

**NEW PROGRAM REQUEST FORM**  
For  
Community Colleges/Technical Colleges/Technical Schools

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Barton County Community College  
**Institution Submitting Proposal**

Pharmacy Technician  
**Title of Proposed Program**

Workforce Training & Community Education  
**Academic Unit**

Certificate  
**Degree/Certificate Program**

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<b>CIP Code</b>	<b>51.0805</b>
<b>Proposed Date of Initiation</b>	<b>Spring 2008</b>
<b>Specialty Accrediting Agency</b>	<b>ASHP (American Society of Health Systems Pharmacists)</b>
<b>Location(s) Program Offered</b>	<b>On-Line</b>
<b>Name and Title of Contact Person</b>	<b>Elaine Simmons--Dean of Workforce Training and Community Education</b>

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**Date of KBOR Approval** \_\_\_\_\_

**Signature of KBOR Official** \_\_\_\_\_

**Date:** \_\_\_\_\_

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# Barton County Community College

## Pharmacy Technician Certificate Program

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### Program Description and Information

#### Program Objectives

At the completion of this program, graduates will be able to:

- Package and label drugs for prescription dispensing
- Prepare and deliver unit dose drugs to the nursing services of hospitals or nursing homes
- Prepare parenteral admixtures under aseptic and sterile conditions
- Receive and inventory drug shipments
- Maintain records, including patient profiles
- Compound solutions, ointments, lotions, suppositories, and other medications
- Comprehend and utilize medical and drug terminology common to the pharmaceutical environment
- Recognize and apply the knowledge of ethical as well as legal implications of their actions as it relates to themselves, the pharmacist and the pharmacy

#### Institutional Mission

*The mission of Barton County Community College is to deliver educational opportunities that improve the lives of students, meet the workforce needs of the region and strengthen its communities.*

The pharmacy technician certificate is a new opportunity for students to further their education in a medical field proving top-notch competence across Kansas. The pharmacy technician profession has become indispensable to the healthcare field. A nationwide shortage of pharmacists and a growing consumer demand for prescription medications have allowed pharmacy technicians the opportunity to play a continually more important role in today's pharmacy industry. With the increase need for pharmacy technicians Barton will meet the workforce needs of employers across Kansas and across the nation.

#### Catalog Description

Pharmacy technicians assist and support licensed pharmacists in providing health care products and medication to patients. Pharmacy technicians often perform a central role in the preparation and delivery of drug products and act as a liaison for the pharmacist, doctor and the patient. Technicians receive requests for new and refill prescriptions and must verify the authenticity and accuracy of the prescription order. Pharmacy technicians prepare the actual prescriptions, sometimes including the actual compounding of medication. Additionally, technicians prepare and label medication containers. Pharmacy technicians must be registered by the Kansas State Board of Pharmacy. Certification is not required in the state of Kansas.

This certificate program will prepare students with the training, education and skills necessary to pass the licensing exam available from the Pharmacy Technician Certification Board (PTCB) and begin an entry-level job in the pharmacy technician profession.

#### Graduation Requirements

Students will receive a certificate after the identified 27 credit hours are completed.

*(See Appendix A for certificate template.)*

## Program Admission

Students entering the program must be high school graduates or possess a GED certificate.

## Pharmacy Technician Curriculum Course Descriptions

### ***Orientation to Pharmacy Tech (new course)***

This course highlights the practice and role delineation of the pharmacists and pharmacy technicians. Also included are educational requirements, issues related to credentialing, and an overview of pharmacy law, pharmacy ethics, pharmacy math, pharmaceutical operations, and pharmacology.

### ***MDAS 1672-Medical Terminology***

Medical Terminology includes medical terms commonly encountered in the day-to-day activities of medically oriented students. Each lesson consists of prefixes, root words and/or suffixes, exercises, pronunciation of terms, practical applications, and review sheets.

### ***Pharmacology (new course)***

This course provides practical knowledge of pharmacology including pharmaceutical nomenclature and classification, mechanisms of drug actions, interactions, indications and contra-indications, side effects, and methods of administering therapeutic agents primarily in the nervous, endocrine, skeletal, muscular, cardiovascular, respiratory and gastrointestinal systems. Course also includes methods of administration of therapeutic agents with an emphasis on the renal, reproductive, vascular, sensory, dermatological, immunological and hematological systems. Benefits and disadvantages of over-the-counter or non-prescriptive medication will also be addressed.

### ***Pharmacy Calculations (new course)***

This course teaches students the basic terminology, abbreviations, and units needed to perform pharmaceutical calculations. Apothecary, avoirdupois, and metric systems are an essential component of this course. Review of calculations dealing with ratio and proportion, percentages, ratio strength, reducing and enlarging formulas, and dilution and concentration problems are presented.

### ***Pharmacy Operations (new course)***

This course simulates daily activities in the pharmaceutical practice settings. Topics include: order entry processes, medication distribution systems, inventory, prescription processing, billing, repackaging, floor stock and controlled substance distribution, pharmaceutical computer systems, utilization of drug information resources, and proper communication techniques.

### ***Certification Review (new course)***

This course is designed to assist the Pharmacy Technician student in preparing him/her for the Pharmacy Technician certification examination. Course content will include standardized test-taking tips, Pharmacy Technician Certification FAQ's and a review emphasizing major course content areas.

### ***Pharmacy Technician Internship (new course)***

This internship is the application of the basic pharmacy technician concepts in a community pharmacy setting with rotation options such as community, hospital or medical center, home health care facility, and drug information center. Prerequisite: Successful completion of "Certification Review" and receipt of Kansas Registration is required prior to practicum experience.

### ***BUSI 1807-Customer Service***

This course will focus on the needs and requirements of internal and external customers, the enhancement of customer relationships, the significance of market research with respect to customers, the design and redesign of

customer service strategies, and differentiate between internal and external customers in a service and manufacturing organization.

### ***ENGL 1200-Business English***

This course stresses correct word usage, grammatical structure, punctuation and mechanics, and gives the students practice in writing various types of business communications. The course is recommended for business students who need more experience in Business English prior to their work experience.

### **Semester-by-semester Outline**

The intent is to deliver the certificate program entirely online, except for the internship experience. Once the classes are developed for online delivery, they will be offered at all times through the College's online platform-BartOnline.

### **Competency Profile**

The following competency profile will be used for the Pharmacy Technician Certificate. These competencies are adopted from the American Society of Health Systems Pharmacists (ASHP).

### ***Major Areas of Job Responsibility***

1. Assist the pharmacist in collecting, organizing, and evaluating information for direct patient care, medication use review, and departmental management.
2. Receive and screen prescription/medication orders for completeness and authenticity.
3. Prepare medications for distribution.
4. Verify the measurements, preparation, and/or packaging of medications produced by other technicians.
5. Distribute medications.
6. Assist the pharmacist in the administration of immunizations.
7. Assist the pharmacist in the identification of patients who desire/require counseling to optimize the use of medications, equipment, and devices.
8. Initiate, verify, assist in the adjudication of, and collect payment and/or initiate billing for pharmacy services and goods.
9. Purchase pharmaceuticals, devices, and supplies according to an established purchasing program.
10. Control the inventory of medications, equipment, and devices according to an established plan.
11. Assist the pharmacist in monitoring the practice site and/or service area for compliance with federal, state, and local laws; regulations; and professional standards.
12. Maintain pharmacy equipment and facilities.
13. Assist the pharmacist in preparing, storing, and distributing investigational medication products.
14. Assist the pharmacist in the monitoring of medication therapy.
15. Participate in the pharmacy department's process for preventing medication misadventures.

### ***Foundation Knowledge and Skills***

1. Take personal responsibility for assisting the pharmacist in improving direct patient care.
2. Demonstrate ethical conduct in all job-related activities.
3. Maintain an image appropriate for the profession of pharmacy.
4. Resolve conflicts through negotiation.
5. Understand the principles for managing change.
6. Appreciate the need to adapt direct patient care to meet the needs of diversity.
7. Appreciate the benefits of active involvement in local, state, and national technician and other pharmacy organizations.
8. Appreciate the value of obtaining technician certification.
9. Understand the importance of and resources for staying current with changes in pharmacy practice.
10. Communicate clearly when speaking or writing.

11. Maximize work efficiency through the use of technology.
12. Efficiently solve problems commonly encountered in one's own work.
13. Display a caring attitude toward patients in all aspects of job responsibilities.
14. Maintain confidentiality of patient and proprietary business information.
15. Understand direct patient care delivery systems in multiple practice settings.
16. Efficiently manage one's work whether performed alone or as part of a team.
17. Function effectively as a member of the health care team.
18. Balance obligations to one's self, relationships, and work in a way that minimizes stress.
19. Understand the use and side effects of prescription and nonprescription medications used to treat common disease states.
20. Assist the pharmacist in assuring the quality of all pharmaceutical services.

### Curriculum Integration Plan

Since the entire certificate program will be online, high school students may enroll in any of the classes as either junior or seniors with approval from their principal. Gifted underclassmen with IEPs may also take advantage of this training with approval from their principal.

### Accreditation

Though not yet eligible for accreditation, this program adheres to ASHP Regulations on Accreditation of Pharmacy Technician Training Programs. An application for ASHP accreditation will be submitted at the appropriate time. Special emphasis is placed on preparing the student to take the national Pharmacy Technician Certification Board (PTCB) certification examination.

## **Faculty Requirements**

Barton employs competent faculty members qualified to accomplish the mission and goals of the institution. When determining acceptable qualifications of its faculty, the institution gives primary consideration to the highest earned degree in the discipline in accordance with the guidelines listed below. Barton also considers competence, effectiveness, and capacity, including appropriate, undergraduate and graduate degrees, related work experiences in the field, professional licensure and certifications. For all cases, the institution is responsible for justifying and documenting qualifications of its entire faculty.

Current plans are to employ faculty that are either currently employed as pharmacists or have a background in pharmacy.

### Credential Guidelines

**Faculty teaching in professional, occupational or technical areas that are components of associate degree programs not usually resulting in college transfer (unless the accrediting body of specific program required a higher level degree):**

*Baccalaureate degree and, appropriate certifications in the occupational field of teaching*

## **Demand for the Program**

The U.S. Department of Labor estimates that the number of pharmacy technician jobs will grow by 27 percent by 2014. "Employment of pharmacy technicians is expected to grow much faster than the average for all occupations through 2014 because as the population grows and ages, demand for pharmaceuticals will increase dramatically. The increased numbers of middle-aged and elderly people - who use more prescription drugs than

younger people - will spur demand for technicians in all practice settings. With advances in science, more medications are becoming available to treat a greater number of conditions.” (Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook, 2006-07 Edition) In the state of Kansas, a 2003 law requires that all pharmacy technicians be registered. Some employers require that you receive national certification, but the Kansas Board of Pharmacy does not require this certification.

The following data was provided by CCbenefits. CCbenefits provides data, tools, and reports that help community and technical colleges prove their value and plan for their future. CCbenefits was established in collaboration with the Association of Community College Trustees (ACCT). As seen by the projections between 2007-2017, openings for pharmacy technicians in the state of Kansas will increase 23.4%.

Executive Summary

**Selected Occupations**

Pharmacy technicians (SOC 29-2052)

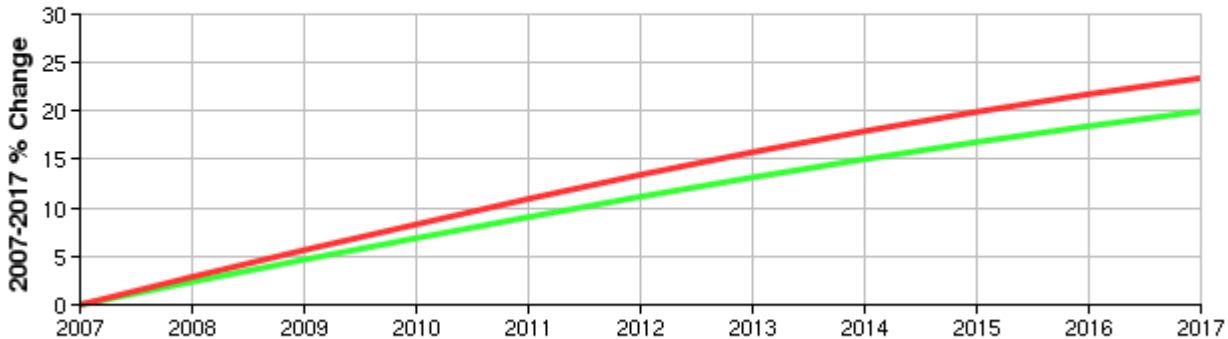
**Basic Information**

2007 Occupational Jobs	2,330
2017 Occupational Jobs	2,875
Total Change	545
Total % Change	23.4%
2006 Median Hourly Earnings/Worker	\$10.94

Occupational Change Summary

**Occupational Change Summary**

■ Regional Growth Rate    ■ National Growth Rate



Source: CCbenefits, 2007

Region	2007 Jobs	2017 Jobs	Change	% Change	Hourly EPW
Regional Total	2,330	2,875	545	23%	\$10.94
National Total	300,694	360,770	60,075	20%	\$11.73

Source: Economic Modeling Specialists, Inc. - 5/07

## Duplication of Existing Programs

According to the Kansas Board of Regents Program Inventory Website (as of 5-21-07), North Central Kansas Technical College (NCKTC) is the only two-year college that offers a pharmacy tech program/certificate. The program at NCKTC is part-time with classes mostly in the evening with some day classes.

Allen County Community College has an online pharmacy technician certificate. According to their college website, there are only eight hours of pharmacy related courses:

Intermediate Pharmacology-3 hours
Pharmacy Calculations-2 hours
Pharmacology Technician-Principles/Practice-3 hours

The other courses required for this certificate are general education courses or general medical courses:

College Algebra
English Comp I
English Comp II
Human Anatomy/Physiology
Basic Nutrition
Medical Terminology

Barton's proposed certificate provides a more in-depth curriculum study with a total of thirteen (13) hours of pharmacy related coursework, a two (2) hour medical terminology course and a six (6) hour internship (see appendix A for complete certificate template). Courses in customer service and Business English have been added to the certificate program as a result of a survey sent to service area pharmacies (see section on advisory board). Survey participants reported these skills are very important for employees in their facilities.

Barton's certificate program will be delivered online, except for the internship portion. This will make this program unique within Kansas.

## Cost and Funding of the Proposed Program

Because the classes will be taught online, there is no need for additional full-time staff, facilities, equipment or instructional materials. All instructors will be associate faculty. Advising will be handled by the Executive Director of Healthcare & Public Safety Education or current medical program faculty.

The only anticipated expenses will be associate faculty pay, marketing expense and expenses related to training faculty to create online courses.

## Program Review and Assessment

### Program Assessment

Due to changes in Perkins funding, assessment plans will be undergoing major changes over the next year. An assessment plan will be developed for this program.

## Program Review

Barton County Community College administers program reviews every year. The Pharmacy Technician program will develop a mission and vision statement in addition to goals for the program. Each year, the program goals will be reviewed and adjusted as appropriate and/or needed. With changes forthcoming in the new Perkins legislation, program reviews will include more in-depth participation of the advisory board reviewing these program reviews.

## Evaluation

Students will evaluate the courses and instructors on a semester basis. Classroom visitations will be conducted by current medical program faculty members and the Executive Director of Healthcare & Public Safety Education. Annual performance reviews will be conducted by the Executive Director of Healthcare & Public Safety Education.

## **New Program Curriculum Committee/Program Advisory Committee**

A survey of interest was sent to 35 service area pharmacies during fall 2006. We received three responses to this survey – all of which indicated support for the proposed certificate. Since that mailing, two additional individuals have pledged their interest in helping to develop this program. One of these individuals is very interested in helping to develop the curriculum and create the online delivery.

### Short-term goals

- June-invite all senior pharmacists from service area pharmacies for an advisory meeting
- Summer-fall 2007 develop curriculum

### Long-term goals

- Create all pharmacy technician courses for online delivery



APPENDIX A  
(Degree Template)



**27-hour Certificate  
 Pharmacy Technician Certificate**

<b>Major Requirements</b>				
<input type="checkbox"/>	PHTC		Orientation to Pharmacy Tech	3
<input type="checkbox"/>	MDAS	1672	Medical Terminology	2
<input type="checkbox"/>	PHTC		Pharmacology	3
<input type="checkbox"/>	PHTC		Pharmacy Calculations	3
<input type="checkbox"/>	PHTC		Pharmacy Operations	3
<input type="checkbox"/>	PHTC		Certification Review	1
<input type="checkbox"/>	PHTC		Pharmacology Technician Internship	6
<input type="checkbox"/>	BUSI	1807	Customer Service	3
<input type="checkbox"/>	ENGL	1200	Business English	3
<b>TOTAL</b>				<b>27</b>

**IMPLEMENTATION YEAR 2007**

Fiscal Summary for Proposed Academic Programs

Institution: **Barton County Community College**

Proposed Program: **Pharmacy Technician**

<b>Part I. Anticipated Enrollment</b>	Implementation Year	
	Full-Time	Part-Time
A. Headcount:		15
B. Total SCH taken by all students in program	18 hours per year	
<b>Part II. Program Cost Projection</b>		
A. In <u>implementation</u> year one, list all identifiable General Use costs to the academic unit(s) and how they will be funded..		
	Implementation Year	
<u>Base Budget</u>		
Salaries	Six courses – Six associate faculty pay at approximately \$1,400 per instructor == \$8,400	
Other Expenses	Marketing – approximately \$3,000	
	Online Training (to teach faculty in creating online coursework – honorariums, mileage, etc) – approximately \$3,000	
Total	\$14,800	

Indicate source and amount of funds:

All funded by Barton – offset the expenses with tuition and fees