

**PHARM 100 Course Outline as of Fall 2004****CATALOG INFORMATION**

Dept and Nbr: PHARM 100 Title: SKILLS FOR ADMIN OF MEDS

Full Title: Skills for Medication Administration

Last Reviewed: 4/8/2013

| Units   |      | Course Hours per Week |      | Nbr of Weeks | Course Hours Total |       |
|---------|------|-----------------------|------|--------------|--------------------|-------|
| Maximum | 2.00 | Lecture Scheduled     | 2.00 | 17.5         | Lecture Scheduled  | 35.00 |
| Minimum | 2.00 | Lab Scheduled         | 1.00 | 6            | Lab Scheduled      | 17.50 |
|         |      | 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: 70.00

Total Student Learning Hours: 122.50

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: PHARM 374

**Catalog Description:**

Instruction in advanced arithmetic skills designed for Health Science students. Prepares students for success in medication administration through advanced skills development of operations with fractions, decimals and percents. Teaches students to convert between metric, household, and apothecary systems, using proportion, equation, and formula methods. Introduces and develops advanced skills in calculating drug dosages in preparation for safe administration of medications in the health field.

**Prerequisites/Corequisites:**

Completion of CSKLS 371 or higher (V1) OR Qualifying Test Score in English

**Recommended Preparation:****Limits on Enrollment:****Schedule of Classes Information:**

Description: Instruction in calculating drug dosages utilizing metric, household and apothecary systems. Designed for Health Science students. (Grade Only)

Prerequisites/Corequisites: Completion of CSKLS 371 or higher (V1) OR Qualifying Test Score

in English  
Recommended:  
Limits on Enrollment:  
Transfer Credit:  
Repeatability: Two Repeats if Grade was D, F, NC, or NP

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

|                      |                      |            |           |
|----------------------|----------------------|------------|-----------|
| <b>AS Degree:</b>    | <b>Area</b>          | Effective: | Inactive: |
| <b>CSU GE:</b>       | <b>Transfer Area</b> | Effective: | Inactive: |
| <b>IGETC:</b>        | <b>Transfer Area</b> | Effective: | Inactive: |
| <b>CSU Transfer:</b> |                      | Effective: | Inactive: |
| <b>UC Transfer:</b>  |                      | Effective: | Inactive: |

**CID:**

**Certificate/Major Applicable:**  
Not Certificate/Major Applicable

## **COURSE CONTENT**

### **Outcomes and Objectives:**

By the end of the course, the student will be able to:

1. Compute advanced operations in addition, subtraction, multiplication, and division of whole numbers, fractions, and decimals;
2. Calculate complex word problems involving multiple operations;
3. Convert metric, household, and apothecary formulas;
4. Use various methods to solve basic pharmacology problems;
5. Calculate drug dosages for oral and parenteral administration.

### **Topics and Scope:**

1. Advanced skills development of operations:
  - a. Addition
  - b. Subtraction
  - c. Multiplication
  - d. Division of
    - 1) Whole numbers
    - 2) Fractions
    - 3) Decimals
    - 4) Measurements
2. Conversions as applied to Health Sciences:
  - a. Fractions
  - b. Decimals
  - c. Percents
  - d. Metric
  - e. Household
  - f. Apothecary

3. Health science problems using various methods:
  - a. Ratio-proportion
  - b. Equations
  - c. Formulas
  - d. Dimensional analysis
4. Measurement systems and their application in basic pharmacology problems, conversions within and between systems:
  - a. Household
  - b. Metric
  - c. Apothecary
  - d. Significant figures
5. Simple and complex drug dosage calculations for safe administration:
  - a. Oral
  - b. Parenteral
  - c. Pediatric--weight and body structure area (BSA)
6. Learn standard abbreviations and conventions of drugs:
  - a. Labels
  - b. Orders
  - c. Records
  - d. Reconstitution of powdered drugs

### Assignment:

1. Approximately 13 to 20 homework assignments.
2. Two mid-term exams.
3. Computer-assisted learning and other lab assignments.
4. Comprehensive final exam.

### 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.

None, This is a degree applicable course but assessment tools based on writing are not included because problem solving assessments and skill demonstrations are more appropriate for this course.

Writing  
0 - 0%

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

Homework problems

Problem solving  
5 - 10%

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

Lab assignments

Skill Demonstrations  
5 - 10%

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

Mid-term and final exams

Exams  
75 - 85%

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

Lecture and lab participation.

Other Category  
5 - 5%

**Representative Textbooks and Materials:**

MATH FOR MEDS: DOSAGES AND SOLUTIONS, 8th edition, Anna Curren and Laurie Munday, W. I. Publications, 2000

DOSAGE CALCULATIONS MADE INCREDIBLY EASY, 1st edition, Lillian S. Brunner, Spring House, 1998

DIMENSIONAL ANALYSIS FOR MEDS, 2nd edition, Anna Curren, Thomson Learning, 2002