Florida Department of Education
Curriculum Framework

Program Title: **Pharmacy Technician**
Program Type: **Career Preparatory**
Career Cluster: **Health Science**

Career Certificate Program		
Program Number	H170500	
CIP Number	0351080506	
Grade Level	30, 31	
Program Length	1050 hours	
Teacher Certification	Refer to the **Program Structure** section.	
CTSO	HOSA, SkillsUSA	
SOC Codes (all applicable)	Please see the CIP to SOC Crosswalk located at the link below.	
CTE Program Resources	http://www.fldoe.org/academics/career-adult-edu/career-tech-edu/program-resources.stml	
Basic Skills Level	Computation (Mathematics): 11	Communications (Reading and Language Arts): 10

Purpose

This program offers a sequence of courses that provides coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers in the Health Science career cluster; provides technical skill proficiency, and includes competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills, and knowledge of all aspects of Health Science career cluster.

This program focuses on broad, transferable skills and stresses understanding and demonstration of the following elements of the health care industry; planning, management, finance, technical and production skills, underlying principles of technology, labor issues, community issues and health, safety, and environmental issues.

The content includes but is not limited to metric system, medical terminology, medicinal drugs, pharmaceutical compounding, USP 795 standards, sterile techniques, USP 797 and USP 800 standards, maintenance of inventory, IV preparation, receiving and handling of hazardous materials, preparing purchase orders, receiving and checking supplies purchased, printing labels, typing prescription labels, delivering medications, pricing prescription drug orders and supplies, prepackaging unit dose packages, patient record systems, control records, data processing automation in pharmacy, computer application, employability skills, leadership and human relations skills, health and safety, including CPR.

Additional Information relevant to this Career and Technical Education (CTE) program is provided at the end of this document.

Program Structure

This program is a planned sequence of instruction consisting of 2 occupational completion points.

This program is comprised of courses which have been assigned course numbers in the SCNS (Statewide Course Numbering System) in accordance with Section 1007.24 (1), F.S. Career and Technical credit shall be awarded to the student on a transcript in accordance with Section 1001.44(3) (b), F.S.

To teach the courses listed below, instructors must hold at least one of the teacher certifications indicated for that course.

The following table illustrates the postsecondary program structure:

OCP	Course Number	Course Title	Teacher Certification	Length
A	HSC0003	Basic Healthcare Worker	PHARMACY 7G	90 hours
B	PTN0084	Pharmacy Technician 1		360 hours
	PTN0085	Pharmacy Technician 2		300 hours
	PTN0086	Pharmacy Technician 3		300 hours

Regulated Programs

This program is regulated by the Department of Health, Florida Board of Pharmacy.

This program must be approved by the Board of Pharmacy. Program completers who wish to work as Pharmacy Technicians in the State of Florida must register with the Board of Pharmacy (465.014, F.S.).

Common Career Technical Core – Career Ready Practices

Career Ready Practices describe the career-ready skills that educators should seek to develop in their students. These practices are not exclusive to a Career Pathway, program of study, discipline or level of education. Career Ready Practices should be taught and reinforced in all career exploration and preparation programs with increasingly higher levels of complexity and expectation as a student advances through a program of study.

1. Act as a responsible and contributing citizen and employee.

2. Apply appropriate academic and technical skills.

3. Attend to personal health and financial well-being.

4. Communicate clearly, effectively and with reason.

5. Consider the environmental, social and economic impacts of decisions.

6. Demonstrate creativity and innovation.

7. Employ valid and reliable research strategies.

8. Utilize critical thinking to make sense of problems and persevere in solving them.

9. Model integrity, ethical leadership and effective management.

10. Plan education and career path aligned to personal goals.

11. Use technology to enhance productivity.

12. Work productively in teams while using cultural/global competence.

Standards

After successfully completing this program, the student will be able to perform the following:

01.0 Demonstrate knowledge of the healthcare delivery system and health occupations.
02.0 Demonstrate the ability to communicate and use interpersonal skills effectively.
03.0 Demonstrate legal and ethical responsibilities.
04.0 Demonstrate an understanding of and apply wellness and disease concepts.
05.0 Recognize and practice safety and security procedures.
06.0 Recognize and respond to emergency situations.
07.0 Recognize and practice infection control procedures.
08.0 Demonstrate an understanding of information technology applications in healthcare.
09.0 Demonstrate employability skills.
10.0 Demonstrate knowledge of blood borne diseases, including HIV/AIDS.
11.0 Apply basic math and science skills.
12.0 Practice personal relation skills.
13.0 Identify pharmaceutical abbreviations and terminology as related to Community Pharmacy Practice.
14.0 Identify medical and legal considerations in various pharmacy settings.
15.0 Perform clerical duties as related to Pharmacy Practice.

16.0 Demonstrate knowledge of basic pharmaceutical chemistry and drug classification.
17.0 Demonstrate knowledge of inventory management.
18.0 Initiate measurement and calculating techniques as it relates to United States Pharmacopeia (USP) 795 (non-sterile) compounding in pharmacy practice.
19.0 Demonstrate a basic knowledge and skills in areas of science relevant to pharmacy technicians including anatomy/physiology and pharmacology.
20.0 Prepare and deliver medications.
21.0 Repackage unit dose medications.
22.0 Prepare United States Pharmacopeia (USP) 797 and USP 800 sterile products.
01.0

Florida Department of Education
Student Performance Standards

Program Title: Pharmacy Technician
Career Certificate Program Number: H170500

The **Basic Health Care Worker (HSC0003)** is referred to as the **Health Science Core** and is the first OCP in the majority of the Career Certificate Program health science programs. Secondary and Postsecondary students completing the health science core will not have to repeat the core in any other health science program in which it is a part. When the recommended sequence is followed, the structure allows students to complete at specified points for employment or remain for advanced training or cross-training.

Course Number: HSC0003
Occupational Completion Point: A
Basic Healthcare Worker – 90 Hours

To ensure consistency whenever these courses are offered, the health science core standards (1-11) and benchmarks have been placed in a separate document. To access this document, visit this link:
https://www.fldoe.org/core/fileparse.php/20706/urlt/health-sci-core-psav-cc-2425.rtf

Course Number: PTN0084
Occupational Completion Point: B
Pharmacy Technician 1 – 360 Hours

12.0	Practice personal relation skills. The student will be able to:
12.01	Explore the meaning, organizational flow, and duties of pharmacy personnel.
12.02	Identify pharmacy organizations and their role in the profession to include student membership opportunities.
12.03	Identify the current trends and perspectives in the pharmacy practice.

	12.04 Describe how team building can facilitate change within the pharmacy working environment.
	12.05 Understand the importance of good interpersonal skills/soft skills in various pharmacy settings.
	12.06 Explain ethical conduct in job-related activities.
	12.07 Identify State of Florida requirements for obtaining and maintaining pharmacy technician registration as well as continuing education requirements for renewal.
	12.08 Explore the importance of national certification and the continuing education requirements for renewal.
13.0	Identify pharmaceutical abbreviations and terminology as related to pharmacy practice. The student will be able to:
	13.01 Utilize pharmaceutical medical terminology.
	13.02 Identify the major symbols and abbreviations used on prescriptions and state the meaning.
	13.03 Describe safety strategies used to prevent medication errors due to pharmaceutical abbreviations and terminology.
14.0	Identify medical and legal considerations in various pharmacy settings. The student will be able to:
	14.01 Articulate the significance of current national and Florida law and administrative rules as they relate to the scope of practice for the pharmacy technician.
	14.02 Convey an understanding of patient counseling requirements pertaining to OBRA-90 versus Medication Therapy Management (MTM).
	14.03 Convey an understanding of medical legal concepts as they relate to the scope of practice for the pharmacy technician.
	14.04 Explain the legal requirements for accurate pharmacy documentation and recordkeeping.
	14.05 Demonstrate an understanding of HIPAA in pharmacy practice pertaining to the ethical and legal considerations.
	14.06 Convey an understanding of the patient's Bill of Rights as it relates to pharmacy practice.
	14.07 Convey an understanding of pertinent laws governing pharmacy practice including but not limited to prescriptions, drug diversion, and use of E-FORCSE PDMP requirements.
	14.08 Differentiate between controlled substance schedules (CI-CV) and their applicable regulations.
	14.09 Convey an understanding of the Florida Right to Know Act with respect to P-listed drugs in addition to hazardous materials, the utilization of safety data sheets, and hazardous communication symbols.
	14.10 Identify and explain appropriate patient safety goals by applicable accrediting and regulatory organizations.
	14.11 Understand and explain activities that may be performed by pharmacy technicians and those that must be performed by licensed pharmacists including final check.
	14.12 Explain the importance of technology and its current use in various pharmacy settings.

15.0	Perform clerical duties as related to pharmacy practice. The student will be able to:
15.01	Demonstrate retail pharmacy dispensing processes.
15.02	Identify potential errors that may result in Quality Related Events and explain specific ways they can be prevented.
15.03	Utilize pharmacy software in processing pharmacy prescription data.
15.04	Identify and discuss applications of E-Prescribing and facsimile.
15.05	Utilize and apply interactive communication skills while gathering accurate information from patients and from other healthcare professionals.
15.06	Identify communication modalities that can result in the transmission of inaccurate information, and explain specific ways to make improvements.
15.07	Create, complete and maintain patient profiles including third party billing information.
15.08	Understand the processes of third party billing, resolving rejections, and obtaining authorizations.
15.09	Demonstrate professional communication skills within the scope of practice for the pharmacy technician.
15.10	Demonstrate the knowledge of systems used in maintaining pharmacy records.
15.11	Summarize, evaluate, and describe the role of the technician in quality assurance activities as related to various pharmacy practices.
16.0	Demonstrate knowledge of basic pharmaceutical chemistry and drug classification. The student will be able to:
16.01	Define the major classifications of pharmaceuticals.
16.02	Identify at least one official compendia of standards for quality and purity of drug monograph.
16.03	Utilize pharmacy reference manuals or web sites.
16.04	Demonstrate knowledge of trade and generic name equivalents.
17.0	Demonstrate knowledge of inventory management. The student will be able to:
17.01	Convey an understanding of industry standards in purchasing pharmaceutical supplies, including the Florida Pedigree Law.
17.02	Explain how to maintain a controlled substance inventory.
17.03	Apply knowledge of pharmacy business math to prescription pricing systems.
17.04	Maintain stock inventory, communicate shortages, and seek solutions to maintain continuity of patient care.
17.05	Understand the process of how to create electronic purchase orders.

	17.06	Accurately perform the process of purchasing, receiving, special handling, storing, distributing and disposing of pharmaceutical supplies.
	17.07	Convey an understanding of Investigational Drugs, Risk Evaluation and Mitigation Strategies (REMS), off label indications, and emerging drug therapy.
	17.08	Convey an understanding of the inventory control process implemented by Title II of the Drug Quality and Security Act.
18.0		Initiate measurement and calculating techniques as it relates to United States Pharmacopeia (USP) 795 (non-sterile) compounding in pharmacy practice. The student will be able to:
	18.01	Convey an understanding of United States Pharmacopeia (USP) 795 standards.
	18.02	Convert measurements within the apothecary, avoirdupois, household and metric systems.
	18.03	Perform common pharmaceutical calculations.
	18.04	Identify and utilize common pharmaceutical weighing equipment.
	18.05	Identify and utilize common pharmaceutical volume measurement equipment.
	18.06	Accurately demonstrate the technique of preparing common non-sterile pharmaceutical compounds.
	18.07	Summarize, evaluate and describe the role of the technician in quality assurance activities as related to the preparation of non-sterile products.

Course Number: PTN0085 **Occupational Completion Point: B** **Pharmacy Technician 2 – 300 Hours**		
19.0		Demonstrate basic knowledge and skills in areas of science relevant to pharmacy technicians including anatomy/ physiology and pharmacology. The student will be able to:
	19.01	Describe electrolyte balances and imbalances.
	19.02	Relate the general sources, classes, indications, mechanisms of actions, routes of administration, side effects, and various types of drug interactions.
	19.03	Demonstrate an understanding of common adult doses of medications, duration of common drug therapies, and respective contraindications including the BEERS Criteria.
	19.04	Identify potential interactions that require a pharmacist's intervention pertaining to food/alcohol, herbal, OTC, and/or prescription medications.
20.0		Prepare and deliver medications. The student will be able to:
	20.01	Read and prepare medication orders correctly.
	20.02	Demonstrate institutional pharmacy dispensing processes.

20.03	Compare all new orders with medications listed on profiles while noting any changes.
20.04	Utilize special precautions in the preparation of medications for pediatric patients.
20.05	Explain how to safely transport medications, being aware of hazards, theft, legal implications of accidental loss, and other consequences.
20.06	Understand how to correctly fill and deliver medication.
20.07	Collect data from medication administration record.
20.08	Describe the use of automated medication dispensing equipment.

Course Number: PTN0086 Occupational Completion Point: B Pharmacy Technician 3 – 300-Hours	
21.0	Repackage unit dose medications. The student will be able to:
21.01	Locate correct stock container.
21.02	Operate unit dose packaging equipment.
21.03	Measure, count, and place individual dose in appropriate containers.
21.04	Understand precautions used when packaging unit dose hazardous drugs.
21.05	Record repackaged medication data correctly.
21.06	Summarize, evaluate, and describe the role of the technician in quality assurance activities as related to repackaging unit dose medication.
22.0	Prepare United States Pharmacopeia (USP) 797 and USP 800 sterile products. The student will be able to:
22.01	Convey an understanding of United States Pharmacopeia (USP) 797 regulations.
22.02	Convey an understanding of United States Pharmacopeia (USP) 800 regulations.
22.03	Compare medication order with label on vial and check expiration date of product.
22.04	Calculate drug dosage for parenteral use.
22.05	Reconstitute parenteral medications.
22.06	Demonstrate aseptic technique to withdraw medication from stock vial, measure correct quantity as instructed, select and insert it into IV solution without error.

22.07	Demonstrate aseptic technique to withdraw medication from an ampule using filter needle/straw.
22.08	Prepare parenteral solutions using proper aseptic technique.
22.09	Understand the preparation of Total Parenteral Nutrition (TPN) solutions.
22.10	Understand the preparation of chemotherapeutic agents using proper safety techniques.
22.11	Understand the appropriate technique while using specialized equipment such as: laminar flow hoods, filters, pumps, automated compounders, and barrier isolator.
22.12	Place label on IV solution container and record appropriately.
22.13	Perform quality control check of completed product.
22.14	Convey an understanding of the proper storage and disposal requirements of reconstituted and non-reconstituted IV solutions.
22.15	Convey an understanding of the proper storage and disposal of hazardous drugs.
22.16	Summarize, evaluate and describe the role of the technician in quality assurance activities as related to the preparation of sterile products.

Additional Information

Laboratory Activities

Laboratory investigations that include scientific inquiry, research, measurement, problem solving, emerging technologies, tools and equipment, as well as, experimental, quality, and safety procedures are an integral part of this career and technical program/course. Laboratory investigations benefit all students by developing an understanding of the complexity and ambiguity of empirical work, as well as the skills required to manage, operate, calibrate and troubleshoot equipment/tools used to make observations. Students understand measurement error; and have the skills to aggregate, interpret, and present the resulting data. Equipment and supplies should be provided to enhance hands-on experiences for students.

Clinical practicum experiences are an integral part of this program.

Special Notes

Due to the clinical experiences students are engaged in through the program and to ensure the safety of both the students and the patients the recommended student to instructor ratio in the classroom is 20:1 and in the lab is 4:1.

This program meets the Department of Health’s education requirements for HIV/AIDS, Domestic Violence and Prevention of Medical Errors. Although not a requirement for initial licensure, it is a requirement for renewal, therefore the instructor **may** provide a certificate for renewal purposes to the student verifying these requirements have been met.

If students in this program are seeking a licensure, certificate or registration through the Department of Health, please refer to 456.0635, F.S. for more information on disqualification for a license, certificate, or registration through the Department of Health.

It is recommended that program completers take national pharmacy technician certification exam offered by the Pharmacy Technician Certification Board, 2215 Constitution Ave. NW, Washington, DC 20037-2985, (202) 429-7576. This certification is offered all year round on a continual basis.

The Core should be taken first in the program. Following the successful completion of the core, the student is eligible to take the National Health Care Foundation Skill Standards Assessment with instructor approval and the completion of a portfolio.

Career and Technical Student Organization (CTSO)

HOSA: Future Health Professionals is the co-curricular career and technical student organization providing leadership training and reinforcing specific career and technical skills. Career and Technical Student Organizations provide activities for students as an integral part of the instruction offered.

Cooperative Training – OJT

On-the-job training is appropriate but not required for this program. Whenever offered, the rules, guidelines, and requirements specified in the OJT framework apply.

Basic Skills

In Career Certificate programs offered for 450 hours or more, in accordance with Rule 6A-10.040, F.A.C., the minimum basic skills grade levels required for postsecondary adult career and technical students to complete this program are: Computation (Mathematics) and Communications (Reading and Language Arts). These grade level numbers correspond to a grade equivalent score obtained on a state designated basic skills examination.

Adult students with disabilities, as defined in Section 1004.02, Florida Statutes, may be exempted from meeting the Basic Skills requirements (Rule 6A-10.040). Students served in exceptional student education (except gifted) as defined in s. 1003.01, F.S., may also be exempted from meeting the Basic Skills requirement. Each school district and Florida College System Institution must adopt a policy addressing procedures for exempting eligible students with disabilities from the Basic Skills requirement as permitted in Section 1004.91, F.S.

Accommodations

Federal and state legislation requires the provision of accommodations for students with disabilities to meet individual needs and ensure equal access. Postsecondary students with disabilities must self-identify, present documentation, request accommodations if needed, and develop a plan with their counselor and/or instructors. Accommodations received in postsecondary education may differ from those received in secondary education. Accommodations change the way the student is instructed. Students with disabilities may need accommodations in such areas as

instructional methods and materials, assignments and assessments, time demands and schedules, learning environment, assistive technology and special communication systems. Documentation of the accommodations requested and provided should be maintained in a confidential file.

Note: postsecondary curriculum and regulated secondary programs cannot be modified.