### **Basic Course Information**

Semester:	Spring 2019	Instructor:	Mary Cavazos
Course Title & #:	Pharmacy Technician Operations PHT140	Email:	mary.cavazos@imperial.edu
CRN #:	11209	Webpage	www.imperial.edu
Classroom:	2150	Office #:	2155
Class Dates:	Feb. 12, 2019 to Jun. 6, 2019	Office Hours:	Tuesday & Thursday 5:00 pm to 6:00 pm
Class Days:	Tuesday & Thursday	Office Phone #:	(760) 355-6348
Class Times:	1800-2140 (6:00pm to 9:40pm)	Emergency Contact:	Nursing Office Secretary
Units:	4.50	Phone #	(760) 355-6348

Last Date to Add: Feb. 23, 2019
Deadline to Drop With "W": May. 11, 2019

### (IT IS NOT THE INSTRUCTOR"S RESPONSIBILITY TO ADD OR DROP STUDENTS)

### **Course Description**

This course is designed to prepare the student for the technical and operational aspects of drug distribution in the ambulatory, inpatient, extended care, and ambulatory care settings. The course includes a review of Federal regulations, State regulations, codes of ethics, and standards pertaining to the practice of pharmacy. Practice site regulations, policies and procedures regarding prescriptions and medication orders will be explored. Various techniques, equipment and supplies for drug administration will be discussed and demonstrated. Mandatory maintenance and screening of equipment and packaging requirements will be reviewed. Application of aseptic techniques and use of the laminar flow hood in the preparation of sterile products is demonstrated. Pharmaceutical industry procedures for obtaining pharmaceuticals including purchasing policies, procedures and practices will be discussed and the role of the pharmacy technician in the administration and management of pharmacy practice will be explored. (CSU)

## Course Prerequisite(s) and/or Co-requisite(s)

#### **Recommended course of study for PHT 140:**

AHP	100	Medical Terminology	3
PHT	108	Introduction to Pharmacy Technology	2
PHT	120	Pharmacy Technician Body Systems I	3
PHT	125	Pharmacy Technician Body Systems II	3
PHT	130	Calculation & Pharmacology for Pharmacy Technicians	3
PHT	140	Pharmacy Technician Operations	4.5

#### PROGRAM OF STUDY: PHARMACY TECHNICIAN MAJOR - A.S. Total units required for the major (18.5 units)

### **Student Learning Outcomes**

- · Outcome 1: Demonstrate safe medication distribution and identify patients that need to be counseled by a licensed pharmacist. (ILO1, ILO2, ILO3, ILO5)
- · Outcome 2: Demonstrate medication-compounding techniques. (ILO2, ILO3, ILO4, ILO5)
- · Outcome 3: Demonstrate calculation and reasoning skills used in the preparation and compounding of medications. (ILO2, ILO3, ILO4, ILO5)
- · Outcome 4: Demonstrate the inventory taking techniques and processes used in the pharmacy. (ILO2, ILO3, ILO4, ILO5)
- · Outcome 5: Demonstrate ability to research and utilize reference materials for fact finding and reporting. (ILO1, ILO2, ILO4, ILO5)

### **Course Objectives**

The Associate of Science Degree program for pharmacy technicians prepares a student for the national certification exam and for entry-level work as a pharmacy technician. A pharmacy technician assists the licensed pharmacist prepare prescription medications, provides customer services, and performs administrative duties. Pharmacy technicians generally are responsible for receiving prescription requests, preparing the prescription, preparing sterile solutions, counting medications, and administrative duties such as answering the phone, stocking shelves, or operating a cash register. Career roles may be in a retail or mail order pharmacy; a hospital or nursing home; and an assisted-living facility or penal system.

### Textbooks & Other Resources or Links

### Required:

Pharmacy Practice for Technicians 6th Ed. Ballington, Dan A.; Anderson, Robert J. 2017 Paradigm Publications: St. Paul. ISBN: 978-0-76386-795-9

Pharmacy Labs for Technicians 3rd Ed. Sparks, Jason; McCartney, Lisa. 2017 Paradigm Publishing: St.

Paul. ISBN: 978-0-76386-790-4

Access to Course Navigator for both course components is Mandatory Users may log on to: <a href="http://coursenav.paradigmcollege.net/login/index.php">http://coursenav.paradigmcollege.net/login/index.php</a>

Your instructor will provide you a course key for both

IVC FA18 PHT 140: Theory IVC FA18 PHT 140: Lab

#### Recommended:

Davis Drug Guide Access to Kahoot.com Online Resource (for 5th Edition): http://irc.emcp.com/index.php?titleID=2858&title=Pharmacy%20Practice%20for%20Technicians%205e

### **Course Requirements and Instructional Methods**

This course consists of a combination of lecture and lab. Assignments assigned in a specified class meeting will be counted towards that course component (i.e., assignments posted to theory will count towards that portion of the class). Assignments may be completed through Paradigm website, Canvas learning platform, in-class check off, or physical document. (Labs must be completed during lab hours, unless otherwise specified by instructor)

**Out of Class Assignments:** The Department of Education policy states that one (1) credit hour is the amount of student work that reasonably approximates not less than one hour of class time and two (2) hours of out-of-class time per week over the span of a semester. WASC has adopted a similar requirement.

**Study Time:** Approximately six to eight hours per week of study or homework time outside of class is recommended for theory and lab for successful completion of the course.

### Course Grading Based on Course Objectives

A grade of "C" or better is considered passing. The following grading schedule will be used in this course.

90% - Above = A

80% - 89% = B

70% - 79% = C

60% - 69% = D

59% - Below = F

Assignments given weekly are due the following class meeting unless specified by the instructor. Assignments will be turned in at the beginning of class to receive full credit. All late assignments turned (submitted 15 minutes after class has started). **WILL NOT BE ACCEPTED**. You will be graded on the following areas in this class: Homework, Quizzes, Tests, Labs, Classroom Participation, and Extra Credit. The above scale refers to all assignments, as well as your total overall points for the class. There is no set amount of points for this class, as pop quizzes will be given. Labs will be completed during class and submitted prior to leaving that day, unless otherwise stated by instructor.

### **Study Time:**

Approximately six to eight hours per week of study or homework time outside of class is recommended for successful completion of course requirements.

All of the following must be attained to successfully pass this course:

A. Final Theory Exam score must be passed at a 70% or greater

B. Final Lab Exam score must be passed at a 70% or greater

#### **Attendance**

This class has 17 Instruction days. If you are absent more than 3 days, you need to drop the class. If you no longer plan to attend class, it is your responsibility, not the Instructor's, to drop you from the class. The class will start as indicated above; **any student who is tardy 15 minutes or more will be counted as absent, will not be allowed to take any scheduled or unannounced quizzes, test', or major exams.** Also, **students who are 15 minutes or more late to class will not be allowed to turn in Homework as assigned for that day**: Students are strongly encouraged to meet all class sessions as homework and assignments will be provided at the end of lecture.

- A student who fails to attend the first meeting of a class or does not complete the first mandatory activity of an online class will be dropped by the instructor as of the first official meeting of that class. Should readmission be desired, the student's status will be the same as that of any other student who desires to add a class. It is the student's responsibility to drop or officially withdraw from the class. See General Catalog for details.
- Regular attendance in all classes is expected from all students. A student whose continuous, unexcused absences exceed the number of hours the class is scheduled to meet per week may be dropped. For online courses, students who fail to complete required activities for two consecutive weeks may be considered to have excessive absences and may be dropped.
- Absences attributed to the representation of the college at officially approved events (conferences, contests, and field trips) will be counted as 'excused' absences.

### **Classroom Etiquette**

I expect each student in this class to respectfully participate. While I enjoy teaching and I hope you have fun in this class, please act professionally and keep other student's feelings in mind and refrain from rude, inappropriate behavior and language in class.

- Electronic Devices: Cell phones and electronic devices must be turned off and put away during class, unless otherwise directed by the instructor.
- Food and Drink are prohibited in all classrooms. Water bottles with lids/caps are the only exception. Additional restrictions will apply in labs. Please comply as directed by the instructor.
- Disruptive Students: Students who disrupt or interfere with a class may be sent out of the room and told to meet with the Campus Disciplinary Officer before returning to continue with coursework.

  Disciplinary procedures will be followed as outlined in the General Catalog.
- Children in the classroom: Due to college rules and state laws, only students enrolled in the class may attend; children are not allowed.

## **Online Netiquette**

- What is netiquette? Netiquette is internet manners, online etiquette, and digital etiquette all rolled into one word. Basically, netiquette is a set of rules for behaving properly online.
- Students are to comply with the following rules of netiquette: (1) identify yourself, (2) include a subject line, (3) avoid sarcasm, (4) respect others' opinions and privacy, (5) acknowledge and return messages promptly, (6) copy with caution, (7) do not spam or junk mail, (8) be concise, (9) use

appropriate language, (10) use appropriate emoticons (emotional icons) to help convey meaning, and (11) use appropriate intensifiers to help convey meaning [do not use ALL CAPS or multiple exclamation marks (!!!!)].

### **Academic Honesty**

Academic honesty in the advancement of knowledge requires that all students and instructors respect the integrity of one another's work and recognize the important of acknowledging and safeguarding intellectual property.

There are many different forms of academic dishonesty. The following kinds of honesty violations and their definitions are not meant to be exhaustive. Rather, they are intended to serve as examples of unacceptable academic conduct.

**Plagiarism** is taking and presenting as one's own the writings or ideas of others, without citing the source. You should understand the concept of plagiarism and keep it in mind when taking exams and preparing written materials. If you do not understand how to "cite a source" correctly, you must ask for help.

**Cheating** is defined as fraud, deceit, or dishonesty in an academic assignment, or using or attempting to use materials, or assisting others in using materials that are prohibited or inappropriate in the context of the academic assignment in question.

Anyone caught cheating or plagiarizing will receive a zero (0) on the exam or assignment, and the instructor may report the incident to the Campus Disciplinary Officer, who may place related documentation in a file. Repeated acts of cheating may result in an F in the course and/or disciplinary action. Please refer to the General Catalog for more information on academic dishonesty or other misconduct. Acts of cheating include, but are not limited to, the following: (a) plagiarism; (b) copying or attempting to copy from others during an examination or on an assignment; (c) communicating test information with another person during an examination; (d) allowing others to do an assignment or portion of an assignment; (e) using a commercial term paper service.

#### **Additional Student Services**

Imperial Valley College offers various services in support of student success. The following are some of the services available for students. Please speak to your instructor about additional services which may be available.

- CANVAS LMS. Canvas is Imperial Valley College's main Learning Management System. To log onto Canvas, use this link: Canvas Student Login. The Canvas Student Guides Site provides a variety of support available to students 24 hours per day. Additionally, a 24/7 Canvas Support Hotline is available for students to use: 877-893-9853.
- Learning Services. There are several learning labs on campus to assist students through the use of computers and tutors. Please consult your Campus Map for the Math Lab; Reading, Writing & Language Labs; and the Study Skills Center.

• **Library Services.** There is more to our library than just books. You have access to tutors in the Study Skills Center, study rooms for small groups, and online access to a wealth of resources.

### **Disabled Student Programs and Services (DSPS)**

Any student with a documented disability who may need educational accommodations should notify the instructor or the Disabled Student Programs and Services (DSP&S) office as soon as possible. The DSP&S office is located in Building 2100, telephone 760-355-6313. Please contact them if you feel you need to be evaluated for educational accommodations.

### **Student Counseling and Health Services**

Students have counseling and health services available, provided by the pre-paid Student Health Fee.

- Student Health Center. A Student Health Nurse is available on campus. In addition, Pioneers
  Memorial Healthcare District provide basic health services for students, such as first aid and care for
  minor illnesses. Contact the IVC Student Health Center at 760-355-6128 in Room 1536 for more
  information.
- **Mental Health Counseling Services**. Short-term individual, couples, family and group counseling services are available for currently enrolled students. Services are provided in a confidential, supportive, and culturally sensitive environment. Please contact the IVC Mental Health Counseling Services at 760-355-6310 or in the building 1536 for appointments or more information.

### Veteran's Center

The mission of the IVC Military and Veteran Success Center is to provide a holistic approach to serving military/veteran students on three key areas: 1) Academics, 2) Health and Wellness, and 3) Camaraderie; to serve as a central hub that connects military/veteran students, as well as their families, to campus and community resources. Their goal is to ensure a seamless transition from military to civilian life. The Center is located in Building 600 (Office 624), telephone 760-355-6141.

### **Extended Opportunity Program and Services (EOPS)**

The Extended Opportunity Program and Services (EOPS) offers services such as priority registration, personal/academic counseling, tutoring, book vouchers, and community referrals to qualifying low-income students. EOPS is composed of a group of professionals ready to assist you with the resolution of both academic and personal issues. Our staff is set up to understand the problems of our culturally diverse population and strives to meet student needs that are as diverse as our student population. Also under the umbrella of EOPS our CARE (Cooperative Agency Resources for Education) Program for single parents is specifically designed to provide support services and assist with the resolution of issues that are particular to this population. Students that are single parents receiving TANF/Cash Aid assistance may qualify for our CARE program, for additional information on CARE please contact Lourdes Mercado, 760-355-6448, <a href="mailto:lourdes.mercado@imperial.edu">lourdes.mercado@imperial.edu</a>.

EOPS provides additional support and services that may identify with one of the following experiences:

• Current and former foster youth students that were in the foster care system at any point in their lives

- Students experiencing homelessness
- Formerly incarcerated students

To apply for EOPS and for additional information on EOPS services, please contact Alexis Ayala, 760-355-5713, <a href="mailto:alexis.ayala@imperial.edu">alexis.ayala@imperial.edu</a>.

### **Student Equity Program**

The Student Equity Program strives to improve Imperial Valley College's success outcomes, particularly for students who have been historically underrepresented and underserved. The college identifies strategies to monitor and address equity issues, making efforts to mitigate any disproportionate impact on student success and achievement. Our institutional data provides insight surrounding student populations who historically, are not fully represented. Student Equity addresses disparities and/or disproportionate impact in student success across disaggregated student equity groups including gender, ethnicity, disability status, financial need, Veterans, foster youth, homelessness, and formerly incarcerated students. The Student Equity Program provides direct supportive services to empower students experiencing insecurities related to food, housing, transportation, textbooks, and shower access. We recognize that students who struggle meeting their basic needs are also at an academic and economic disadvantage, creating barriers to academic success and wellness. We strive to remove barriers that affect IVC students' access to education, degree and certificate completion, successful completion of developmental math and English courses, and the ability to transfer to a university. Contact: 760.355.5736 or 760.355.5733 Building 100.

• The Student Equity Program also houses IVC's Homeless Liaison, who provides direct services, campus, and community referrals to students experiencing homelessness as defined by the McKinney-Vento Act. Contact: 760.355.5736 Building 100.

## **Student Rights and Responsibilities**

Students have the right to experience a positive learning environment and to due process of law. For more information regarding student rights and responsibilities, please refer to the IVC General Catalog.

### **Information Literacy**

Imperial Valley College is dedicated to helping students skillfully discover, evaluate, and use information from all sources. The IVC Library Department provides numerous Information Literacy Tutorials to assist students in this endeavor.

# **Anticipated Class Schedule/Calendar**

Anticipated Class Schedule/Calendar *SUBJECT TO CHANGE Class/Group/Homework as assigned		
Week	Activity, Assignment, and/or Topic	
Week 1	Tuesday: Syllabus & Introduction	
	Chapter 1 Lecture: The Profession of Pharmacy	

	Thursday: Lab 1 & Lab 2	
Week 2	Tuesday: Chapter 1 Theory Quiz - Chapter 2 Lecture Pharmacy Law, Regulations, &	
Week 2	Standards	
	<b>Thursday: Lab 1 &amp; 2 Quiz-</b> Lab 3, Lab 4, & Lab 5	
Week 3	Tuesday: Chapter 2 Theory Quiz - Chapter 3 Lecture: Drug & Supplement Development	
	Thursday: Lab 3,4, & 5 Quiz - Lab 6, Lab 7, & Lab 8	
Week 4		
	<b>Thursday: Lab 6, 7, &amp; 8 Quiz -</b> Lab 9	
Week 5	Tuesday: Chapter 4 Theory Quiz- Chapter 5 Lecture: Routes of Drug Administration &	
	Dosage Formulations	
	Thursday: Lab 9 Quiz - Lab 10 & Lab 11	
Week 6	Tuesday: Chapter 5 Theory Quiz- Chapter 6 Lecture: Pharmacy Measurements &	
	Calculations	
	<b>Thursday: Lab 10 &amp; 11 Quiz -</b> Lab 12 & Lab 13	
Week 7	Tuesday: Unit 2 Theory Exam - Chapter 7 Lecture: Community Pharmacy Dispensing	
	Thursday: Lab12 & 13 Quiz - Lab 14 & Lab 15	
Week 8		
MAZ1 O	Thursday: Mid- Term LABS 1-13	
Week 9	<b>Tuesday: Chapter 7 Theory Quiz -</b> Chapter 8 Lecture: Healthcare & Prescription Drug Insurance	
	Thursday: Lab 14 & 15 Quiz- Lab 16, Lab 17, & Lab 18	
Week 10	Tuesday: Chapter 8 Theory Quiz- Chapter 9 Lecture: The Business of Community	
WCCK 10	Pharmacy	
	<b>Thursday: Lab 16, 17, &amp; 18 Quiz -</b> Lab 19, Lab 20 & Lab 21	
No Class	Spring Break	
Week 11	Tuesday: Chapter 9 Theory Quiz- Chapter 10 Lecture: Extemporaneous, Nonsterile	
	Compounding	
	Thursday: Lab 19, 20, & 21 Quiz - Lab 22, Lab 23 & Lab 24	
Week 12	Tuesday: Unit 3 Exam - Chapter 11 Lecture: Hospital Pharmacy Dispensing	
	<b>Thursday: Lab 22, 23, 24 Quiz -</b> Lab 25, Lab 26, & Lab 27	
Week 13	Tuesday: Chapter 11 Theory Quiz- Chapter 12 & 13 Lecture: Infection Control, Aseptic	
	Technique, & Clean-room Facilities & Sterile & Hazardous Compounding	
	<b>Thursday: Lab 25, 26, &amp; 27 Quiz -</b> Lab 28, Lab 29, & Lab 30	
Week 14	<b>Tuesday: Unit 4 Exam-</b> Chapter 14 & 15 Lecture: Medication Safety & Professional	
	Performance, Communication, & Ethics	
	<b>Thursday: Lab 28, 29, &amp; 30 Quiz -</b> Lab 31, Lab 32, & Lab 33	
Week 15	Tuesday: Chapter 14 & 15 Theory Quiz Chapter 16 Lecture: Your Future in Pharmacy	
	<b>Thursday: Lab 31, 32, &amp; 33 Quiz-</b> Lab 34 & Lab 35	
Week 16	Tuesday Final Exam: Theory	
	Thursday Final Exam: Lab	

<sup>\*\*\*</sup>Tentative, subject to change without prior notice\*\*\*

### Pharmacy Practice for Technicians: LECTURE

### **Unit 1 | Principles of Pharmacy Practice**

Chapter 1: The Profession of Pharmacy

Chapter 2: Pharmacy Law, Regulations, & Standards

Chapter 3: Drug & Supplement Development

#### **UNIT 2 | Introduction to Pharmacy Skills**

Chapter 4: Introducing Pharmacology

Chapter 5: Routes of Drug Administration & Dosage

**Formulations** 

Chapter 6: Pharmacy Measurements & Calculations

#### **Unit 3 | Community Pharmacy Practice**

Chapter 7: Community Pharmacy Dispensing

Chapter 8: Healthcare & Prescription Drug Insurance

Chapter 9: The Business of Community Pharmacy

Chapter 10: Extemporaneous & Non-Sterile

Compounding

#### **Unit 4 | Institutional Pharmacy Practice**

Chapter 11: Hospital Pharmacy Dispensing

Chapter 12: Infection Control, Aseptic Technique, &

Cleanroom Facilities

Chapter 13: Sterile & Hazardous Compounding

#### **Unit 5 | Professionalism in the Pharmacy**

Chapter 14: Medication Safety

Chapter 15: Professional Performance,

Communication, & Ethics

Chapter 16: Your Future in Pharmacy

#### Pharmacy Labs For Technicians: LAB

### **Unit 1 | Essential Pharmacy Skills**

Lab 1: Using Reference Material in Pharmacy

Lab 2: Customer Service & Processing Payments

#### **Unit 2 | Community Pharmacy Practice**

Lab 3: Validating DEA Numbers

Lab 4: Inventory Management Procedures

Lab 5: Reviewing a Patient Profile

Lab 6: Reviewing a Prescription Form

Lab 7: Reviewing a Filled Prescription

Lab 8: Entering Patient Data

Lab 9: Processing a Prescription

Lab 10: Processing a Refill

Lab 11: Obtaining Refill Authorization

Lab 12: Processing Third-Party Claims

Lab 13: Verifying Cash Pricing

Lab 14: Producing an Audit Log

Lab 15: Medication Therapy Management

#### **Unit 3 | Institutional Pharmacy Practice**

Lab 16: Filling a 24-Hour Medication Cart

Lab 17: Filling & Checking Floor Stock

Lab 18: Filling & Recording Controlled

Substances

Lab 19: Preparing Oral Syringes

Lab 20: Charging & Refilling a Crash Cart

Lab 21: Filling an Automated Drug Storage

System

Lab 22: Medication Reconciliation

#### **Unit 4 | Nonsterile Extemporaneous Compounding**

Lab 23: Reconstituting Powders

Lab 24: Filling Capsules
Lab 25: Preparing Suspensions from Tablets
Lab 26: Preparing Suspensions from Capsules
Lab 27: Preparing Creams, Ointments, Gels, and
Pastes
Lab 28: Preparing Lozenges
Unit 5   Aseptic Technique
Lab 29: Garbing According to USP Chapter <797>
Lab 30: Aseptic Hand Washing
Lab 31: Hood Cleaning
Lab 32: Preparing Large-Volume Parenteral
Solutions
Lab 33: Preparing Small-Volume Parenteral
Solutions
Lab 34: Preparing Sterile Powder Drug Vials
Lab 35: Using Ampules