

Pharmacy Science



New for 2022 – 2023

- Skills have been renumbered.
- Equipment to be identified has been updated.
- Clarification for the use of zero has been added.
- Test plan percentages have changed.
- There will be NO verbal announcements during testing.
- Editorial updates have been made for clarity

Event Summary

Pharmacy Science provides members with the opportunity to gain knowledge and skills required in pharmacy-related careers. This competitive event consists of 2 rounds. Round One is a written, multiple-choice test and the top scoring competitors will advance to Round Two for the skills assessment. This event aims to inspire members to be learn more about pharmacy careers and practices.

Sponsorship

This competitive event is sponsored by [CVS Health](#)



Dress Code

Competitors shall wear proper business attire or official HOSA uniform, or attire appropriate to the occupational area, during both rounds. Bonus points will be awarded for [proper dress](#).

Competitors Must Provide:

- A [photo ID](#)
- Two #2 lead pencils (not mechanical) with eraser
- Ink pen
- Shoe covers
- Face mask
- Hair cover
- Beard cover (if appropriate)
- Hair Tie to pull back long hair (if appropriate)
- Sterile non-shedding gown with snug-fitting cuffs
- Eye shields or goggles
- Sterile, powder-free, latex free gloves

General Rules

1. Competitors in this event must be active members of HOSA and in good standing.
2. **Eligible Divisions:** Secondary and Postsecondary/Collegiate divisions are eligible to compete in this event.
3. Competitors must be familiar with and adhere to the "[General Rules and Regulations of the HOSA Competitive Events Program \(GRR\)](#)."
 - Per the [GRRs #11](#) and [Appendix H](#), HOSA members may request accommodation in any competitive event. To learn the definition of an accommodation, please read [Appendix H](#). To request accommodation for the International Leadership Conference, [submit the request form here](#) by May 15 at midnight EST.
 - To request accommodation for any regional/state level conferences, please work with your local and state advisor directly. Accommodations must first be done at state in order to be considered for ILC.
4. All competitors shall report to the site of the event at the time designated for each round of competition. At ILC, competitor's [photo ID](#) must be presented prior to ALL competition rounds.

Official References

5. All official references are used in the development of the written test and skill rating sheets.
6. [Johnston, Mike. *The Pharmacy Technician: Foundations and Practices*. Pearson, latest edition.](#)
7. American Academy of Allergy, Asthma, and Immunology. Symptoms and Diagnosis tab (as posted as of September 1, 2022).
<https://www.aaaai.org/conditions-and-treatments/allergies/drug-allergy>
8. [McCartney, Lisa. *Sterile Compounding and Aseptic Technique: Concepts, Training, and Assessment for Pharmacy Technician*. Paradigm, latest edition.](#)
9. [Moini, Jahangir. *The Pharmacy Technician: A Comprehensive Approach*. Cengage Learning, Latest edition.](#)

Round One Test

10. [Test Instructions](#): The written test will consist of 50 multiple choice items in a maximum of 60 minutes.
11. **Time Remaining Announcements:** There will be NO verbal announcements for time remaining during ILC testing. All ILC testing will be completed in the Testing Center and competitors are responsible for monitoring their own time.
12. At the International Leadership Conference, HOSA will provide basic handheld calculators (no graphing calculators) for addition, subtraction, division, multiplication and square root.
13. **USE OF ZERO:** Decimal expressions of less than 1 should be preceded by a zero – "leading zero". A whole number should never be followed by a decimal point and a zero – "trailing zero".
14. **Written Test Plan**
 - Pharmacy Practice History & Practice Settings 4%
 - Pharmacy Law & Ethics and Safety & Infection Control 10%
 - Pharmacy Terminology & Abbreviations 10%
 - Dosage Formulations & Administration Routes 10%
 - Sterile and Non-Sterile Compounding 10%
 - Concentration & Dilutions 10%

- Disorders & Treatments..... 46%

15. The test score from Round One will be used to qualify the competitor for Round Two.

16. **Sample Test Questions**

1. What U.S. law was passed based upon international treaties intended to stop the recreational use of opium? (Moini pp 45)
 - A. Sherley Amendment of 1912
 - B. Harrison Narcotic Tax Act of 1914**
 - C. Food, Drug, and Insecticide Administration of 1927
 - D. Food, Drug, and Cosmetic Act of 1938
2. The newest forms of insulin have been produced from which source? (Johnston pp 94)
 - A. Animal
 - B. Mineral
 - C. Synthetic
 - D. Genetic engineering**
3. If a patient is to receive 1 ounce of an over-the-counter medication, how many tablespoons should be given? (Moini pp 140)
 - A. 1
 - B. 2**
 - C. 4
 - D. 6

Round Two Skills

17. Round Two is the performance of a selected skill(s). The skills approved for this event are:
- Skill I: Identifying Equipment (*Including name of instrument and purpose or use*) (15 minutes)
 - Skill II: Verifying Controlled Substance Prescription Content and DEA Number (6 minutes)
 - Skill III: Withdrawing Liquid from a Vial (15 minutes)
 - Skill IV: Compounding an Oral Suspension (15 minutes)
 - Skill V: Patient Screening for Pharmacist Consultation and Services (4 minutes)
 - Skill VI: Filling A Prescription (5 minutes)
 - Skill VII: Aseptic Garbing, Hand Washing and Gloving (10 minutes)

Skill I: Numbered Instruments (15) or photos from list:

Ampules	Cylindrical Graduates	Intravenous System – Roller Clamp	Spatula
Autoclave	Eyewash Station	Laminar Airflow Hood	Suppository Mold – Aluminum Type
Auxiliary Labels	Heat Gun	Liquid Oral Syringe	Suppository Mold – Plastic Type
Beaker Tongs	Hot Plate	Medicine Cup	Syringes
Beakers	Indicator Strip (used for sterilization)	Medicine Dropper	Tablet Mold
Calibrated Spoon	Insulin Syringes	Mortar	Transdermal Patch
Compounding Slabs or Disposable Slabs	Intravenous Injection	Pestle	Tuberculin Syringe
Conical Graduates	Intravenous System – Drip Chamber	Pipettes	Weights
Counting Trays	Intravenous System – IV Solution Bag	Safety Syringes	
Crimper	Intravenous System – Piggyback Device	Sharps Container	

18. Skill I and/or Skill II may be administered with the Round One written test.
19. The selected Skill(s) will be presented to competitors as a written scenario at the beginning of the round. The scenario will be the same for each competitor and will include a challenging component that will require the competitors to apply critical thinking skills. A sample scenario can be found [here](#).
20. Timing will begin when the scenario is presented to the competitors and will be stopped at the end of the time allowed.
21. The scenario is a secret topic. Competitors MAY NOT discuss or reveal the secret topic until after the event has concluded or will face penalties per [the GRRs](#).

22. Judges will provide information to competitors as directed by the rating sheets. Competitors may ask questions of the judges while performing skills if the questions relate to patient's condition and will be included in the scenario or judge script.

Final Scoring

23. The competitor must earn a score of 70% or higher on the combined skill(s) of the event (excluding the test and ID equipment) in order to be recognized as an award winner at the ILC.
24. Final rank is determined by adding the round one test score plus round two skill score. In case of a tie, the highest test score will be used to determine the rank.

PHARMACY SCIENCE

Competitor #: _____ Judge's Initials: _____ Total Points (45 possible) _____

Skill I: Identify Equipment and Instruments

(Time: 15 minutes)

	Name of Instrument	Points (1 each for name & spelling)	Purpose or Use	Points (1 point for correct purpose/use)
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
TOTAL: ID & Spelling (30 poss)			TOTAL: Purpose (15 possible)	

PHARMACY SCIENCE

Skill II: Verifying the Content of a Controlled Substance Prescription and DEA Number (6 minutes)

*** Via the event scenario, the competitor will be given a prescription. Each competitor will also be given a Prescription Verification Form which acts as the rating sheet (page 7 of the guidelines). The prescription in the scenario will have missing information. Competitors must know all the required components (below) of the prescription in order to identify which components are missing. The Prescription Verification Form will be scored by the judges using the points indicated.

When verifying a Controlled Substance Prescription with DEA Number, the below list of items must all be verified.

1. Patient Information
 - a. Name
 - b. Address
2. Prescriber Information
 - a. Name
 - b. Address
 - c. Telephone Number
 - d. License Number
3. DEA Number
 - a. Verified the second letter corresponds to the first letter of the provider's last name
 - b. Added the first, third, and fifth digits of the DEA number.
 - c. Added the second, fourth, and sixth digits of the DEA number. Double the sum.
 - d. Added the sum of b and c.
 - e. Verified that the last digit from step d matches the last digit of the DEA number.
4. When prescribed
 - a. Month
 - b. Day
 - c. Year
5. Drug name and strength
6. Dose and quantity
7. Route of administration
8. Directions (signature or "Sig")
9. Number of refills authorized
10. Product selection was permitted
11. Prescriber's signature
12. No dangerous abbreviations, acronyms, or symbols are used from the Joint Commission's "Minimum" Do Not Use list and Joint Commission's "Recommended" Do Not Use List.

PHARMACY SCIENCE

Section # _____ Division: _____ SS _____ PS/Collegiate
Competitor # _____ Judge's Signature _____

Skill II: Verifying the Content of a Controlled Substance Prescription and DEA Number (6 minutes)

Prescription Verification Form – Rating Sheet

**Name brand and generic names will be used in the scenarios.*

Please list the 5 components missing from the prescription given to you (below):

1. _____ (3 points)
2. _____ (3 points)
3. _____ (3 points)
4. _____ (3 points)
5. _____ (3 points)

DEA Number listed on prescription: _____

Determine the validity of the DEA Number by showing your work in **five** steps :

1. _____ (1 point)
2. _____ (1 point)
3. _____ (1 point)
4. _____ (1 point)
5. _____ (1 point)

Is the DEA number valid? _____ Yes or No (3 points)

Are there any dangerous abbreviations, acronyms, or symbols used from the Joint Commission's "Minimum" Do Not Use list and the Joint Commission's "Recommended" Do Not Use List? If yes, **list below**. If no, **write NO** (3 points)

If the prescription lacks required elements, what steps would you take? _____
_____ (2 points)

Total Points Possible: 28

Total Points Awarded: _____

70% Mastery for Skill II: 19.6

PHARMACY SCIENCE

Section # _____ Division: _____ SS _____ PS/Collegiate
 Competitor # _____ Judge's Signature _____

****Name brand OR generic names will be used in the scenarios.***

Skill III: Withdrawing Liquid from a Vial (Time: 15 minutes)	Possible	Awarded
1. Obtained the medication order.	1	0
2. Obtained needed supplies and placed on transport vehicle.	1	0
3. Performed calculation based on scenario.	4	0
4. Verbalized following proper procedure for dressing with PPE and handwashing.	2	0
CLEAN ROOM PROCEDURE	-	
5. Verbalized cleaning the hood.	2	0
6. Placed all supply items for the skill into the outer six-inch staging area of the hood.	1	0
7. Placed the vial within the DCA.	1	0
8. Removed the flip-top cap and placed in the discard pile.	1	0
9. Opened an alcohol swab within the DCA and swabbed the rubber top of the medicine vial.	2	0
10. Placed the used swab on the hood's work surface within the DCA.	1	0
11. Placed wrapper in the discard pile.	1	0
12. Aseptically attached a regular needle to the syringe.	2	0
13. Pulled the plunger back on the syringe to slightly less than the amount needed to be drawn up.	1	0
14. Removed the needle cap and placed it onto the alcohol swab.	2	0
15. Used the thumb and forefinger of the nondominant hand, to stabilize the vial against the hood's work surface.	1	0
16. Placed the needle tip bevel up and inserted at a 45-degree angle through the stopper.	1	0
17. Gently pushed the air from the syringe into the vial.	1	0
18. Used nondominant hand holding the vial and the dominant hand to maintain the needle in the vial while inverting the vial so that needle and syringe is below the vial.	1	0
19. Allowed fluid to move from the vial to syringe. If needed, pulled back on the plunger until the desired amount withdrawn.	1	0
20. Withdrew needle from vial.	1	0
21. Carefully recapped needle.	1	0

Skill III: Withdrawing Liquid from a Vial (con't) - Items Evaluated	Possible		Awarded
22. <i>Judge verified correct amount of liquid withdrawn.</i>	4	0	
23. Placed the completed syringe and other supply items on the transport vehicle.	1	0	
24. Discarded waste items in proper waste container.	2	0	
25. Returned to anteroom and returned unused supply items to proper storage.	1	0	
26. Verbalized removing PPE in correct order.	2	0	
27. Washed hands or used alcohol based hand-rub for hand hygiene.	1	0	
TOTAL POINTS – SKILL III 70% Mastery for Skill III = 28	40		

PHARMACY SCIENCE

Section # _____ Division: _____ SS _____ PS/Collegiate
 Competitor # _____ Judge's Signature _____

**Name brand OR generic names will be used in the scenarios.*

Skill IV: COMPOUNDING AN ORAL SUSPENSION (Time: 15 minutes)		Possible		Awarded
1.	Obtained the completed recipe or completed formula via scenario using the Master Formula sheet.	1	0	
2.	Checked the amount per dose and the number of doses needed with the pharmacist (judge).	2	0	
3.	Used Master Formula sheet to obtain needed medication: a. obtained the correct number of tablets needed.	2	0	
	b. verified with pharmacist (judge) of both the drug product selected and the number of tablets needed for compounding, based on the Master Formula Sheet * Judge verified accuracy. Competitor proceeds either way. Points only awarded if the correct number of tablets were obtained.	2	0	
4.	Obtained needed equipment	1	0	
5.	Washed hands or used alcohol based hand-rub for hand hygiene.	2	0	
6.	Crushed or reduced to a fine powder by using mortar and pestle.	1	0	
7.	Added a small amount of suspending vehicle to wet the powder, and then mixed (levigated) the powder with the liquid until a smooth paste is formed.	1	0	
8.	Continued to add suspending vehicle until product is liquid enough to transfer to a graduated cylinder	1	0	
9.	Poured the liquid into a graduated cylinder.	1	0	
10.	Rinsed mortar several times with small amounts of suspending vehicle and added to product in graduated cylinder.	1	0	
11.	Added suspending vehicle to bring product up to the required final volume and verified the amount of suspension at eye level.	2	0	
12.	Poured the compounded suspension into the most appropriately-sized amber oval medication bottle, closed bottle and shake well.	1	0	
13.	Selected the appropriate label from those provided and affixed to the medication bottle. *Judge verified accuracy. Points only awarded if the correct label was selected and affixed.	4	0	
14.	Selected the appropriate auxiliary label from those provided and affixed to medication bottle. *Judge verified accuracy. Points only awarded if the correct label was selected and affixed.	4	0	

Skill IV: COMPOUNDING AN ORAL SUSPENSION (Cont'd) Items Evaluated	Possible		Awarded
15. Cleaned the area and equipment using 70% isopropyl alcohol and returned equipment to proper place.	2	0	
16. Washed hands or used alcohol based hand-rub for hand hygiene.	2	0	
TOTAL POINTS - SKILL IV 70% Mastery for Skill IV = 21	30		

**Compounding directions were obtained from nationwidechildrens.org*

Skill IV - MASTER FORMULA SHEET: NON-STERILE COMPOUNDING

**This form will be completed by HOSA staff prior to the event and will be given to competitors with the scenario.*

PRODUCT: _____

Date Prepared: _____ **FINAL PRODUCT CHECKED BY:** _____

EXPIRATION DATE: _____

INGREDIENT	MANUFACTURER	Lot #	MFR EXPIRATION DATE	FORMULA QUANTITY REQUIRED	QUANTITY USED	PREPARED BY	CHK BY
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EQUIPMENT

PRESCRIPTION LABEL

AUXILIARY LABELS

**COMPOUNDING DIRECTIONS : (finished
suspension will be 60mL or greater)**

DATE PREPARED:

EXPIRATION DATE:

STABILITY

PHARMACY SCIENCE

Section # _____
 Competitor # _____

Division: _____ SS _____ PS/Collegiate
 Judge's Signature _____

Skill V Patient Screening for Pharmacist Consultation and Services	(Time: 4 minutes)	Possible		Awarded
1.	Greeted patient and introduced self.	1	0	
2.	Provided patient privacy by verbalizing or moving to a private area.	1	0	
3.	Recorded patient's name and date of birth on the blank screening form to verify patient.	2	0	
4.	<p>**Asked patient to respond to all questions (5 total) related to screening (as identified in scenario).</p> <p>- Judge verifies correct questions are asked using screening checklist (student must memorize questions as they will not have access to questions at the event). Questions do not have to be asked in order</p>		-	
	a. Question #1	3	0	
	b. Question #2	3	0	
	c. Question #3	3	0	
	d. Question #4	3	0	
	e. Question #5	3	0	
5.	Demonstrated NO distracting elements of nonverbal communication including lack of eye contact, inappropriate facial expressions and body position such as closed posture.	2	0	
6.	Avoided the use of medical jargon during discussion with patient.	2	0	
7.	Spoke with appropriate volume, pitch, inflection, pronunciation and diction.	2	0	
8.	Actively listened and did not interrupt while patient was speaking.	2	0	
9.	Questioned the patient as needed to ensure that responses were completely understood.	2	0	
10.	Signed the Patient Screening form.	1	0	
11.	Referred patient to the pharmacist for counseling.	4	0	
12.	Handed the completed Patient Screening form to the Pharmacist (judge) indicating the skill is complete.	2	0	
13.	Used appropriate verbal and nonverbal communication with patient and other personnel.	2	0	
TOTAL POINTS -- SKILL V		38		
70% Mastery for Skill V = 26.6				

** Step #4: Competitors should ask the patient the questions outlined in the screening checklists on the following pages 14 -18 that are applicable to the screening (vaccination x3, late refill, or drug allergy) listed in the scenario received at the time of competition. To prepare, competitors should memorize all 5 questions on each of the 5 screening checklists so they can adequately ask the patients the correct questions.

*Definition of Diction – Choice of words especially with regard to correctness, clearness, and effectiveness.

**Definition of Pronunciation – Act or manner of uttering officially.

PHARMACY SCIENCE

Skill V Patient Screening for Pharmacist Consultation and Services

Screening Checklist for Contraindications to **Injectable Influenza Vaccination**

For patients (both children and adults) to be vaccinated: The questions asked are developed to determine if the requested vaccination should be given. If you answer “yes” to any of the following questions it, it does not necessarily mean the vaccination will not be given. Additional information will be required.

1. Is this vaccination for yourself or someone else? If for someone else, is the patient to be vaccinated younger than 6 months of age?
2. Is the patient over the age of 65 resulting in the need for CDC recommended higher dose?
3. Is the person to be vaccinated today showing any signs of illness?
4. Does the person to be vaccinated have allergies to any component of the vaccine?
5. Does the person have a severe allergy to chicken eggs?

Reference: Moini, Jahangir. *The Pharmacy Technician: A Comprehensive Approach*. Cengage Learning, latest edition.

Screening Checklist will not be provided during the event. Competitors will need to memorize the questions related to the identified issue.

PHARMACY SCIENCE

Skill V Patient Screening for Pharmacist Consultation and Services

Screening Checklist for Contraindications to **Injectable Inactivated Poliovirus Vaccination**

For patients (both children and adults) to be vaccinated: The questions asked are developed to determine if the requested vaccination should be given. If you answer “yes” to any of the following questions it, it does not necessarily mean the vaccination will not be given. Additional information will be required.

1. Does the person to be vaccinated have allergies to any component of the vaccine?
2. Is the person to be vaccinated today immune depressed in any way?
3. Does the person to be vaccinated live with anyone who has an immune deficiency disease?
4. Is there a suspected familial immune deficiency?
5. Is there possibility that the person being vaccinated is pregnant?

Reference: Moini, Jahangir. The Pharmacy Technician: A Comprehensive Approach. Cengage Learning, latest edition.

Screening Checklist will not be provided during the event. Competitors will need to memorize the questions related to the identified issue.

PHARMACY SCIENCE

Skill V Patient Screening for Pharmacist Consultation and Services

Screening Checklist for Contraindications to **Injectable Rubella Vaccination**

For patients (both children and adults) to be vaccinated: The questions asked are developed to determine if the requested vaccination should be given. If you answer “yes” to any of the following questions it, it does not necessarily mean the vaccination will not be given. Additional information will be required.

1. Does the person to be vaccinated have allergies to any component of the vaccine?
2. Is the person to be vaccinated today immunosuppressed?
3. Is the person being vaccinated receiving corticosteroids?
4. Has the person being vaccinated been diagnosed with tuberculosis?
5. Is there possibility that the person being vaccinated is pregnant or attempting to become pregnant?

Reference: Moini, Jahangir. The Pharmacy Technician: A Comprehensive Approach. Cengage Learning, latest edition.

Screening Checklist will not be provided during the event. Competitors will need to memorize the questions related to the identified issue.

PHARMACY SCIENCE

Skill V Patient Screening for Pharmacist Consultation and Services

Screening Checklist for Late Refill

Promoting compliance with prescribed medication is an important role of the pharmacy staff. If the patient is not taking medication as prescribed the following questions may help determine the cause of noncompliance.

1. How did the prescriber recommend you take this medication?
2. What methods do you use to help remember to take your medication?
3. What side effects have you experienced with the medication?
4. Has this medication helped relieve condition for which it was prescribed?
5. Are there any other reasons you do not take this medication as often as prescribed?

Reference: Johnston, Mike. The Pharmacy Technician: Foundations and Practices. Pearson, latest edition.

Screening Checklist will not be provided during the event. Competitors will need to memorize the questions related to the identified issue.

PHARMACY SCIENCE

Skill V Patient Screening for Pharmacist Consultation and Services

Screening Checklist for **Possible Allergic Reaction**

Allergic reactions can be life threatening. Concerns expressed by patient must be investigated. The following questions should be asked to obtain basic needed information.

1. What medication were you taking when you noticed symptoms of concern?
2. Please describe your symptoms.
3. When did your symptoms begin?
4. Were any other medications taken during this time, including over-the-counter drugs?
5. Have you stopped taking the medication?

Reference: American Academy of Allergy, Asthma, and Immunology. Symptoms and Diagnosis tab. <https://www.aaaai.org/conditions-and-treatments/allergies/drug-allergy>

Screening Checklist will not be provided during the event. Competitors will need to memorize the questions related to the identified issue.

PHARMACY SCIENCE

Skill V Patient Screening Form for Pharmacist Consultation and Services

This form is given to the competitor during the event. The competitor completes this form as they ask the patient the 5 questions they have memorized for the selected screening checklist. As the competitor asks each question, the competitor should write a note of which question they asked (such as allergies, side effects, methods, concerns, immunosuppressed, etc.) in the blank space provided below. As the patient answers each question, the competitor should check "yes", "no", or "don't know" according to how the patient responds. After asking the 5 questions, the competitor will sign the form (in the form completed by line) and then return it to the judge (Pharmacist) as the final step in the skill.

Screening Checklist for: _____

Patient Name: _____ Date of Birth: ____/____/____

	Yes	No	Don't Know
1.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Form completed by: _____

Date: _____

Form reviewed by: _____

Date: _____

PHARMACY SCIENCE

Section # _____ Division: _____ SS _____ PS/Collegiate

Competitor # _____ Judge's Signature _____

***Name brand OR generic names will be used in the scenarios.**

Skill VI: Filling a Prescription	(Time: 5 minutes)	Possible		Awarded
1. Obtained prescription.		1	0	
2. Reviewed the prescription for legality and correctness.		2	0	
a. Verified the name on the prescription by asking the patient.		2	0	
b. Verified prescription was presented within one year of being written.		2	0	
c. Verified address of the patient.		1	0	
d. Date of birth verified		1	0	
3. Reviewed the original medication order with the judge:		1	0	
a. correct dosage form is included on the prescription		1	0	
b. correct strength is included on the prescription		1	0	
4. Determined if generic substitution is allowed based on the prescription		1	0	
5. Washed hands or used alcohol-based hand sanitizer for hand hygiene.		2	0	
6. Obtained the correct medication to fill the prescription.		2	0	
7. Checked the medication expiration date		2	0	
8. Calculated the number of tablets or capsules to dispense based on prescription.		4	0	
9. Used the counting tray and spatula to count needed number of tablets or capsules for the current prescription.		4	0	
10. Recounted to ensure the correct number will be dispensed.		2	0	
11. Obtained the most appropriate container (type and shape) for the prescription from those supplied.		1	0	
12. Obtained the correct label, rechecking the directions and drug strength.		4	0	
13. Affixed auxiliary labels if indicated such as take with meals, shake well, etc.		2	0	
14. Submitted to pharmacist (judge) for final check. *Judge verified accuracy of final product		4	0	

Skill VI: Filling a Prescription (con't) – Items Evaluated	Possible		Awarded
15. Avoided contamination by not touching medication directly throughout filling process.	2	0	
16. Cleaned counting tray and spatula with an alcohol swab.	2	0	
17. Returned all equipment to appropriate place.	2	0	
18. Washed hands or used alcohol-based hand sanitizer for hand hygiene.	2	0	
18. Used appropriate verbal and nonverbal communication with patient and other personnel.	2	0	
TOTAL POINTS - SKILL VI 70% Mastery for Skill VI = 32.9	47		

PHARMACY SCIENCE

Section # _____ Division: _____ SS _____ PS/Collegiate
 Competitor # _____ Judge's Signature _____

Skill VII: Aseptic Garbing, Hand Washing, & Gloving (Time: 10 minutes)	Possible		Awarded
1. Removed any outer garments and jewelry.	2	0	
2. Obtained needed supplies.	1	0	
3. Cleansed hands with sterile, foamed 70% IPA by holding can so that tip is down into the palm of opposite hand and coating palms, back of hands, and each finger and allow to dry.	2	0	
4. Donned shoe covers one at a time completely covering shoe.	2	0	
5. Reapplied sterile, foamed 70% IPA to hands and allowed to dry.	2	0	
6. Gathered or tied loose hair back and put on the hair cover while completely covering all of the hair.	2	0	
7. Reapplied sterile, foamed 70% IPA to your hands & allow to dry.	2	0	
8. Donned a face mask by positioning the mask securely over nose, mouth and chin. If have facial hair, donned a beard cover.	2	0	
9. TO SINK FOR ASEPTIC HAND WASHING:	2	0	
a. Squeezed surgical scrub sponge/brush several times to activate soap suds.	2	0	
b. Opened the packet removing the sterile sponge/brush and held in dominant hand.	2	0	
c. Used the other hand to dispose of wrapper in waste container.	2	0	
d. Pressed the foot pedals if present to begin flow of water. <i>*IF NO FOOT PEDALS ARE AVAILABLE ASK JUDGE TO TURN ON THE WATER.</i>	2	0	
e. When water was warm, wet hands and arms.	2	0	
10. Used the nail pick to clean under each fingernail while still holding the scrub sponge/brush. When completed disposed of pick in wastebasket.	2	0	
11. Applied a small amount of water to the scrub sponge/brush.	2	0	
12. Used the brush side of the sterile scrub sponge/ brush under the fingernails of left hand moving from thumb to pinkie.	2	0	
13. Repeated step #12 on the right hand.	2	0	

Skill VII: Aseptic Garbing, Hand Washing, & Gloving (con't) – Items Evaluated		Possible	Awarded
14.	Used the sponge side to clean each of the four surfaces (top, side, bottom, side) and webbing between beginning with thumb and repeating for each finger on left side.	2	0
15.	Repeated step #14 on the right hand.	2	0
16.	Used the sponge to clean the palm of the left hand.	2	0
17.	Repeated step #16 on the right hand.	2	0
18.	Cleaned the left forearm in a circular pattern around the arm from wrist to elbow.	2	0
19.	Repeated step #18 on the right side.	2	0
20.	Disposed of scrub sponge/brush without touching waste container or contents.	2	0
21.	Rinsed the left hand and forearm holding your arm with fingers pointed up and rinsing from fingers to elbow.	2	0
22.	Repeated step #21 on right hand.	2	0
*Foot Pedal released OR Judge turns off water when handwashing is complete.		-	
23.	Used an aseptic, lint-free paper towel to dry both hands moving from fingers toward the elbow.	2	0
24.	Disposed of paper towel in waste container.	2	0
25.	Opened the sterile gown.	2	0
26.	DONNED STERILE GOWN		
	a. Inserted one arm into open sleeve and pulled it up on shoulder and repeated on other sleeve.	2	0
	b. Secured the gown at the neck and at the waist.	2	0
27.	Sterilized hands with sterile, foamed 70% IPA.	2	0
28.	Opened sterile gloves and placed on clean surface.	2	0
29.	Placed the left glove on the left hand by grasping the inner part of the cuff with the right hand & pulled up onto left hand.	2	0
30.	Repeated gloving process on right hand. *Judge states "skill is completed".	2	0
31.	Removal of PPE		
	a. Grasped cuff of one glove and pulled glove down & off hand.	2	0
	b. While grasping removed glove in gloved hand, grasped the cuff & pulled off the glove of the other hand.	2	0
	c. Disposed of glove bundle in waste container.	2	0
	d. Untied the gown and removed by pulling at shoulders turning the gown inside out and placed in a waste container.	2	0
	e. Removed face mask, hair cover, and shoe covers and discarded in waste container.	2	0
32.	Washed hands or used alcohol-based handrub for hand hygiene.	2	0
TOTAL POINTS - SKILL VII		81	
70% Mastery for Skill VII = 56.7			