**Las Positas College**
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**Course Outline for PHT 50**

**PHARM TEC TRAINING I (INTRO)**

**Effective: Summer 2014**

I. CATALOG DESCRIPTION:
PHT 50 — PHARM TEC TRAINING I (INTRO) — 6.00 units

Entry level pharmacy technician training, drug classification and uses, pharmacy laws, rules, regulations and ethics, storage of drugs, record keeping of prescriptions and medications, pharmacy math and dosage calculation, medical terminology, abbreviation and symbols.

3.00 Units Lecture 3.00 Units Lab

**Prerequisite**
ENG 100A - Integrated Reading and Writing I
or

ESL 23 - College Grammar
and

MATH 110 - Elementary Algebra
with a minimum grade of C
or

ENG 100B - Reading, Reasoning, and Writing II
or

MATH 55 - Intermediate Algebra for STEM
or

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**Strongly Recommended**
BIO 50 - Anatomy and Physiology
and

HSCI 52 - BASIC MEDICAL TERMINIOLOGY
and

CIS 8 - Essential Computing Skills

**Grading Methods:**
Letter Grade

**Discipline:**

| | MIN |
|---|---|
| **Lecture Hours:** | 54.00 |
| **Lab Hours:** | 162.00 |
| **Total Hours:** | 216.00 |

II. NUMBER OF TIMES COURSE MAY BE TAKEN FOR CREDIT: 1

III. PREREQUISITE AND/OR ADVISORY SKILLS:
**Before entering the course a student should be able to:**

A. ENG100A
B. ESL23
C. MATH110
D. ENG100B
E. MATH55

**Before entering this course, it is strongly recommended that the student should be able to:**

A. BIO50
B. HSCI52
C. CIS8

IV. MEASURABLE OBJECTIVES:

**Upon completion of this course, the student should be able to:**

1. discuss the drug classification system;
2. explain common indication/usage of drugs;
3. interpret pharmacy laws, rules, and regulations;
4. Verify the validity of a prescriber's DEA number;
5. Recognize restricted medication orders;
6. compare and contrast common types of drug storage methods;
7. explain at least two different types of drug record keeping;
8. accurately apply pharmacy math to dosage calculations;
9. accurately solve dosage calculation;
10. integrate medical terminology into written and verbal communication with other medical professionals;
11. compose written and verbal communication using common medical abbreviations and symbols;
12. under the direct supervision of a Pharmacist, investigate the role of Pharmacy technicians in various types of pharmacies;
13. organize pertinent information collected from the patients;
14. analyze the patient needs in phone calls received from patients;
15. prescription orders for completeness, possible errors;
16. Describe techniques, equipment, and supplies for drug administration (for example, insulin syringes and IV tubing)
17. prepare medications according to directions from ordering agent;
18. perform inventory control procedures;
19. compare and contrast regulations for over-the-counter medications with other types of prescription and controlled drug regulations;
20. describe the differences and similarities in a variety of pharmacy practice settings;
21. demonstrate the role of cashier in the pharmacy Technician's scope of responsibilities;
22. explain the issues in third party billing;
23. perform customer service for patients and clients that is designed to exceed expectations;
24. demonstrate strategies designed to assist the pharmacist in providing pharmaceutical care;
25. comply with all federal, state and local laws, and regulations;
26. consistently demonstrate professional and ethical standards.
27. Perform billing and accounting functions for products and services (for example, self-pay, third-party adjudication, pharmaceutical discount cards, medication reimbursement)
28. Provide prescription/medication to patient/patient's representative:
29. Process a prescription order

V. CONTENT:

A. Introduction to pharmacy history and development:
   1. Development of the profession of pharmacy
   2. Evolution of pharmacy regulation
   3. Evolution of pharmacy and drug manufacture
   4. Past, present and future of pharmacy practices
   5. Accreditation of pharmacy technician
B. Law and ethics:
   1. Federal and state statutes
   2. Pharmacy rules and regulations
   3. Federal, state and local regulatory agencies
   4. Controlled substance act
   5. Federal and state controlled substance laws
   6. Federal food, drug and cosmetic act
   7. Investigational drugs
   8. Orphan drug act
   9. Drug recalls
   10. Federal hazardous substances act
   11. Occupational and safety act
   12. Omnibus budget reconciliation act
   13. Health insurance portability and accountability act
   14. Joint commission on accreditation of healthcare organizations
   15. Ethic and professional standards
C. Medical terminology and abbreviation:
   1. Recognize word elements of medical terms
   2. Interpret medical terminology and abbreviations
   3. Recognize apothecary symbols
   4. Identify drugs by brand and generic names
   5. Differentiate "look-alike," and "sound-alike" drugs
D. Pharmacy math and dosage calculations:
   1. Roman numerals
   2. Apothecary system
   3. Metric system
   4. Common household system
   5. Conversion between different measurement systems
   6. Set up proportions to perform dosage calculation
   7. Fractional dosage calculations
   8. Calculate dosage based on patient's weight and/or height
   9. Calculate recommended dose
   10. Decimal point
   11. Interpret drug strength from the prescriptions order
E. Pharmacy practice settings
   1. Hospital pharmacy
   2. Community pharmacy
   3. Home health care pharmacy
   4. Long term care pharmacy
   5. Mail order pharmacy
   6. Specialty pharmacy

7. Drug information center
8. Drug benefits company
9. Drug wholesaler
10. Insurance reimbursement procedures

F. Assist Pharmacists in Serving Patients
1. New patient information
2. Refill authorizations
3. Assess prescription orders for completeness
4. Patient history
5. Communicate with third party payers
6. Procedures for filling prescriptions

VI. METHODS OF INSTRUCTION:
A. **Lecture** -
B. **Demonstration** -
C. Build interest, maximize describing and retention; problem solving and critical thinking skills: a. Text reading b. Handouts c. Research d. Written assignments e. Group discussion f. Group project g. Individual presentation h. Group presentation
D. **Lab** -
E. **Discussion** -

VII. TYPICAL ASSIGNMENTS:

A. Research paper for a prescription drug of students' choices, on drug classification, mechanism of action, common side effects and drug indications, recommended dosage B. Review and interpret sample written prescriptions C. Oral Presentation on an over the counter drug of students' choices D. Group project on the care and use of either a glucometer or a sphygmomanometer E. Quiz on weekly reading assignments F. Demonstrate application from laboratory assignment

VIII. EVALUATION:
A. **Methods**

1. Exams/Tests
2. Research Projects
3. Papers
4. Group Projects
5. Class Participation

B. **Frequency**

1. Frequency:
a. Two midterms
b. Regular quizzes
c. One research paper
d. One individual presentation
e. One group project/presentation
f. Comprehensive final examination

IX. TYPICAL TEXTS:
1. Johnston *Pharmacy Technician, Foundations and Practices.*, Prentice Hall., 2005.
2. Morton *Pharmacy Technician.* 3rd ed., Perspective Press, 2007.
3. Woodrow *Essential of Pharmacology for health Occupatio w/CD.,* . 5th ed., -, 2007.
4. Hopkins *APhA's Complete Math Review for Pharmacy Technician.* 2nd ed., -, 2006.

X. OTHER MATERIALS REQUIRED OF STUDENTS: