, 12.6, 12.7 History and Social Science: GOVT.9	Health Professions Events o Pharmacy Science	II. Maintaining Medication and Inventory Control Systems o II.4. Knowledge of dosage forms o II.20. Knowledge of preparation, storage requirements, and documentation for medications compounded in anticipation of prescriptions or medication orders o II.21. Knowledge of repackaging, storage requirements, and documentation for finished dosage forms prepared in anticipation of prescriptions or medication orders o II.25. Knowledge of quality assurance policies, procedures, and practices for medication and inventory control systems
Discuss quality assurance tests on compounded medication.	English: 11.1, 12.1	Health Professions Events o Clinical Specialty o Pharmacy Science	II. Maintaining Medication and Inventory Control Systems o II.17. Knowledge of legal and regulatory requirements and professional standards governing operations of pharmacies (for example, prepackaging, difference between compounding and manufacturing) o II.18. Knowledge of legal and regulatory requirements and professional standards (for example, FDA, DEA, state board of pharmacy, JCAHO) for

Task	SOL Correlations	HOSA Competitive Events (High School)	Pharmacy Technician Certification Board (PTCB) Examination Required Knowledge
			preparing, labeling, dispensing, distributing, and administering medications <ul style="list-style-type: none"> o II.20. Knowledge of preparation, storage requirements, and documentation for medications compounded in anticipation of prescriptions or medication orders o II.21. Knowledge of repackaging, storage requirements, and documentation for finished dosage forms prepared in anticipation of prescriptions or medication orders o II.24. Knowledge of the written, oral, and electronic communication channels necessary to ensure appropriate follow-up and problem resolution (for example, product recalls, supplier shorts) o II.25. Knowledge of quality assurance policies, procedures, and practices for medication and inventory control systems
Repackage finished dosage forms for dispensing.	English: 11.5, 11.6, 11.7, 12.5, 12.6, 12.7	Health Professions Events <ul style="list-style-type: none"> o Clinical Specialty o Pharmacy Science 	II. Maintaining Medication and Inventory Control Systems <ul style="list-style-type: none"> o II.1. Knowledge of drug product laws and regulations and professional standards related to obtaining medication supplies, durable medical equipment, and products (for example, Food, Drug and Cosmetic Act; Controlled Substances Act; Prescription Drug Marketing Act; USP-NF; NRC standards) o II.4. Knowledge of dosage forms o II.17. Knowledge of legal and regulatory requirements and professional standards governing operations of pharmacies (for example, prepackaging, difference between compounding and manufacturing)

Task	SOL Correlations	HOSA Competitive Events (High School)	Pharmacy Technician Certification Board (PTCB) Examination Required Knowledge
			<ul style="list-style-type: none"> o II.18. Knowledge of legal and regulatory requirements and professional standards (for example, FDA, DEA, state board of pharmacy, JCAHO) for preparing, labeling, dispensing, distributing, and administering medications o II.19. Knowledge of medication distribution and control systems requirements for the use of medications in various practice settings (for example, automated dispensing systems, bar coding, nursing stations, crash carts) o II.20. Knowledge of preparation, storage requirements, and documentation for medications compounded in anticipation of prescriptions or medication orders o II.21. Knowledge of repackaging, storage requirements, and documentation for finished dosage forms prepared in anticipation of prescriptions or medication orders o II.25. Knowledge of quality assurance policies, procedures, and practices for medication and inventory control systems
Identify quality assurance reports related to nursing units, products, and/or supplies.	English: 11.5, 12.5 History and Social Science: GOVT.9		<p>II. Maintaining Medication and Inventory Control Systems</p> <ul style="list-style-type: none"> o II.17. Knowledge of legal and regulatory requirements and professional standards governing operations of pharmacies (for example, prepackaging, difference between compounding and manufacturing) o II.18. Knowledge of legal and regulatory requirements and professional standards (for example, FDA, DEA, state board of pharmacy, JCAHO) for

Task	SOL Correlations	HOSA Competitive Events (High School)	Pharmacy Technician Certification Board (PTCB) Examination Required Knowledge
			preparing, labeling, dispensing, distributing, and administering medications o II.19. Knowledge of medication distribution and control systems requirements for the use of medications in various practice settings (for example, automated dispensing systems, bar coding, nursing stations, crash carts) o II.25. Knowledge of quality assurance policies, procedures, and practices for medication and inventory control systems
Communicate with representatives of pharmaceutical and equipment suppliers.	English: 11.1, 12.1 History and Social Science: GOVT.16	Health Science Events o Pharmacology Health Professions Events o Pharmacy Science	II. Maintaining Medication and Inventory Control Systems o II.3. Knowledge of purchasing policies, procedures, and practices o II.24. Knowledge of the written, oral, and electronic communication channels necessary to ensure appropriate follow-up and problem resolution (for example, product recalls, supplier shorts)
Participating in the Administration and Management of Pharmacy Practice			
Collect productivity information.	English: 11.5, 11.6, 11.7, 12.5, 12.6, 12.7	Health Science Events o Pharmacology Health Professions Events o Pharmacy Science	III. Participating in the Administration and Management of Pharmacy Practice o III.4. Knowledge of productivity, efficiency, and customer satisfaction measures
Participate in continuous quality improvement programs and patient safety activities.	English: 11.5, 12.5 History and Social Science: GOVT.7, GOVT.8	Health Science Events o Medical Law and Ethics o Pharmacology	III. Participating in the Administration and Management of Pharmacy Practice o III.4. Knowledge of productivity, efficiency, and customer satisfaction measures

Task	SOL Correlations	HOSA Competitive Events (High School)	Pharmacy Technician Certification Board (PTCB) Examination Required Knowledge
	Mathematics: PS.8*, PS.9*	Health Professions Events o Pharmacy Science	o III.10. Knowledge of quality improvement standards and guidelines o III.11. Knowledge of state board of pharmacy regulations o III.35. Knowledge of procedures to document occurrences such as medication errors, adverse effects, and product integrity (for example, FDA Med Watch Program)
Generate quality assurance reports.	English: 11.1, 11.5, 12.1, 12.5 History and Social Science: GOVT.7, GOVT.8 Mathematics: COM.10, COM.11	Health Science Events o Pharmacology Health Professions Events o Pharmacy Science	III. Participating in the Administration and Management of Pharmacy Practice o III.35. Knowledge of procedures to document occurrences such as medication errors, adverse effects, and product integrity (for example, FDA Med Watch Program)
Maintain the practice setting for compliance with federal, state, and local laws, regulations, and professional standards.	English: 11.5, 11.8, 12.5, 12.8 History and Social Science: GOVT.7, GOVT.8, GOVT.9, GOVT.15, GOVT.16	Health Science Events o Medical Law and Ethics o Pharmacology Health Professions Events o Pharmacy Science	III. Participating in the Administration and Management of Pharmacy Practice o III.1. Knowledge of the practice setting's mission, goals and objectives, organizational structure, and policies and procedures o III.8. Knowledge of legal and regulatory requirements for personnel, facilities, equipment, and supplies (for example, space requirements, prescription file storage, cleanliness, reference materials, storage of radiopharmaceuticals) o III.9. Knowledge of professional standards (for example, JCAHO) for personnel, facilities, equipment, and supplies o III.12. Knowledge of storage requirements and expiration dates for equipment and supplies (for example, first-aid items, fire extinguishers)

Task	SOL Correlations	HOSA Competitive Events (High School)	Pharmacy Technician Certification Board (PTCB) Examination Required Knowledge
			<ul style="list-style-type: none"> o III.13. Knowledge of storage and handling requirements for hazardous substances (for example, chemotherapeutics, radiopharmaceuticals) o III.15. Knowledge of procedures for the treatment of exposure to hazardous substances (for example, eyewash) o III.24. Knowledge of documentation requirements for routine sanitation, maintenance, and equipment calibration o III.27. Knowledge of security procedures related to data integrity, security, and confidentiality o III.35. Knowledge of procedures to document occurrences such as medication errors, adverse effects, and product integrity (for example, FDA Med Watch Program)
Evaluate written policies and procedures for environmental quality, sanitation management, handling of hazardous waste, and infection or exposure control.	English: 11.5, 12.5 History and Social Science: GOVT.7, GOVT.8, GOVT.9, GOVT.14, GOVT.15	Health Science Events <ul style="list-style-type: none"> o Pharmacology Health Professions Events <ul style="list-style-type: none"> o Pharmacy Science 	III. Participating in the Administration and Management of Pharmacy Practice <ul style="list-style-type: none"> o III.12. Knowledge of storage requirements and expiration dates for equipment and supplies (for example, first-aid items, fire extinguishers) o III.13. Knowledge of storage and handling requirements for hazardous substances (for example, chemotherapeutics, radiopharmaceuticals) o III.14. Knowledge of hazardous waste disposal requirements o III.15. Knowledge of procedures for the treatment of exposure to hazardous substances (for example, eyewash) o III.18. Knowledge of infection control policies and procedures

Task	SOL Correlations	HOSA Competitive Events (High School)	Pharmacy Technician Certification Board (PTCB) Examination Required Knowledge
			<ul style="list-style-type: none"> o III.19. Knowledge of sanitation requirements (for example, handwashing, cleaning counting trays, countertop, and equipment) o III.23. Knowledge of purpose and function of pharmacy equipment
Perform routine sanitation, maintenance, and calibration of equipment.	English: 11.6, 11.7, 12.6, 12.7	Health Science Events <ul style="list-style-type: none"> o Pharmacology Health Professions Events <ul style="list-style-type: none"> o Pharmacy Science 	III. Participating in the Administration and Management of Pharmacy Practice <ul style="list-style-type: none"> o III.12. Knowledge of storage requirements and expiration dates for equipment and supplies (for example, first-aid items, fire extinguishers) o III.13. Knowledge of storage and handling requirements for hazardous substances (for example, chemotherapeutics, radiopharmaceuticals) o III.17. Knowledge of laminar flow hood maintenance requirements o III.19. Knowledge of sanitation requirements (for example, handwashing, cleaning counting trays, countertop, and equipment) o III.20. Knowledge of equipment calibration and maintenance procedures o III.22. Knowledge of technology used in the preparation, delivery, and administration of medications (for example, robotics, Baker cells, automated TPN equipment, Pyxis, infusion pumps) o III.23. Knowledge of purpose and function of pharmacy equipment
Use manual or computer-based information systems to perform job-related activities.	English: 11.5, 11.6, 11.7, 12.5, 12.6, 12.7 Mathematics: COM.7	Health Science Events <ul style="list-style-type: none"> o Pharmacology Health Professions Events	III. Participating in the Administration and Management of Pharmacy Practice <ul style="list-style-type: none"> o III.26. Knowledge of manual and computer-based systems for storing, retrieving, and using

Task	SOL Correlations	HOSA Competitive Events (High School)	Pharmacy Technician Certification Board (PTCB) Examination Required Knowledge
		<ul style="list-style-type: none"> o Pharmacy Science 	<ul style="list-style-type: none"> pharmacy-related pharmacy information (for example, drug interactions, patient profiles, generating labels) o III.34. Knowledge of information sources used to obtain data in a quality improvement system (for example, the patient's chart, patient profile, computerized information systems, medication administration record)
Maintain automated dispensing technology.	English: 11.2, 11.5, 12.2, 12.5	Health Science Events <ul style="list-style-type: none"> o Pharmacology Health Professions Events <ul style="list-style-type: none"> o Pharmacy Science 	
Conduct staff training and continuing education for pharmacy-assisting tasks.	English: 11.5, 12.5 History and Social Science: GOVT.16		III. Participating in the Administration and Management of Pharmacy Practice <ul style="list-style-type: none"> o III.3. Knowledge of principles of resource allocation (for example, scheduling, cross training, workflow) o III.7. Knowledge of roles and responsibilities of pharmacists, pharmacy technicians, and other pharmacy employees o III.36. Knowledge of staff training techniques o III.37. Knowledge of employee performance evaluation techniques o III.38. Knowledge of employee performance feedback techniques
Aid in establishing, implementing, and monitoring policies and procedures.	English: 11.5, 12.5	Health Science Events <ul style="list-style-type: none"> o Medical Law and Ethics o Pharmacology 	III. Participating in the Administration and Management of Pharmacy Practice <ul style="list-style-type: none"> o III.38. Knowledge of employee performance feedback techniques

Task	SOL Correlations	HOSA Competitive Events (High School)	Pharmacy Technician Certification Board (PTCB) Examination Required Knowledge
		Health Professions Events o Pharmacy Science	
Maintain patient and data confidentiality in the administrative and management environment.	English: 11.5, 12.5 History and Social Science: GOVT.11, GOVT.16	Health Science Events o Medical Law and Ethics o Pharmacology Health Professions Events o Pharmacy Science	I. Assisting the Pharmacist in Serving Patients o I.73. Knowledge of confidentiality requirements III. Participating in the Administration and Management of Pharmacy Practice o III.27. Knowledge of security procedures related to data integrity, security, and confidentiality
Maintain required registration(s), license(s), and/or certification(s).	English: 11.5, 12.5 History and Social Science: GOVT.8, GOVT.9, GOVT.11	Health Science Events o Pharmacology Health Professions Events o Pharmacy Science	III. Participating in the Administration and Management of Pharmacy Practice o III.6. Knowledge of required operational licenses and certificates o III.7. Knowledge of roles and responsibilities of pharmacists, pharmacy technicians, and other pharmacy employees o III.11. Knowledge of state board of pharmacy regulations
Implement safety, security, and loss-prevention policies and procedures.	English: 11.5, 12.5 History and Social Science: GOVT.8, GOVT.9	Health Science Events o Pharmacology Health Professions Events o Pharmacy Science	III. Participating in the Administration and Management of Pharmacy Practice o III.13. Knowledge of storage and handling requirements for hazardous substances (for example, chemotherapeutics, radiopharmaceuticals) o III.14. Knowledge of hazardous waste disposal requirements o III.15. Knowledge of procedures for the treatment of exposure to hazardous substances (for example, eyewash)

Task	SOL Correlations	HOSA Competitive Events (High School)	Pharmacy Technician Certification Board (PTCB) Examination Required Knowledge
			<ul style="list-style-type: none"> o III.16. Knowledge of security systems for the protection of employees, customers, and property o III.18. Knowledge of infection control policies and procedures o III.25. Knowledge of the Americans with Disabilities Act requirements (for example, physical accessibility) o III.27. Knowledge of security procedures related to data integrity, security, and confidentiality o III.28. Knowledge of downtime emergency policies and procedures o III.29. Knowledge of backup and archiving procedures for stored data and documentation o III.30. Knowledge of legal requirements regarding archiving o III.35. Knowledge of procedures to document occurrences such as medication errors, adverse effects, and product integrity (for example, FDA Med Watch Program)
Maintain inventory of operational supplies.	English: 11.5, 12.5 History and Social Science: GOVT.16		III. Participating in the Administration and Management of Pharmacy Practice <ul style="list-style-type: none"> o III.12. Knowledge of storage requirements and expiration dates for equipment and supplies (for example, first-aid items, fire extinguishers) o III.21. Knowledge of supply procurement procedures
Describing the Opioid Crisis			
Describe the history and current state of the opioid crisis in the United States.	English: 12.5	Health Science Events <ul style="list-style-type: none"> o Medical Spelling 	

Task	SOL Correlations	HOSA Competitive Events (High School)	Pharmacy Technician Certification Board (PTCB) Examination Required Knowledge
		<ul style="list-style-type: none"> o Medical Terminology o Teamwork Events o Creative Problem Solving o Public Service Announcement 	
Describe the history and current state of the opioid crisis in Virginia.	English: 12.5, 12.8	Health Science Events <ul style="list-style-type: none"> o Medical Spelling o Medical Terminology o Teamwork Events o Creative Problem Solving o Public Service Announcement 	
Define the pharmacological components and common uses of opioids.	English: 12.3, 12.8	Health Science Events <ul style="list-style-type: none"> o Medical Spelling o Medical Terminology o Knowledge Test: Pharmacology o Health Professions Events o Clinical Nursing 	
Examining Key Factors of Drug Addiction			
Examine the science of addiction.	English: 12.5		

Task	SOL Correlations	HOSA Competitive Events (High School)	Pharmacy Technician Certification Board (PTCB) Examination Required Knowledge
Explain prevention and early intervention strategies.	English: 12.5, 12.8		
Identify addiction and its behavioral elements, as defined by the Diagnostic and Statistical Manual of Mental Disorders (DSM-5).	English: 12.5	Health Science Events o Knowledge Test: Behavioral Health o Knowledge Test: Medical Law and Ethics Health Professions Events o Clinical Nursing	
Describe the treatment models of addiction therapy.	English: 12.5	Health Science Events o Knowledge Test: Behavioral Health o Knowledge Test: Medical Law and Ethics Health Professions Events o Clinical Nursing	
Describe the medication management antidote used to prevent fatal opioid overdoses.	English: 12.5, 12.8	Health Science Events o Medical Spelling o Medical Terminology o Knowledge Test: Pharmacology	
Understanding Pain Management Protocols			

Task	SOL Correlations	HOSA Competitive Events (High School)	Pharmacy Technician Certification Board (PTCB) Examination Required Knowledge
Explain the science of physiological and mental pain.	English: 12.3, 12.5	Health Science Events <ul style="list-style-type: none"> o Knowledge Test: Nutrition <ul style="list-style-type: none"> o Knowledge Test: Transcultural Health Care Teamwork Events <ul style="list-style-type: none"> o Community Awareness o Creative Problem Solving o HOSA Bowl 	
Describe the diagnostic tools used in developing pain management plans.	English: 12.5	Health Science Events <ul style="list-style-type: none"> o Knowledge Test: Nutrition <ul style="list-style-type: none"> o Knowledge Test: Transcultural Health Care Teamwork Events <ul style="list-style-type: none"> o Community Awareness o Creative Problem Solving o HOSA Bowl 	
Describe pain treatment options available to various populations of patients.	English: 12.5, 12.8	Health Science Events <ul style="list-style-type: none"> o Knowledge Test: Nutrition <ul style="list-style-type: none"> o Knowledge Test: Transcultural Health Care Teamwork Events	

Task	SOL Correlations	HOSA Competitive Events (High School)	Pharmacy Technician Certification Board (PTCB) Examination Required Knowledge
		<ul style="list-style-type: none"> o Community Awareness o Creative Problem Solving o HOSA Bowl 	
Describe the effects of opioid dependency on the human body systems.	English: 12.5	Health Science Events <ul style="list-style-type: none"> o Medical Spelling o Medical Terminology Teamwork Events <ul style="list-style-type: none"> o HOSA Bowl 	
Explain the mechanism and physical effects of opioids on the human body.	English: 12.5	Health Science Events <ul style="list-style-type: none"> o Medical Spelling o Medical Terminology Teamwork Events <ul style="list-style-type: none"> o HOSA Bowl 	
Explain the use of opioids in practice settings, the role of opioids in pain management, and risk factors associated with the use of the medication.	English: 12.5	Health Science Events <ul style="list-style-type: none"> o Medical Spelling o Medical Terminology o Knowledge Test: Pharmacology Teamwork Events <ul style="list-style-type: none"> o Creative Problem Solving o HOSA Bowl 	

Task	SOL Correlations	HOSA Competitive Events (High School)	Pharmacy Technician Certification Board (PTCB) Examination Required Knowledge
Describe the withdrawal and tapering side effects of opioid use.	English: 12.5	Health Science Events o Knowledge Test: Pharmacology Health Professions Events o Clinical Nursing	
Describe storage and disposal options for opioids.	English: 12.5, 12.8	Health Science Events o Knowledge Test: Pharmacology Health Professions Events o Clinical Nursing	
Explain community resources for education about opioid use.	English: 12.5	Health Science Events o Knowledge Test: Pharmacology Health Professions Events o Clinical Nursing	
Working with Patients and Caregivers			
Describe key communication topics involving opioids for patients.	English: 12.5	Health Science Events o Medical Spelling o Medical Terminology Health Professions Events o Clinical Nursing	

Task	SOL Correlations	HOSA Competitive Events (High School)	Pharmacy Technician Certification Board (PTCB) Examination Required Knowledge
Describe communication topics for caregivers and family members.	English: 12.5	Health Science Events <ul style="list-style-type: none"> o Medical Spelling <ul style="list-style-type: none"> o Medical Terminology Health Professions Events <ul style="list-style-type: none"> o Clinical Nursing	