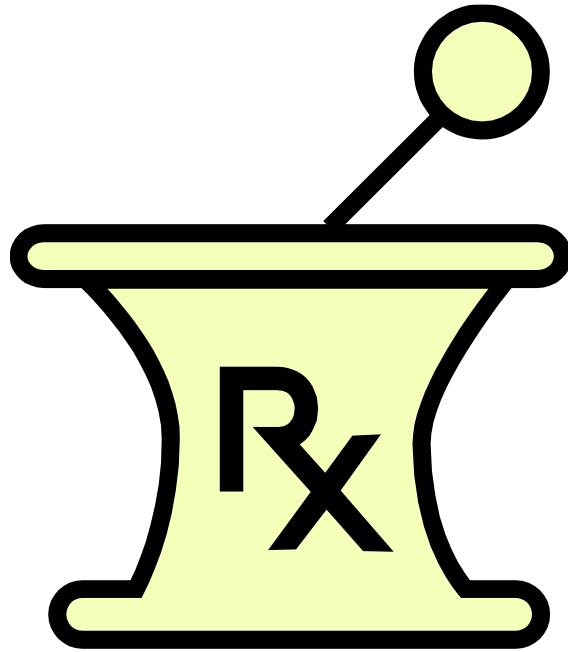


# Section III

## Pharmacy Technology



### Pharmacy Technology Faculty

Clayton Sprouse, MEd, CPhT

Academic Program Director

864-941-8527

Denise Schumacher, CPhT

Pharmacy Technology Adjunct

[schumacher.c@ptc.edu](mailto:schumacher.c@ptc.edu)

# Mission

The mission of the Pharmacy Technician program is to provide an economically flexible didactic and clinical competency based curriculum which provides students from diverse backgrounds the opportunity to master skills required to enter the entry-level job market in community and hospital pharmacy settings. This diploma program also strives to assist students in achieving personal and professional goals as well as instill life-long learning values.

## Program Goals

The goals of the Pharmacy Technology Program are to:

- A. Promote a collaborative learning environment for students to stimulate personal and professional growth.
- B. Assist the student in the development of the technical necessary for employment in the field.
- C. Provide meaningful clinical experiences for practical development.
- D. Graduate students who are academically and technically competent.
- E. Meet employment needs without saturating the market with unemployable graduates.
- F. Apply life-long learning processes by attending continuing educational program.



# Program Objectives

- ☞ Demonstrate knowledge and understanding of the pharmacy department.
- ☞ Demonstrate an understanding of technician duties and responsibilities.
- ☞ Demonstrate knowledge of pharmacy/medical terms, abbreviations, and symbols used in prescribing and dispensing medication.
- ☞ Demonstrate knowledge of drug properties in manufacturing and packaging
- ☞ Perform calculations for dosage
- ☞ Perform functions for drug purchasing and inventory
- ☞ Demonstrate knowledge of dosage, route of administration and dose forms
- ☞ Demonstrate procedures for manufacturing, packaging and labeling of drug products.
- ☞ Demonstrate aseptic compounding and parenteral admixture.
- ☞ Demonstrate institutional and ambulatory drug distribution.
- ☞ Perform dispensing of controlled substances as per federal and state guidelines.



# Pharmacy Technician

## Your Next Step

Pharmacy practice includes the interpretation and evaluation of orders for medications, compounding, dispensing, labeling of drug products and pharmaceuticals and/or medical devices, involvement in drug selection, review of drug utilization, values, uses and hazards of medications and devices.



Pharmacists are responsible for all pharmacy activities that are patient and medication related. Authority to practice, is granted to pharmacists by the process of licensure through the state. Pharmacy practice is defined by the state Pharmacy Practice Act, which also describes the role and practice of technicians.

Many technician activities and educational training program requirements are outlined in the practice act.

Pharmacy technicians practice under the legal umbrella of the pharmacists' license; therefore all technician activities are the responsibility of the pharmacist.

The technician is a specialist working under the direction of a licensed pharmacist. Duties are assigned by the pharmacist and are related to preparing and dispensing medication in accordance with standards of procedures and laws.

Some of the duties include:

- 🌸 Fill medication orders
- 🌸 Prepare IV solutions
- 🌸 Replenish medications and pharmaceuticals on patient care
- 🌸 Interpret physician medication orders
- 🌸 Maintain controlled substance distribution
- 🌸 Inventory control of pharmaceuticals
- 🌸 Ordering, receiving, pricing as directed
- 🌸 Maintaining patient profiles
- 🌸 Preparing bulk formulations
- 🌸 Other pharmacy and drug related activities



units

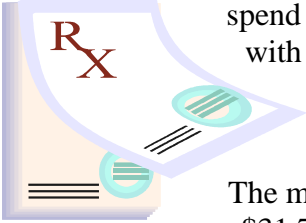
Technician duties will vary from practice site to practice site depending on the needs within the practice and responsibilities delegated by the pharmacist. Duties could vary greatly as a result of the site characteristics. The role of both pharmacist and technician are changing as healthcare needs change. The pharmacists are the drug information expert while the technicians are the drug preparation expert.

# CAREERS

Training in the pharmacy technician program prepares the student to practice in a variety settings. Positions are available in community pharmacy, hospital pharmacy, home health, mail order, military and VA services, wholesaling, electronic data handling, education, manufacturing and non-pharmacy industries.

**There is a great demand for these highly trained pharmacy workers.**

For students to be successful in the pharmacy technician program he or she must be a self-starter and must be self-motivated. The nature of the curriculum requires that students spend time in individual study. Study groups are helpful when students are able to meet and work with their peers.



## Salary Range

The median salary for Pharmacy Technicians in 2017 according to the Bureau of Labor Statistics was \$31,750 or \$15.26 per hour.

## Job Placement

As a graduate of Piedmont Technical College, job placement services are available to you both as a student and as an alumnus at no charge.

The program opens the door to the pharmaceutical industry and allows students an opportunity to adopt the profession as a possible life-long career.

Completion of the Pharmacy Technician Program at Piedmont College does not guarantee employment. The competencies however; prepare the student to take the National Certification



Technical taught will Exam.

## Benefits of Certification

Certification benefits the tech, pharmacist, and the employer. Employers find benefit in managing risk, reduced training costs, increased employee satisfaction, and improved performance by hiring the certified technician. Pharmacists, who have techs with greater knowledge and skills, are able to devote more time to patients and patient medications and focus more on patient counseling and monitoring drug utilization as well as disease state management. The certified tech has greater opportunities for professional growth, enhanced job security, and increased financial incentives.



The State of South Carolina requires that all persons working in a pharmacy must be registered through the South Carolina Department of Labor, Licensing, and Regulations. You may go under one of these categories: registered pharmacy technician or certified registered pharmacy technician. For state registration and state certification, the candidate must complete 10 continuing education hours. Four (4) of these hours must be obtained by attending lectures, seminars, or workshops. These must be completed every year. In order to be state certified, the technician must pass the National Certification Exam and be nationally certified. As of July 1, 2004, the technician must receive a diploma from an ASHP-accredited Pharmacy Technology Program. The candidate would also need to work as a registered pharmacy technician for a minimum of 1000 hours, before state certification will be granted.

**SOUTH CAROLINA BOARD OF PHARMACY  
APPROVED DUTIES FOR PHARMACY TECHNICIANS**

The following duties may be performed by a registered technician after the supervising pharmacist carefully considers the individual's abilities and/or qualifications:

- Assist RPh. in providing effective, appropriate, and safe pharmacy service
- Assist RPh. in preparing Rx
- Handling of legend drugs or devices, to include but not limited to, receiving shipments of pharmaceuticals and stocking of shelves and bins
- Accepting **WRITTEN** prescriptions only
- Receive verbal request from patients for available refills.
- Perform initial interpretation of licensed practitioner orders
  - Select from available stock legend drugs and devices for Rx preparation
  - Enter Rx information into computer, including drug allergies. **\*ONLY A LICENSED RPH MAY OVERRIDE Drug Utilization Review and Drug Interaction Alerts.**
- Place meds in a suitable container
  - Appropriately label Rx container
  - Check for drug outdates
  - Deliver dispensed meds to a licensed healthcare provider
  - Fill and maintain unit dose carts
  - Change unit dose medication cassettes
  - Stock automatic dispensers
  - Process medications returned for credit according to permitted facility's policies and procedures
  - Discard expired returns according to facility's policies and procedures
- **May process new Rx medications sales only after RPh provides counseling to the patient.**
  - Compound, or mix meds.
  - Mix drugs in a dry form with water to make them an active liquid med.
  - Prepare IV solutions.
  - Repackage bulk medications.

**SOUTH CAROLINA BOARD OF PHARMACY  
APPROVED DUTIES FOR STATE CERTIFIED PHARMACY TECHNICIANS**

The following additional duties may be performed by a state certified pharmacy technician after the supervising pharmacist carefully considers the individual's abilities and/or qualifications:

- Receive and initiate verbal telephone orders.
- Conduct prescription transfers.
- Check a technician's refill of medications if the medication is to be administered by a licensed healthcare professional in an institutional setting.
- Check a technician's repackaging of medications from bulk to unit dose in an institutional setting.

Revised 3/

# Pharmacy Technician Certification Board

## Candidate Information for National Certification Test

### Certification

There are two parts to being a Certified Pharmacy Technician (CPhT). First, pharmacy technicians must sit for and pass the national PTCE. Once a pharmacy technician has passed the exam, he or she may use the designation of CPhT. Second, to continue to hold certification, a CPhT is required to obtain twenty hours of continuing education for recertification within two years of original certification or previous recertification. For more information regarding certification, please visit the PTCB website ([www.ptcb.org](http://www.ptcb.org)).

### Recertification

Renewal of certification is required every two years. During the two-year period, a CPhT must earn twenty hours of pharmacy-related continuing education; one of the twenty hours must be in pharmacy law. Approximately sixty days before the recertification date, PTCB will mail a recertification packet to the candidate's mailing address on file. For more information on recertification, visit [www.ptcb.org](http://www.ptcb.org) and download a copy of PTCB's Recertification Requirements and Guidelines.



### Eligibility Requirements

You must have received a high school diploma, a GED, or the foreign equivalent by the application receipt deadline and have never been convicted of a felony to sit for the PTCB Examination.

**Piedmont Technical College requires a complete background check and drug test to verify candidate to the program eligibility.**





# CODE OF ETHICS FOR PHARMACY TECHNICIANS

Approved by the Board of Directors  
American Association of Pharmacy Technicians

**Preamble:** **Pharmacy Technicians** are health-care professionals who assist pharmacists in providing the best possible care for patients. The principles of this code which apply to pharmacy technicians working in all settings are based on the application and support of the moral obligations that guide all in the pharmacy profession in relationships with patients, health-care professionals, and society.

## **Principles:**

1. A pharmacy technician's first consideration is to ensure the health and safety of the patient, and to use knowledge and skills most capable in serving others.
2. A pharmacy technician supports and promotes honesty and integrity in the profession, which includes a duty to observe the law, maintain the highest moral and ethical conduct at all times, and uphold the ethical principles of the profession.
3. A pharmacy technician assists and support the pharmacist in the safe, efficacious, and cost-effective distribution of health-services, and health-care resources.
4. A pharmacy technician respects and values the abilities of pharmacists, colleagues and other health-care professionals.
5. A pharmacy technician maintains competency in practice, and continually enhances professional knowledge and expertise.
6. A pharmacy technician respects and supports the patient's individuality, dignity, and confidentiality.
7. A pharmacy technician respects the confidentiality of patient's records and discloses pertinent information only with proper authorization.
8. A pharmacy technician never assists in the dispensing, promoting, or distribution of medications or medical devices that are not a good quality or do not meet the standards required by law.
9. A pharmacy technician does not engage in any activity that will discredit the profession, and will expose, without fear or favor, illegal or ethical conduct in the profession.
10. A pharmacy technician associates and engages in the support of organizations that promote the profession of pharmacy through the use and enhancement of pharmacy technicians.

## Developing a Good Work Ethic

As in any work setting, one is expected to perform at the highest level of competency. Developing a good work ethic from the beginning of one's employment in the work force or academic career is of the utmost importance. Here at Piedmont Technical College we strive to encourage each student to make this their goal. Not only will this aid in personal satisfaction, but will enable the student to be more marketable and sought after as an employee.

Work ethic is not only governed by the dictated rules of the workplace, but also by personal, moral, and ethical values one develops within oneself. Honesty, dependability and punctuality are a few of the desired traits an employer seeks. The faculty at the College will seek to encourage and aid each student in developing a good work ethic. It is the student's responsibility to implement these suggestions put forth by faculty, clinical instructors, and advisors.



## Course Descriptions

Course	Title	Credit	Description
PHM 101 Fall 19	Introduction to Pharmacy	3.0	This course provides a study of and introduction to pharmacy and the role in providing patient care services. (3/0)
PHM 103 Spring 20	Pharmacy Law & Ethics	2.0	This course is a study of the current laws and ethical practices appropriate to pharmacy and the role of patient services.
PHM 110 Fall 19	Pharmacy Practice	4.0	This course provides a study of theory and practice in procuring, manipulating, and preparing drugs for dispensing.
PHM 113 Fall 19	Pharmacy Technician Math	3.0	This course includes a review of basic mathematics focusing on its application to common pharmaceutical calculations. (3/0)
PHM 114 Spring 20	Therapeutic Agents I	3.0	This course provides an introductory study of therapeutic drug categories. (3/0)
PHM 118 Summer 20	Community Pharmacy Seminar	3.0	This course is a study of the pharmacy issues related to the community pharmacy practice. (3/0)
PHM 124 Summer 20	Therapeutic Agents II	3.0	This course includes a study of therapeutic drug categories. (3/0)
PHM 152 Spring 20	Pharmacy Technician Practicum I	2.0	This course provides a practical introduction to the pharmacy environment. (0/6)
PHM 164 Spring 20	Pharmacy Technician Practicum II	4.0	This course provides practical application of pharmacy skills in pharmacy environment. (0/12)
PHM 202 Spring 20	Pharmacological Anatomy and Physiology	4.0	This course introduces therapeutic drug categories; basic anatomy and physiology of systems affected by drug action are emphasized. Focus is directed to the body systems' anatomical and physical reaction to therapeutic drugs.

**Associates in Applied Science**  
**Major in General Technology:**  
**Concentration in Pharmacy Technician**  
**Pharmacy Technician Diploma – 47 Credit Hours**

<b>AHS 102</b>	<b>Medical Terminology</b>	<b>3 Hours</b>
<b>AHS 116</b>	<b>Patient Care Relations</b>	<b>3 Hours</b>
<b>PSY 103 or PSY 201</b>	<b>Human Relations/General Psych</b>	<b>3 Hours</b>
<b>ENG 101</b>	<b>English Composition I</b>	<b>3 Hours</b>
<b>MAT 155</b>	<b>Contemporary Math</b>	<b>3 Hours</b>
<b>PHM 101</b>	<b>Introduction to Pharmacy</b>	<b>3 Hours</b>
<b>PHM 103</b>	<b>Pharmacy Law and Ethics</b>	<b>2 Hours</b>
<b>PHM 110</b>	<b>Pharmacy Practice</b>	<b>4 Hours</b>
<b>PHM 113</b>	<b>Pharmacy Technician Math</b>	<b>3 Hours</b>
<b>PHM 114</b>	<b>Therapeutic Agents I</b>	<b>3 Hours</b>
<b>PHM 118</b>	<b>Community Pharmacy Seminar</b>	<b>1 Hours</b>
<b>PHM 124</b>	<b>Therapeutic Agents II</b>	<b>3 Hours</b>
<b>PHM 152</b>	<b>Pharmacy Technician Practicum I</b>	<b>2 Hours</b>
<b>PHM 164</b>	<b>Pharmacy Technician Practicum II</b>	<b>4 Hours</b>
<b>PHM 173</b>	<b>Pharmacy Technician Practicum III</b>	<b>3 Hours</b>
<b>PHM 202</b>	<b>Pharmacological Anatomy and Physiology</b>	<b>4 Hours</b>

**For Associate Degree Requirements, please see your advisor (Clay Sprouse).**

## Pharmacy Technology Program Estimated Costs

Tuition per semester is based on county and credit hours.

State Registration Fee	\$40 (Initial) – (\$15 for each additional year)
Physical examination, vaccines, lab work	\$250 – \$300 – Student responsibility
SCSHP Technician Membership	\$26 – Assessed in Second Semester
Liability Insurance	\$25- Assessed once a semester
Books (3 semesters)	\$500-\$600
Background/Drug Test	\$85-\$100
CPR Non-Rebreathable Mask	\$20 (Second Semester)
CPR Certification Card	\$5.00
Lab Coat/ Uniforms	\$25 per coat/ \$50 per set (Approx.)
Monogram for lab coat	\$10
Cap/Gown	\$50 (Approx.)
Pinning Fee	\$15-Assesed in Third Semester
National Certification Exam PTCB (Pharmacy Technician Certification Board)	\$129-assessed in Third Semester

***You must provide your own transportation to and from your clinical sites, which could be in any of the seven counties served by Piedmont Technical College or in Anderson County.***

## Technical Standards for Students in the Pharmacy Technology Program

### Required of Students for Progression in a Health Science Program (PHARMACY TECHNICIAN)

Applicants and students should be able to perform these essential functions or with reasonable accommodations, such as the help of compensatory techniques and/or assistive devices, be able to demonstrate ability to become proficient in these essential functions.

Essential Function	Technical Standard
Critical Thinking	Critical thinking ability sufficient for clinical placement judgment.
Interpersonal Skills	Interpersonal abilities sufficient to interact with individuals, families and groups from a variety of social, emotional, cultural and intellectual backgrounds.
Communication Ability	Communication abilities sufficient for effective interaction with others in expressive and written English, including computer literacy.
Physical Endurance	Remain continuously on task for several hours while standing, sitting, walking, lifting, bending, and/or transporting clients/patients.
Mobility	Physical abilities sufficient to move from area to area and maneuver in small spaces, full range of motion, manual and finger dexterity, and hand-eye coordination.
Motor Skills	Gross and fine motor abilities sufficient to provide safe and effective patient/client care and operate equipment.
Adequate Height	Ability to reach and operate overhead equipment.
Hearing Ability	Auditory ability sufficient to access non-direct essential patient information.
Visual Ability	Normal or corrected visual ability sufficient for patient/client observation, assessment and/or treatment, ability to discriminate between subtle changes in density (black to gray) of a color in low light.
Tactile Ability	Tactile ability sufficient for physical assessment.
Olfactory Ability	Olfactory senses (smell) sufficient for maintaining environmental safety, and patient/client needs.
Professional Presentation	Ability to present professional appearance and attitude, implement measures to maintain own physical and mental health and emotional stability.
Data Conception	Requires the ability to gather, collate, or classify information about data, people or objects. Reporting and/or carrying out a prescribed action in relation to the information involved.
Manual Dexterity/Motor Coordination	Requires the ability to use body members, tools, or special devices to work, move, guide or place objects or materials. Involves some latitude for judgment with regard to precision attained and selecting appropriate tool, object, or material. Must have good eye/hand/foot coordinator.
Language Development	Requires ability to read and understand complex information from scientific and/or technical journals, papers, etc. Requires the ability to communicate the same types of complex information and data through speech and in writing using proper format, punctuation, spelling, grammar, and using all parts of speech.
Numerical Ability	Requires the ability to determine time, weight, and to perform practical applications of fractions, percentages, ratio and proportion as well as basic addition, subtraction, multiplication and division operations.

Form/Spatial Ability	Requires the ability to inspect dimensions of items and to visually read information and data.
Personal Temperament	Requires the ability to deal effectively with stress produced by work and guest interaction situations that may be of critical or emergency situation.
Physical Exam 1	Requires the submission of a completed medical examination form before beginning classes.
Physical Restrictions	An individual is constantly exposed to various forms of latex in the pharmacy setting. Known and/or developed latex allergy may result in a potential life-threatening situation.
Requirements of Employers	Be free from chemical abuse. Be free from diseases and/or conditions which are communicable and not amendable to universal precautions. Demonstrate immunity to Rubella, Rubeola, Tuberculosis, and Varicella. Be able to perform all essential job functions and tasks.

\_\_\_\_\_ I am capable of meeting these requirements.

\_\_\_\_\_ I am not capable of meeting these requirements.

\_\_\_\_\_ I am aware of any physical restrictions.

\_\_\_\_\_ I am capable of meeting these requirements with the following accommodations.

Student's Signature \_\_\_\_\_

Social Security Number \_\_\_\_\_ Date \_\_\_\_\_

# CLINICAL PLAN OF EDUCATION

During the second and third semester, each student will be required to complete a minimum of 275 clinical hours.

Each student will rotate through some of the following clinical assignments for a length of time determined by the Program Coordinator.

- a. Retail
- b. Hospital pharmacy
- c. IV pharmacy
- d. Compounding pharmacy
- e. Long-term care pharmacy



Clinical Courses:

PHM 152  
PHM 164  
PHM 173

## **Clinical Grading Criteria:**

The student must achieve a grade of “75” or higher. Failure to do so will result in a “F” for the clinical course. The lowest competency level for procedures is 90%.

Clinical rotation schedules are provided at the beginning of each semester. Changes and addendums can be made as deemed necessary by the clinical instructor during the semester.

Clinical instructors may recommend to the program coordinator that a student be dismissed for inappropriate behavior or failure to complete required clinical assignments.



# Guidelines for Clinical Experience

- I. Absences and Tardies
- Two absences are allowed per semester. (Hours must be made up)
  - Make-up required at instructor's discretion, make-up time at end of the semester.
  - Cancellation due to inclement weather is the same as for classes for PTC.
  - An absence must be reported to instructor and clinical site before expected arrival time at clinical site. Failure to do so may result in administrative removal from the program.
  - Never leave clinical site during assigned hours without permission of instructor.
- II. Confidentiality
- Any confidence or information regarding patients or patient's condition is confidential.
  - Never repeat in public, neither to family nor friends.
- III. Smoking
- No smoking is allowed at any clinical facility.
- IV. Conduct and Behavior
- Always wear designated uniform.
  - Never bring intoxicants or liquor to clinical site.
  - Never report to clinical under the influence of liquor or intoxicants.
  - Never consume liquor or intoxicants while at clinical site.
  - Fighting, indecency, profanity and stealing is prohibited.
  - Refusal to obey instructions of instructor is not acceptable.
  - Failure to use reasonable care, consideration and courtesy in dealing with patients, visitors, and other personnel is unacceptable.
  - Behave in a professional manner at all times.
- V. Phones
- Cell phones are not allowed in clinic and are not to be used in the clinical setting at anytime.
  - No personal phone call during clinic hours.
- VI. Pregnant students must have written permission from their prenatal care provider in order to participate in the clinical experience of the Pharmacy Technology curriculum.

I understand that failure to abide by these guidelines may result in termination from the program.

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Student Signature

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Date