

Academic Program Review
Pharmacy Technician Program
Allied Health Department
Central Oregon Community College
2017



CENTRAL OREGON
community college

Academic Program Review (APR) KEY QUESTIONS

The APR Key Questions serve as the outline for the report. The [APR Data Sets](#) align College data with the APR Key Questions. If a question has an associated data table or support information, it is designated with the following bar chart icon and will be provided in the designated N: drive space:

[2016-17 Discipline Work Space](#) 

1. Discipline Overview

Discipline: Pharmacy Technician

Contact: Shannon Waller

Participants:

- Shannon Waller, MEd, CPhT, Director of Pharmacy Technician Program
- Stephanie O'Bryan, CPhT, PT Instructor of Pharmacy Technician Program
- Julie Downing, PhD, FACSM, Interim Instructional Dean of Health Sciences
- Deborah Davies, Allied Health Department Chair

Programs included in this discipline:

- Program: Pharmacy Technician
- Department: Allied Health

Date Program Review Submitted: December 14, 2016

Accrediting Body: American Society of Health-Care Pharmacists (ASHP) /Pharmacy Technician Accrediting Commission (PTAC)

2. Discipline Mission/Purpose and Goals

- **Pharmacy Technician Program Vision:**
 - The program will prepare students to take the national certification exam to become a Certified Pharmacy Technician as required by the Oregon Board of Pharmacy and to be employed in a pharmacy setting.
- **Purpose:**
 - a. This three-term program was developed to prepare individuals for employment in the pharmacy industry. Pharmacy technicians are skilled workers who are educated and trained to work in a pharmacy and assist in all areas of the pharmacy not requiring the professional judgment of the registered pharmacist. Some current practice areas for the pharmacy technician include retail, hospital, chemotherapy, nuclear medicine, compounding, home health, manufacturing, disease state management, and mail order and insurance claim specialists. The pharmacy technician processes prescriptions and medication orders and plays an integral role in maintaining the pharmacy department.

- **Goals:**
 - a. **1-3 Year Goals:**
 - Increase equipment purchases for program laboratories
 - Narcotic storage
 - Adjustable sit to stand tables
 - Increased compounding equipment and labs
 - Active phone/fax line
 - Refrigerator
 - Increased amount of shelves for bottles
 - Over the Counter (OTC) medicine shelving
 - Increase program enrollment
 - Faculty and students will attend job fairs, health fairs, and other on-campus outreach to help recruit students
 - Faculty and students will volunteer at community job fairs and health clinics
 - Faculty will get in contact with Future Center Directors at local high schools
 - Increase number of clinical rotation sites
 - Focus on compounding, home health, and chemotherapy sites (as they may be available)
 - Cooperative simulation labs with COCC nursing students
 - Contact the COCC Nurse Administrator to establish goals and lab procedures for learning labs

Narrative: Some of the 1-3 year goals have been completed. The program now has narcotic storage, increased compounding equipment, active phone/fax line, refrigerator, OTC shelving, non-narcotic shelving, and tables that adjust to standing height to simulate a more realistic pharmacy environment. Clinical sites with compounding and chemotherapy have been contacted and are in talks on how to get students more involved in these sites (Home Care IV, St Charles Chemo Pharmacy)

Five-Year Goals:

- Instead of one entrance into the program a year, allowing entrance into the program every term (Fall, Winter, Spring) to accommodate more students
 - Offer all courses each term during the year
- Increase enrollment for distance students
 - Faculty will conduct outreach to other regional colleges
 - Blue Mountain- Pendleton
 - Clackamas- Oregon City
 - Columbia Gorge- The Dalles
 - Lane- Eugene
 - Mt Hood- Gresham
 - Rogue Valley - Medford
- Obtain pharmacy automation systems and unit dose machine
 - Purchase or have a Pyxis (automated medication dispensing system) donated to program
 - Purchase or have a unit dose machine donated to the program
- Maintain or exceed a 75% pass rate for the PTCE (Pharmacy Technician Certification Exam)
 - PHM (Pharmacy Technician) cohort has added an additional credit course for exam prep
 - Encourage students to take the exam prior to or soon after graduation

- Maintain or exceed 75% program completion rate
 - Evaluate the students prior to registration to determine if this program is appropriate for their career expectations
 - Evaluate students' mid-year to discuss their progress and expectations
 - Make all co-requisite courses pre-requisites
- Develop and implement value added programs in IV and compounding certifications. Since the scope of practice for pharmacy technicians is growing, having students certified in additional areas of expertise will add value to each student when looking for employment in the field. More and more employers are looking for more well-rounded certified technicians.
 - Each faculty member will attend courses to obtain instructor certification

Ten-Year Goals:

- Maintain an 80% pass rate on PTCE
- Maintain an 80% completion rate
- Fully functional simulation lab with multiple computer and phone stations
- Automated pharmacy systems including a Pyxis and pharmacy robot

3. Student Learning Outcomes (SLO) Assessment

COCC is in the process of articulating an instructional assessment plan. Given the College is in transition, answer the following questions to the best of your ability:

- a. **Course Level SLO:** The College has an expectation that course outcomes are assessable and assessed on a routine basis.
 - i. Review the **Course SLO Report** for courses in your discipline, considering both 1) the percentage of courses that have SLOs and 2) the quality and usefulness of the established SLOs. Describe the status of your course SLOs in these two areas.
 1. Nine active courses, 100% have SLOs
 2. The quality of the current SLO's in some courses are not up to par. During winter term, four courses will be going through curriculum with significant SLO changes.
 - ii. Describe the methodology for course SLO assessment in your discipline and if applicable, identify any goals or objectives you have for improvement.
 1. Using the COCC course outcome guide (COG), periodic review of the SLOs are conducted. During the 2015-16 academic year three course outcomes were reviewed and updated. PHM 190 and 191 (practicum courses), and 181 (seminar course) went through curriculum to change current SLO's and add credit to each course. The changes to the practicum courses were to add hours from 180 to 240. The change was recommended by our accrediting body (ASHP) and advisory board saying students needed more practicum hours to fulfill all the duties required as a pharmacy technician. The seminar course added one credit hour to have additional time to prepare students for their national certification exam. Over the years, students have expressed that they wanted more test preparation prior to taking their exam which takes place around graduation time. In the 2016-17 academic year, four courses (PHM 100, 120, 130, 140) will have increased credit hours and all courses will have new updated SLO's.

Academic Program Review (APR)

Academic Program Review: 2016-17

Last Updated 12/14/16

- b. **Program Level SLO:** *The College has an expectation that each academic program - any institutionally established combination of courses and/or requirements leading to a degree or certificate - have assessable and assessed outcomes. Disciplines are not expected to have SLOs.*
- i. *Review the [Instructional Assessment Reports](#) that lists COCC programs by discipline and department. Consider both 1) the percentage of programs that have individualized SLOs and 2) the quality and usefulness of the established SLOs. Describe the status of your program SLOs in these two areas.*
 1. The pharmacy technician program has established SLO's. Since the recent modifications to the program SLO's, the quality and usefulness to students has improved greatly for better understanding of desired outcomes of being in the program.
 - ii. *Describe the methodology for program SLO assessment in your discipline and if applicable, identify any goals or objectives you have for improvement.*
 1. Last year there was a huge push for programs to revisit their program SLO's and find where there could be improvement. Faculty and the advisory board had a meeting dedicated to formulating and constructing new SLO's that reflected the mission and purpose of COCC's Pharmacy Technician Program. These new SLO's were adopted in the 2015/16 academic year
 - iii. *Identify and give examples of changes made to improve student's attainment of program-level outcomes, or if applicable, identify any goals or objectives you have for improvement, as a result of assessment efforts.*
 1. With newly adopted SLOs the students' have a better understanding of the specific goals to successfully complete the pharmacy technician program
 - a. **New SLO's:**
 - i. Communication:
 1. Communicate professionally verbally and non-verbally with patients and healthcare professionals in order to promote safe patient care.
 - ii. Manage Inventory and Orders:
 1. Manage physical drug inventory, process medication orders and maintain documentation.
 - iii. Medication Preparation:
 1. Calculate, measure and prepare medication for patient administration.
 - iv. Computer Skills:

Operate pharmacy software to perform the roles and responsibilities of a Pharmacy Technician.
 - v. Regulations:
 1. Comply with Oregon Administrative Rules (OARs), various standards of Joint Commission, and apply principles of USP 797 and USP 800.
 - vi. Insurance:
 1. Process insurance claims and explain benefit structures.

4. Curricular Issues

a. Recent Curricular changes: Identify and explain any recent significant curricular changes.

i. 2016-2017 curriculum changes:

1. PHM 181 (Pharmacy Tech Seminar) changed from 1 to 2 credits to include National Exam prep. During past cohorts, students have expressed the need to have more time to prep for the national certification. Taking the need into consideration, the decision to add one additional credit to this course will make it possible to have face to face time to help students prepare for the exam.
2. PHM 190 (Institutional Practicum) changed from 3 to 4 credits
 - a. Students are now required to spend 120 hours in a hospital setting, which is an increase of 30 hours from the previous 90 hours of Institutional Practicum
3. PHM 191 (Community Practicum) changed from 3 to 4 credits
 - a. Students are now required to spend 120 hours in a retail which is an increase of 30 hours from the previous 90 hours of Community Practicum
4. New temporary course: AH 199 (Simulation Lab)
 - a. added 2 credit course to cover face-to-face hours with students (44 hours) to meet accreditation standards (ASHP/PTAC). Before the accreditation visit, students were meeting approximately 66 hours and for accreditation students must meet for face to face simulation for a total of 80 hours.

ii. 2017-2018 proposed curriculum changes

1. New course (Fall Simulation Lab)
 - a. 2 credit courses to cover 40 hours of face-to-face simulation per accreditation standard (ASHP/PTAC)
2. New Course (Winter Simulation Lab)
 - a. 2 credit course to cover 40 hours of face-to-face simulation per accreditation standard (ASHP/PTAC)
3. PHM 100, 120, 130, 140 (Pharmacy Practice I and II, Pharmacology I and II)
 - a. all courses would be moved to 5 credits
 - b. National exam has shown lower competency in areas of pharmacology and pharmacy practice, the additional credits would increase student retention and comprehension of the material prior to taking national exam

b. Partnerships

i. *Do you collaborate with area high schools to offer dual credit courses and, if yes, how do you maintain a strong relationship with K-12 partners in support of quality instruction?*

1. No, however we will make time to visit local area high schools to talk with counselors and students about the opportunity for students to be a part of the pharmacy technician program. Having more high schools aware of the program will build stronger relationships.

Academic Program Review (APR)

Academic Program Review: 2016-17

Last Updated 12/14/16

- ii. *Do you have a program or courses that articulate with OSU-Cascades or another higher education partner?*
 - 1. In 2009, COCC was given a 3 year grant to design and partner with community colleges around the state to provide a distance program in pharmacy technology. The articulated colleges with COCC were Blue Mountain Community College, Treasure Valley Community College, Rogue Community College, Tillamook Bay Community College. Some of these partnerships continue today with BMCC and TVCC. However, since there is no longer a grant in place, reaching students at distance locations has become difficult.
- iii. *Collaboration with local and distant pharmacies*
 - a. Local: Walgreens, Cascade Custom Pharmacy, Pill Box, Option Care, Home Care IV, St Charles Health Systems (SCHS)
 - b. Distant: St. Anthony's hospital and Walgreens in Pendleton
 - c. What successes have resulted?
 - i. Long lasting relationships where sites continue to take our students for practicums
 - ii. Employable students - students can obtain their required practicum hours which allows them to finish our program, become licensed, and then find living wage jobs
 - 1. More than half of our students obtain a job as a pharmacy technician prior to or shortly after graduation from the site where they completed their practicum (data since 2010, from what was reported to Program Director)
 - a. Cascade Custom Pharmacy – 2 students
 - b. Drug Mart – 1 student
 - c. Rite Aid – 3 students
 - d. Pill Box – 4 Students
 - e. Redmond Compounding Pharmacy – 3 students
 - f. Pacific Source – 1 student
 - g. Safeway – 4 students
 - h. Walgreens – 3 students
 - i. SCMC – 8 students
 - j. Home Town Dugs – 2 students
 - k. Clinic Pharmacy – 1 student
 - iii. Community members on our Pharmacy Technician advisory board
 - d. *What challenges have resulted?*
 - i. Loss of practicum sites due to personality issues with students
 - ii. Loss of sites due to sites closure
 - iii. Lack of knowledge about our program in the community
 - e. *How do you maintain a strong partnership?*
 - i. Making routine visits- at least 3 visits per year
 - ii. Having prepared students
 - iii. Being honest and attentive
 - iv. Open communication about expectations of what sites expect from students coming into practicum, as well as instructor expectations of practicum sites

c. **Online/Hybrid**

- i. *If you offer online courses, describe the process used to determine which faculty participate in COCC's Hybrid and Online Teaching (HOT) Course, which courses are offered online, and the frequency with which courses are offered online.*
 1. All COCC faculty who teach in a fully online environment are required to participate in COCC's HOT course.
 2. Shannon Waller and Stephanie O'Bryan have both completed HOT course. Online courses are offered Fall (PHM 100, PHM 101, PHM 120), Winter (PHM 110, PHM 130, PHM 140), and Spring terms (PHM 181).
- ii. *Evaluate data on discipline specific student success in online courses. Compare to discipline specific student success in traditional courses and COCC student success in online courses and traditional courses. Are student success rates similar regardless of the format, or are students more successful in one format than another? If so, what can you do to improve student success? See Appendix B*
 1. According to the data, 86% of students are successful in the online courses compared to other online courses taught at COCC at a 69% success rate
 2. We could improve student success by adding more learning activities (games, quizzes, critical thinking) that will improve comprehension of the learning modules. In the pharmacy field it is critical to be able to recall information on a daily basis. Using more activities that increase memorization of medications, their uses, and indications will be beneficial to students. Implementation of quizzing games and real world scenarios will also help in comprehension and memorization.
- iii. *Evaluate data on discipline specific student success in hybrid courses. Compare to discipline specific student success in traditional courses and COCC student success in online courses and traditional courses. Are student success rates similar regardless of the format, or are they more successful in one format than another? If so, what can you do to improve student success?*
 1. No data for hybrid courses in this specific discipline
- iv. *Do you have evidence of student need or demand to increase online courses or program offerings?*
 1. No evidence of the need or demand to increase online courses.
 - a. All courses except two are online. In 2017-2018, there will be three classes (two simulation courses and one pharmacy seminar) that will be face to face, all others courses will remain online.

d. **North Campuses Offerings**

- i. *How do you determine which courses are offered on which campus?*
 1. Because the pharmacy lab is only on the Bend campus, all simulation courses are offered at the Bend campus only
 - a. Adding pharmacy labs at other campuses would cost over \$50,000 each due to the need for compounding equipment, IV hoods, computers, shelving with mock medicine, cash register, refrigerator, etc.
- ii. *Do facilities meet your needs in those locations?*
 1. N/A
- iii. *Evaluate data on discipline specific student success in courses offered in Redmond, Madras and Prineville (RMP). Compare to discipline specific student success in all courses in RMP and discipline specific and all courses at Bend Campus. Are student success rates similar regardless of the location, or are they more successful in one location than another? If so, what can you do to improve student success? See Appendix C*

1. Data is only available for off campus (online). In this data students are more successful in PHM courses that are offered online compared to all COCC students who take courses online.
 2. Improving student success is going to be a continuing effort to bring more interactive engagement and learning opportunities in the online environment.
- e. *Do you offer 50% or more of a program in any location outside of Bend? If yes, evaluate the support of faculty (especially part-time), student services support, facilities, library and technology resources.*
- i. Since the program is approximately 75% online, some of our students come from all over the state. These students are able to use their own systems at local colleges to fulfill the support and resources necessary for student success.
 1. Distant students can communicate with faculty via e-mail, phone, and instant messenger. Students connect with one another via discussion boards and blog entries.
- f. *Do you incorporate educational initiatives such as learning communities, service learning, developmental education redesign, or grants? If so, explain the purpose of any initiative and how you have measured your success accomplishing these goals.*
- i. Since having the grant opportunity, we continue to pursue relationships with other community colleges around the state to provide a distance learning option to those students who would like to pursue becoming a certified pharmacy technician. Since this is a distance education program, students are able to complete assignments and exams at their home school while only having to come to COCC for simulation labs. Students are placed in required practicums in their home town whenever possible.

5. Disciplines with CTE Programs

- a. *Program Entrance and Progression*
- i. *Review the Catalog "Program Preparation and Prerequisites" entry for each program in your discipline. Is the information accurate?*
 1. Yes
 - ii. *Related to the above question, reflect on prerequisites/program entrance and sequencing within each academic program. Explain how the current process of sequencing courses in each program supports students' success, or identify changes that might improve student success.*
 1. We are working to better support student success by making all co-requisite courses pre-requisites (AH 111, AH 112, BI 231, BI 232, BI 233, SP 218)
 - a. After reviewing completion rates of the pharmacy program, it has been made apparent that many students who enter with prerequisites are going through the cohort without completing all the requisite courses. The decision has been made to make all requisite courses changed to pre-requisites prior to entry into program due to the low completion rate. Students are not earning certificate of completion due to not having all requisites completed at the end of the cohort. With this change, students who enter the pharmacy program will leave with a certificate of completion.
- b. *COCC expects all CTE Disciplines to have active advisory boards that provide a vital link from local industry to CTE academic programs. Evaluate the status of the discipline's advisory board in the following areas:*
- i. *Interaction and feedback about the curriculum and instructional content and/or outcomes.*

Academic Program Review (APR)

Academic Program Review: 2016-17

Last Updated 12/14/16


1. COCC Pharmacy Tech advisory board is very influential on forging ahead with feedback in regards to curriculum. In 2015, the advisory board completely restructured the program outcomes that met the needs of this community
- ii. *Advisory board membership*
 1. Currently we have 12 active members on the board. We hope to grow that number to include more diverse pharmacies in the community including compounding and chemotherapy technicians and pharmacists. Currently no max number of advisory board members, but would not want to exceed 20 members.
 - a. Our advisory board consists of seven Pharmacists and five Pharmacy Technicians. Some work at retail chain pharmacies and some own/work at independent pharmacies.
- iii. *Advisory board activity: meeting frequency, attendance, engagement.*
 1. The board meets twice a year (Fall and Spring term). Average attendance is around 6-8 members and the engagement is very high for those that come to meetings.
 - a. Some examples that are discussed at advisory board meetings include: changes in the program including curriculum changes and prerequisites, changes in processes of pharmacies (there may be new policies or procedures that students need to know prior to entering practicum), how feedback should be distributed to faculty when students are attending practicum, update program outcomes, and how the program could improve as a whole
- c. *Review the demographic data on students declared for programs in your discipline. Summarize the demographic make-up of your students and describe whether this aligns with your target population (Explain). See Appendix D*
 - i. Female vs male per academic year:
 - 2013/14 – 69% female, 31% male
 - 2014/15 – 73% female, 27% male
 - 2015/16 – 83% female, 17% male
 - 2016/17 – 100% female
 1. Summary: The field as a whole is female dominant. Target population should be more males in the field and in the discipline. Some ways to recruit more men is to attend student career fairs given by the High Desert Education Service District (HDESD) and the Science, Technology, Engineering, and Mathematics (STEM) Hub. This not only markets the program to all students but there is an opportunity to speak with more men as well.
- d. *Refer to completion data for the programs in your discipline. Do your individual programs and/or discipline have a benchmark or goal completion rate? Can you identify barriers to completion or common reasons that students may leave your program?*
 - i. For ASHP/PTAC accreditation, the completion rate goal is 85%
 - ii. Barriers why students leave the COCC Pharm Tech program
 1. Personal issues (health, family)
 2. Find a job in the field prior to program completion
 3. Students finish PHM required courses but do not complete co-requisite courses that would allow them to obtain diploma

4. Per Oregon Board of Pharmacy, going through an accredited program to get licensed is not mandatory
 5. Until 2020, Pharm Tech students do not have to go through an accredited program to sit for the national exam.
- e. *If your discipline includes board exams or a licensure option, and you have access to the results, attach a summary to the appendix. Evaluate this data and share your observations about strengths and areas for improvement.*
- i. **See Appendix A**
 1. 86% (6/7) of the students in the 2015-16 cohort passed the exam (one student taking the exam was a prior COCC pharmacy tech cohort [2015-2016] student who failed the exam).
 2. Overall the COCC Pharmacy Tech Program is successful in preparing students to take the national exam. Pass rates were higher than the national average, which was 57% in 2015.
 3. Of the eight exam content domains, the one of most concern is pharmacology. This is an area that needs to be evaluated on how to better prepare students in this area. A proposal to change pharmacology courses (PHM 120, 130) will go from 3 credits to 5 credits.
 - a. Some examples on the change of curriculum:
 - i. Going more in depth of specific drug indications and how they act in the body.
 - ii. Adding more pharmacy math which would include drip rates, pediatric and neonatal dosing, geriatric dosing
 - iii. Critical thinking activities regarding contraindications of medications
 4. For accreditation purposes and with the goals for the program having an 80% pass rate on the national exam and 80% in each domain would suggest that the courses offered need to be more rigorous.
- f. *Does your discipline collect any information on job placement rates for program completers? If yes, how do you collect this information and what are your findings?*
- i. Yes
 1. In prior years, students who were able to procure a job notified the program director
 2. Currently, students are emailed a survey, which addresses satisfaction of the program and employment once graduated from the program and sent out each summer.
 3. Findings: approximately 75% of the students are attaining employment in the pharmacy technician field, generally in state, at the pharmacies that we use for practicums.


6. Enrollment and Completion

Please address the student and community demand for your discipline and the programs in your discipline. In doing so, please consider the following questions:

- a. *What is the community demand for your discipline/programs? What is the impact of your discipline/programs on the community?*
 - i. The profession in general is growing through 2024 at 9% according to the Bureau of Labor and Statistics

- ii. The demand in Central Oregon is high due to retirement and people moving into the area. According to Merck, Medscape, Health in Aging, and other journals, people above the age of 60 typically require more medication than younger adults
 - iii. The program has a positive impact that we are the only program east of the Cascades offering training for pharmacy technicians. More than half of the students who have graduated the program have gained employment as pharmacy technicians in Central Oregon. Sometimes, students are offered jobs while in the middle of their practicum. All of our local pharmacies require the employment of pharmacy technicians, which consists of approximately thirty pharmacies in Central Oregon.
 - iv. We provide knowledgeable and certified pharmacy technicians into our community. The demand for well-educated technicians is on the rise. COCC's pharmacy technician program receives multiple offers a month asking for our graduates to work for local pharmacies. More pharmacies have opened in the last few years that employ our students.
- b. *Evaluate the Full-Time Equivalent (FTE) and headcount for students taking courses in your discipline. Is your discipline at your desired enrollment level, given community demand and impacts above?* 
- i. NO
 - 1. The community demand (potential employers) for Pharmacy Technicians is currently greater than the number of Pharm Tech graduates the program can produce. Our last cohort produced two graduates. In the past two months, local pharmacies have reached out to the Program Director in search of graduates to work in their pharmacies. Walgreens, ShopKo, Rite Aid, and Safeway have all asked to hire multiple graduates.
- c. *Describe opportunities that exist or are in development for graduates of this program to continue their education (articulation agreements, etc.)*
- 1. Adding an Associate of Applied Science in Allied Health Degree has been discussed as an idea for a few years. This would give many of the programs (Medical Assisting, Dental Assisting, Pharmacy Technician, Massage Therapy, and Nursing Assistant) the opportunity for students to receive a two-year degree in addition to their current program certificate. Currently, the PHM specific courses provided for the pharmacy technician program do not meet the requirements to transfer to either a four-year college or for students to obtain their Doctorate in Pharmacy (PharmD). Since there are only two universities in the State of Oregon that have a PharmD program, it may be wise to reach out to these programs to see if there is a way to articulate some courses as prerequisites to enter a PharmD program.

7. Faculty – Composition, Qualifications and Development

- a. *Refer to the list of faculty teaching courses in your discipline. Describe the current quantity and qualifications of your discipline faculty:* 

Shannon's qualifications:

- Graduated Pharmacy Tech school from Apollo College in Tucson, AZ
- Nationally Certified Pharmacy Technician (CPhT)
- Worked in the pharmacy field for over 14 years
- Graduated with a B.A. in Education and MEd in Instructional Design both from Western Governor's University

Academic Program Review (APR)

Academic Program Review: 2016-17

Last Updated 12/14/16

Stephanie's qualifications:

- Graduated from COCC Pharmacy Technician Program in 2013
- Nationally Certified Pharmacy Technician (CPhT)
- Has worked in the pharmacy field for over 3 years
- Graduated with an Associate of General Science (AGS) from COCC
- Currently pursuing bachelor's degree in Health Information Management from Western Governor's University

First	Last	FTADJPT	Load	RACE
Shannon	Waller	FT	23.28	White
Stephanie	O'Bryan	PT	12.9	White

- b. *COCC's 2010-15 Diversity Plan has an outcome that states, "The staff and faculty ethnic demographics reflect the diversity of our students." For 2015-16, the ethnic demographics of COCC credit students were 17% Students of Color, 70% White and 13% Unknown. Discuss the diversity goal given your current faculty composition, any challenges of achieving an equal ethnic diversity, and identify any strategies that could support achievement of this goal. In addition, discuss any way in which discipline faculty trying to become more culturally competent and informed about the needs of other groups.*
- Diversity goal for this program would be to have equal ethnic diversity on staff. At this time, the faculty is 100% white and does not reflect the diversity of our students.
 - Challenges to achieve this goal is due to the diversity of Central Oregon and the majority of the pharmacy technicians in this area are white.
 - Strategies: Look for ways to hire diverse staff which could include advertising for a multilingual instructor for simulation labs and exam prep courses. Reaching out to Latino and Native American clubs where qualified individuals may have connections.
 - Faculty needs to be more culturally competent not only in education but in the career itself. Having faculty involved in more cultural training on campus and conferences outside of the campus. Faculty to attend the COCC Culturally Respectful Hiring Practices workshop within the next year.
- c. *Anticipate faculty turnover or changes in the next five years, and describe how you will use future faculty position requests to advance your discipline's goals and long-term plans.*
- We currently have young faculty that are not planning on retiring anytime soon. However, if a replacement were necessary, we would ensure that the position was replaced with another qualified faculty member.
 - We are hoping to convert our part-time position into an Adjunct (benefitted) Faculty position. Having benefits like health insurance would increase the likelihood of retaining the faculty member long term, which would add stability to the program.

- d. *What professional development activities contribute to the strength of the discipline?*
- i. Pharm Tech faculty participate in a conference titled *Pharmacy Technician Educators Council (PTEC)* once per year. Presentations on new teaching strategies, program accreditation, current and future trends in the industry, and national exam reports are given. It has been a very informative conference providing the faculty with usable techniques they can immediately apply to their instruction as well as management of the program.
 - ii. Being a part of state and national organizations, such as PTEC (Pharmacy Technician Educators Council), OSHP (Oregon Society of HealthCare Pharmacists), and ASHP (American Society of HealthCare Pharmacists) also help strengthen the program. There are many opportunities to go to more conferences that are geared toward the industry. Finding the resources to attend these can be challenging for part-time faculty members.
- e. *Refer to the ratio of full-time/part-time faculty. How does the ratio of full-time tenure track to part-time faculty in your discipline compare to the institutional ratio, and how does this ratio support student success?*
- i. Compared to our discipline to COCC as a whole, the pharmacy program is not supporting student success as well as it could. To be consistent with the norms of the college there should be at least one adjunct faculty member added to the program.

Discipline Faculty by Status	#	% of Total	Load	% of Total Load
FT	1	50%	23.28	64%
PT	1	50%	12.9	36%
Total	2		36.18	

ALL COCC Faculty by Status	#	% of Total	Load	% of Total Load
FT	131	31%	5322.56	52%
ADJ	57	13%	2171.478	21%
PT	235	56%	2816.775	27%
Total	423		10310.81	

- f. *What procedures are used to acquaint new faculty members with the program and its policies?*
- i. While there are no current written procedures on how to acquaint new faculty members with the pharmacy technician program, new faculty meet with the program director to go over policies, how the program works, expectations, etc. There are new COCC employee onboarding processes required by Human Resources as well. New faculty are required to attend either the full-time or part-time faculty orientations.
- g. *How well are part-time faculty in your discipline supported? Do they have needs that, if met, could result in greater student success and employee satisfaction?*
- i. Support is fair
 - ii. Having additional funding for part time faculty to go to industry specific conferences and training would be beneficial for both student success and employee satisfaction

8. Facilities, Instructional and Student Support, and Resources

- a. *In what ways do the physical facilities (classroom space, lab space, and equipment) encourage or limit the educational process? In what ways do they meet or fail to meet the program’s needs?*
- i. The classroom/lab space barely meets the needs of the educational process.
 - ii. Meet:

1. IV/ante (preparatory) room
 2. Compounding space with sinks to make new medications from scratch
 3. Laptop computers
 4. Adjustable height tables that can be arranged in the lab to be more like a pharmacy
- iii. Fail:
1. The space looks more like a classroom instead of a real pharmacy
 2. Do not have pharmacy automation that is a necessity working in the field, such as a medication robot that dispenses medication, unit dose machine that packages medication individually for patients, pyxis where technicians and nurses can access for faster patient care
 3. Needs more compounding equipment, which enables students to learn how to prepare personalized medication for patients
- b. *Are the following instructional support services sufficient to support the goals of your discipline: library/information resources, technology, e-learning? Explain.*
- i. Yes
 1. Pharmacy industry does not utilize a significant amount of library/information resources
 2. Pharmacy technician program uses a variety of technology and e-learning services provided by the program and through support services such as ITS and Blackboard course management software support services.
- c. *Are student support services (admissions, advising, career services, financial aid, placement, student life, personal counseling, placement, recruiting, services for students with disabilities, testing, tutoring) sufficient to support the needs of students in this discipline? Explain.*
- i. Yes
 1. Overall the student support services provided are sufficient. However, recruiting has become an issue for the pharmacy technician program as a whole. There needs to be additional funds available to market and recruit students. Support and direction needs to be provided to faculty on how to reach out or communicate with potential students. Many students who come for advising typically say they had no idea this program existed which is a significant problem.

9. Overall

- a. *Review the most current [Academic Master Plan](#). Are there priorities or goals identified in this plan, that are not already addressed in this review, which relate to your discipline?*
- i. No
- b. *If you have other sources of data, evidence, or feedback that is helpful to you in evaluating discipline, program, or student needs (e.g. from advisory groups, graduates, etc.), explain your sources and summarize what needs they have identified.*
- i. Advisory board
 1. Students need more hands on automation experience
 2. Students need more practicum hours (which has been increased in the 2016/17 academic year)
 3. Cultural competency for students and faculty

- c. *What are the areas in which increased resources would allow the discipline to better meet its goals/objectives?*
 - i. Automation
 - ii. Compounding
 - iii. Chemotherapy

10. Conclusions: Goals and Needed Support

Given the previous narrative, identify the goals, plans, and improvements that your discipline is committing to for the next five years, and identify your biggest areas of need.

- a. *GOALS: Identify discipline goals for the period of the APR (suggested: four to six goals listed by priority). What is the discipline planning to do to improve teaching and learning, student success and degree or certificate completion? In answering, think about how the discipline's strengths and opportunities be used to address its areas of concern and mitigate challenges.*
 - i. Change required courses to prerequisites
 - ii. Pharmacy automation
 - iii. full time faculty
 - iv. Compounding equipment
 - v. Bar coding system to ensure students are pulling the correct medication for the "patient"
- b. *NEEDED SUPPORT: What support do you need from administration, financial or other, in order to carry out your planned improvements? For recommendations asking for financial resources, please present them in priority order.*
 - i. Marketing and recruiting needs to be the number one priority for the program. Additional funding would need to be required to do outreach to attract students to the program.
 - ii. Pharmacy automation equipment
 - 1. Pyxis (\$30,000-\$50,000)
 - 2. Compounding equipment and supplies (up to \$1000)
 - 3. Robot to fill prescriptions (\$50,000-\$100,000)
 - iii. Convert Part-time Faculty member into an Adjunct faculty member (\$23,871 for payroll assessment which includes benefits, no new salary)

APPENDICES – Attach any documentation, data or references that would be helpful for understanding the status of your discipline.

Appendix A

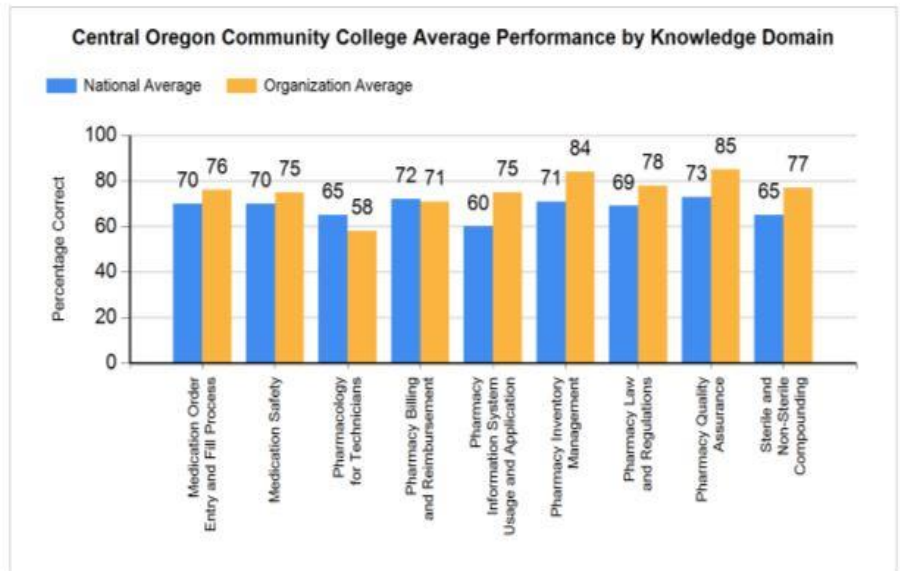


Pharmacy Technician Certification Exam Sponsor Summary Report

Central Oregon Community College

For exams administered between 5/1/2016 and 10/6/2016

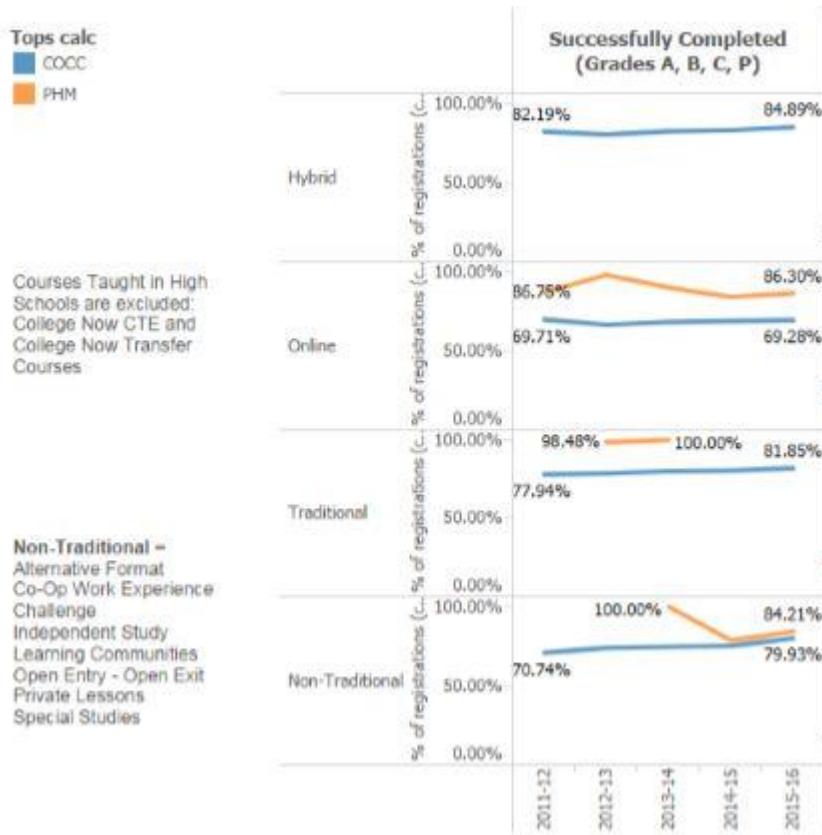
Number of Exams Passed:	6
Number of Exams Administered:	8
Percentage Passed:	75%
National Average Pass Rate:	58%



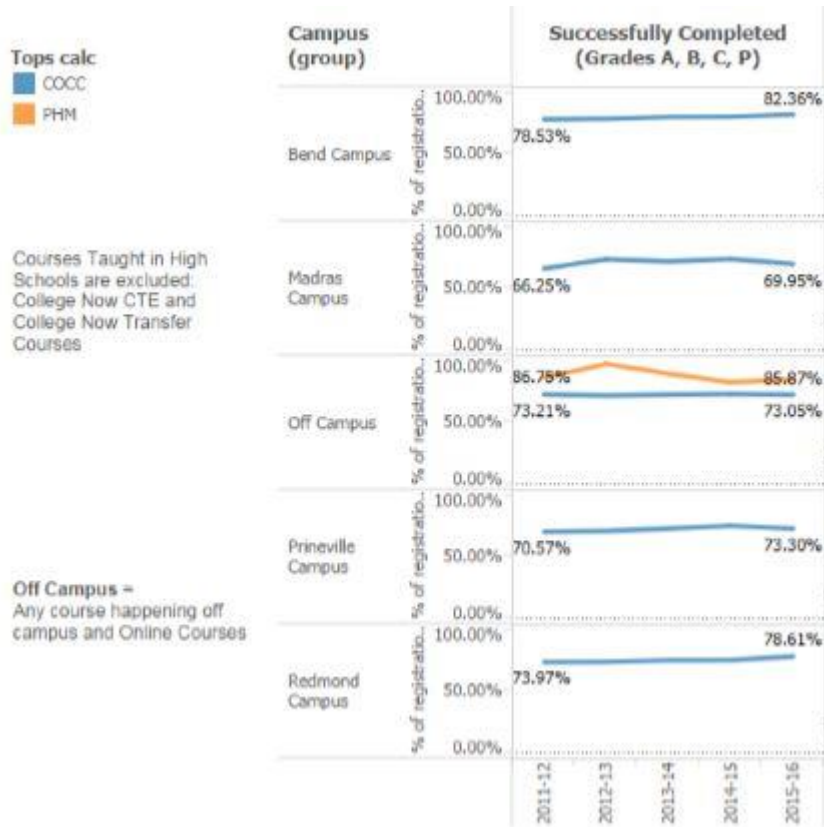
PTCE performance shown in percentage of questions answered correctly by knowledge domain:

	Medication Order Entry and Fill Process	Medication Safety	Pharmacology for Technicians	Pharmacy Billing and Reimbursement	Pharmacy Information System Usage and Application	Pharmacy Inventory Management	Pharmacy Law and Regulations	Pharmacy Quality Assurance	Sterile and Non-Sterile Compounding
Central Oregon Community College	76%	75%	58%	71%	75%	84%	78%	85%	77%
National	70%	70%	65%	72%	60%	71%	69%	73%	65%

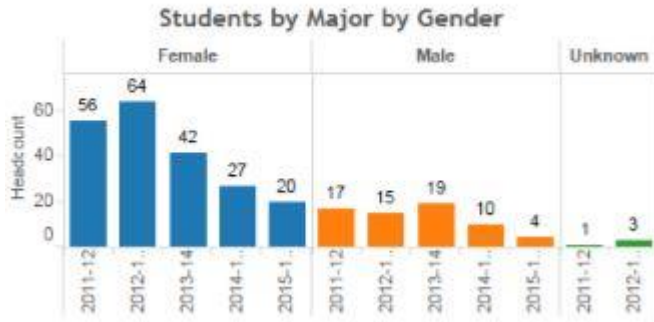
Appendix B



Appendix C



Appendix D



Addendum

Several changes were made in curriculum, such as course additions and eliminations, and increase in class credits, due to various factors. The accreditation standards for pharmacy technicians were set to change in 2020 by ASHP, the accrediting organization for pharmacy technicians, but was cancelled in January of 2017, which affected the direction of the COCC programming for pharmacy technicians. In addition, competition with employer-based programs at Walgreens and Walmart, for example, required COCC to make changes in the curriculum.

Current Curriculum:

	<u>Course</u>	<u>Credits</u>
AH 111	Medical Term I	3
AH 112	Medical Term II	3
BI 121, 122	Anatomy & Function I and II	8
or BI 231, 232, 233	Anatomy & Phys I, II	8
CIS 120	Computer Concepts	0-4
SP 218	Interpersonal Communication	3
WR 121	English Composition	4
MTH 95	Intermediate Algebra	4
PHM 100	Pharmacy Tech Practice I	4
PHM 101	Law and Ethics for Pharmacy Tech	3
PHM 110	Pharmacy Calculations	3
PHM 120	Drug Class and Therapeutics I	3
PHM 130	Drug Class and Therapeutics II	3
PHM 140	Pharmacy Tech Practice I	4
PHM 181	Pharmacy Tech Seminar	2
PHM 190	Practicum I/Hospital	4
PHM 191	Practicum II/Community	4
	Total	52-56

Approved Curriculum 2017-18 Catalog year:

WR 121	English Composition	4
MTH 95	Intermediate Algebra	4
AH 115	Cultural Responsiveness in Allied Health	3
PHM 100	Pharmacy Tech Practice I	5
PHM 101	Law and Ethics for Pharmacy Tech	3
PHM 110	Pharmacy Calculations	3
PHM 115	Retail Simulation Lab	2
PHM 120	Pharmacology I	5
PHM 130	Pharmacology II	5
PHM 140	Pharmacy Tech Practice I	5
PHM 145	Institutional Simulation Lab	2
PHM 181	Pharmacy Tech Seminar	2
PHM 190	Practicum I/Hospital	4
PHM 191	Practicum II/Community	4
	Total	51