### PHARM 156 Course Outline as of Spring 2002

### **CATALOG INFORMATION**

Dept and Nbr: PHARM 156 Title: DISPENSING & COMPOUNDING

Full Title: Dispensing and Compounding

Last Reviewed: 12/10/2018

Units		Course Hours per Week		Nbr of Weeks	<b>Course Hours Total</b>	
Maximum	3.00	Lecture Scheduled	3.00	17.5	Lecture Scheduled	52.50
Minimum	3.00	Lab Scheduled	0	17.5	Lab Scheduled	0
		Contact DHR	0		Contact DHR	0
		Contact Total	3.00		Contact Total	52.50
		Non-contact DHR	0		Non-contact DHR	0

Total Out of Class Hours: 105.00 Total Student Learning Hours: 157.50

Title 5 Category: AA Degree Applicable

Grading: Grade Only

Repeatability: 00 - Two Repeats if Grade was D, F, NC, or NP

Also Listed As:

Formerly:

### **Catalog Description:**

General preparation of topical, transdermal, rectal, opthalmic, and otic pharmaceutical dosage forms. Practical experience in the manipulative and record keeping functions associated with the compounding and dispensing of prescriptions. Study of dosage forms, advantages and disadvantages, uses, storage and packing of pharmaceutical products.

# **Prerequisites/Corequisites:**

Course Completion of PHARM 150

#### **Recommended Preparation:**

#### **Limits on Enrollment:**

#### **Schedule of Classes Information:**

Description: General preparation of topical, transdermal, rectal, opthalmic, and otic pharmaceutical dosage forms. Practical experience in the manipulative and record keeping functions associated with the compounding and dispensing of prescriptions. Study of dosage forms, advantages and disadvantages, uses, storage and packing of pharmaceutical products. (Grade Only)

Prerequisites/Corequisites: Course Completion of PHARM 150

Recommended:

Limits on Enrollment:

**Transfer Credit:** 

Repeatability: Two Repeats if Grade was D, F, NC, or NP

# **ARTICULATION, MAJOR, and CERTIFICATION INFORMATION:**

AS Degree: Area Effective: Inactive: CSU GE: Transfer Area Effective: Inactive:

**IGETC:** Transfer Area Effective: Inactive:

**CSU Transfer:** Effective: Inactive:

**UC Transfer:** Effective: Inactive:

CID:

### Certificate/Major Applicable:

Certificate Applicable Course

### **COURSE CONTENT**

#### **Outcomes and Objectives:**

Upon successful completion of this course the student will be able to:

- 1. Operate common pharmaceutical measuring, weighing and compounding devices.
- 2. Accurately use the metric, apothecary, avoirdupois and household systems to count and measure.
- 3. Identify and differentiate between various topical, transdermal, rectal, ophthalmic, and otic dosage forms.
- 4. Compare and contrast the advantages and disadvantages of various topical, transdermal, rectal, opthalmic, and otic dosage forms.
- 5. Recognize specific uses for various topical, transdermal, rectal, opthalmic, and otic dosage forms.
- 6. Determine the different storage requirements and safety considerations of various classifications of pharmaceuticals.
- 7. Select proper containers for packaging of pharmaceutical preparations.
- 8. Properly compound, label and document topical, transdermal, rectal, opthalmic, and otic dosage forms.
- 9. Classify commonly prescribed drugs by generic name, trade names, common therapeutic use and usual dose.

# **Topics and Scope:**

- I. Review of common pharmaceutical measuring systems and equipment
- II. Topical dosage forms
  - A. Factors affecting absorption
  - B. Definition and terminology
    - 1. Uses

- 2. Solutions
- 3. Lotions
- 4. Creams
- 5. Ointments
- 6. Pastes
- 7. Liniments
- 8. Tinctures
- 9. Collodions
- 10. Aerosols
- 11. Inhalants
- 12. Sprays
- 13. Powders
- 14. Lab: Extemporaneous compounding and packaging of solutions, lotions, creams, ointments, pastes, and powders
- 15. Transdermal drug delivery systems
  - a)Designs
  - b)Use
- III. Rectal dosage forms
  - A. Local vs. systemic use
  - B. Ointments & Creams
  - C. Lotions
  - D. Suppositories
  - E. Lab: Extemporaneous compounding and packaging of pharmaceuticals administered by suppository
- IV. Ophthalmic dosage forms
  - A. Sterile preparation
  - B. Solutions
  - C. Suspensions
  - D. Semi-solids
  - E. Solid inserts
  - F. Storage
- V. Otic dosage forms
- A. Preparation
- B. Uses
- VI. Practical dispensing
  - A. Patient profile
  - B. Product identification
  - C. Label
  - D. Auxiliary labels
- E. Packaging

### **Assignment:**

- 1. Simulate compounding & dispensing techniques.
- 2. Critique another's compounding & dispensing skills.
- 3. Answer critical thinking questions at the end of each chapter.

#### Methods of Evaluation/Basis of Grade:

**Writing:** Assessment tools that demonstrate writing skills and/or require students to select, organize and explain ideas in writing.

Written homework

Writing 30 - 40%

**Problem Solving:** Assessment tools, other than exams, that demonstrate competence in computational or non-computational problem solving skills.

None

Problem solving 0 - 0%

**Skill Demonstrations:** All skill-based and physical demonstrations used for assessment purposes including skill performance exams.

Lab Demonstrations

Skill Demonstrations 30 - 40%

**Exams:** All forms of formal testing, other than skill performance exams.

Multiple choice

Exams 30 - 40%

**Other:** Includes any assessment tools that do not logically fit into the above categories.

None

Other Category 0 - 0%

## **Representative Textbooks and Materials:**

California Pharmacists Association. Pharmacy Certified Technician (Training Manual, Calculations Workbook, and California Law Supplement), Lansing: Michigan Pharmacists Association, 1994.