



## NURP 1101

**Division:** Career and Technical Education

**Department:** Allied Health

**Course:** NURP 1101

**Title:** Drug Dosages and Calculations

**Catalog Description:**

This course is recommended for students applying for the Snow College Practical Nursing program. This course uses an interactive online learning environment that leads the learner through every aspect of dosage calculations. To meet the requirement for Practical Nursing, students must score B- or better as a final grade.

**General Education Requirements:** N/A

**Semesters Offered:** Fall, Spring, Summer

**Credit/Time Requirement:** Credit: 1; Lecture: 0; Lab: 3

**Clock/Hour Requirements:** 45

**Offered for Non-Credit:** Yes

**Prerequisites:** None

**Corequisites:** None

**Justification:**

This course is recommended for students applying for the Practical Nursing program and is recommended by the advisory committee. The course benefits other students entering health science programs that work with medications and their dosages.

**Student Learning Outcomes:**

Upon successful completion of this course, the student will:

- define medical abbreviations as used in drug dosages and calculations
- master drug calculations and dosages using at least one of three methods:
  - ratio-proportion
  - formula method
  - dimensional analysis
- demonstrate correct pronunciation of drug names
- prioritize client care by mastery of critical thinking scenarios
- choose the proper dosage of injections and oral, topical, or suppository medications
- demonstrate mastery of course content by successful completion of self assessment tools and test.

**Content:**

NURP 1101

Course objectives will be accomplished by providing each student with learning experiences in the following subject areas:

- review of dosage calculation mathematics
- systems of measurement
- conversions
- equipment used in dosage measurement
- interpreting drug orders
- understanding drug labels
- methods to calculate drug dosages
- oral dosage of drugs
- parenteral dosage of drugs
- pediatric dosages

### **General Education Outcomes:**

4) Retrieve, evaluate, interpret, and deliver information through a variety of traditional and electronic media.  
Students will use required text to learn theories, complete practice exercises, and utilize reference tables and graphs when taking online quizzes. Online quizzes are graded and feedback is given online.

6) Apply computational skills to a variety of contexts.

Students must demonstrate in the final exam the ability to convert metric equivalents, household equivalents, and temperature equivalents when converting drug dosages, calculation methods and formulas, and medication administration. Students will also use body surface area, weight, age rules, and nomograms to calculate drug dosages.

### **Applied Education Outcomes:**

1) Students will acquire entry-level skills specific to and appropriate for employment in their chosen field of study.

Students will be able to accurately interpret drug labels, orders, calculate dosages, and select the proper administration method.

3) Students will demonstrate safe practices and awareness of potential hazards in their field of expertise.

Students will be able to accurately interpret drug labels, orders, calculate dosages, and select the proper administration method.

### **Key Performance Indicators:**

#### **In class:**

- Students must receive a B- or higher as a final grade in order to receive points on the Practical

Nursing program application.

- The final represents 90% of grade.

**Representative Text and/or Supplies:**

- Joyce Key & Sally Marshall, *Clinical Calculations with Application to General and Specialty Areas.* (current edition) Saunders Elsevier

**Optimum Class Size:** 20

**Maximum Class Size:** 30

**Signatures:**

I hereby submit this course syllabus:

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Dean Brereton, M.S., Associate Professor

I hereby find this course consistent with the goals and resources of the Allied Health Department:

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Amber Epling, MSN, Associate Professor, Chair

I hereby find this course consistent with the goals and resources of the Career and Technical Education Division:

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Michael P. Medley, MBA, Assistant Professor, Dean

I have discussed the need for library resources related to this class with the person submitting the syllabus:

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Lynn Anderson, MLIS, Technical Services Librarian (Main Campus)

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Michelle Olsen, MLS, Campus Librarian (Richfield Campus)