

**SINCLAIR COMMUNITY COLLEGE
DAYTON, OHIO**

**MATERIALS AVAILABLE FOR
MATH 109 - NURSING MATHEMATICS
SEPTEMBER 6, 2006**

I. Math Review

1. Roman Numerals

Calculating Drug Dosages, Basic Math Review, Roman Numerals (CD)
Accu.Calc Chapter 1 “Math Review for Dosage Calculations” (CD)

2. Fractions

Calculating Drug Dosages, Basic Math Review, Fractions (CD)
Accu.Calc Chapter 1 “Math Review for Dosage Calculations” (CD)
105 CD Lectures Disk 1, Chapter 2 (all sections)
105 Interact Disk 1, 2.1-2.5
EV 1005 “Fractions- Lowest Terms, Comparing, Mixed Numbers”
EV 1006 “Fractions- Multiplication and Division”
EV 1007 “Fractions- LCD, Addition, and Subtraction”
Boxer Beginning Algebra Lesson 5 All Sections (CD)
101 & 102 CD Lectures 1.1
101-102 InterAct Chptr 1.1
V-BIA Tape 1

3. Decimals

Calculating Drug Dosages, Basic Math Review, Decimals (CD)
Accu.Calc Chapter 1 “Math Review for Dosage Calculations” (CD)
105 CD Lectures Disk 1, 1.3 – 1.5
105 Interact Disk 1, 1.3-1.5
EV 1008 “Decimals- Add, Sub, Mult, and Rounding”
EV 1009 “Decimals- Division and Converting to Fractions”

4. Ratio and Proportion

Calculating Drug Dosages, Methods of Calculation, Ratio & Proprtn.
(CD)
Accu.Calc Chapter 1 “Math Review for Dosage Calculations” (CD)
EV 1020 “Applications of Proportions”

5. Percentages

Accu.Calc Chapter 1 “Math Review for Dosage Calculations” (CD)
EV 1010 “Percent and Applications”
105 Interact Disk 1, 3.1-3.5

II. Systems of Measurement

6. Metric System

Calculating Drug Dosages, Systems of Measurement, Metric System (CD)
Accu.Calc Chapter 2 “Systems of Measurement” (CD)
EV 1023 “Metric System”
HANDOUT “Measurement Systems Conversions”

7. Apothecaries’ and Household Systems

Calculating Drug Dosages, Systems of Measurement, Apothecaries’
System, Household System (CD)
Accu.Calc Chapter 2 “Systems of Measurement” (CD)
HANDOUT “Measurement Systems Conversions”

8. Converting Within and Between Systems

Calculating Drug Dosages, Systems of Measurement, Conversions (CD)
Accu.Calc Chapter 3 “Conversions” (CD)
HANDOUT “Measurement Systems Conversions”

9. Additional Conversions Useful in the Health Care Setting

Calculating Drug Dosages, Systems of Measurement, Conversions (CD)
Accu.Calc Chapter 3 “Conversions” (CD)
HANDOUT “Measurement Systems Conversions”

III. Methods of Administration and Calculation

10. Medication Administration

Accu.Calc Chapter 4 “Equipment Used in Dosage Measurement” (CD)

11. Understanding Medication Orders

Accu.Calc Chapter 5 “Interpreting Drug Orders” (CD)

12. Medication Administration Records

Accu.Calc Chapter 3 “Conversions” (CD)

13. Reading Medication Labels

Calculating Drug Dosages, Reading Medication Labels (CD)

Accu.Calc Chapter 6 “Understanding Drug Labels” (CD)

14. Calculating Doses Using Ratio-Proportion

Accu.Calc Chapter 7 “Methods to Calculate Drug Dosages” (CD)

Calculating Drug Dosages, Methods of Calculation (CD)

15. Calculating Doses Using Formulas

Accu.Calc Chapter 7 “Methods to Calculate Drug Dosages” (CD)

Calculating Drug Dosages, Methods of Calculation (CD)

16. Calculating Doses Using Dimensional Analysis

Accu.Calc Chapter 7 “Methods to Calculate Drug Dosages” (CD)

Calculating Drug Dosages, Methods of Calculation (CD)

IV. Oral and Parenteral Dose Forms, Insulin, and Pediatric Dose Calculations

17. Calculation of Oral Medications

Calculating Drug Dosages, Administration of Oral Medications (CD)

Accu.Calc Chapter 8 “Oral Dosage of Drugs” (CD)

18. Parenteral Medications

Calculating Drug Dosages, Administration of Parenteral Medications

(CD)

Accu.Calc Chapter 9 “Parenteral Dosage of Drugs” (CD)

19. Powdered Drugs

Calculating Drug Dosages, Reconstitution of Powdered Medications (CD)
Accu.Calc Chapter 9 “Parenteral Dosage of Drugs” (CD)

21. Pediatric Dose Calculation

Calculating Drug Dosages, Pediatric Calculations (CD)
Accu.Calc Chapter 10 “Pediatric Dosages” (CD)

V. Basic I.V., Heparin, and Critical Care Calculations

***. Graphs**

VHC Tape 25 “Communicating With Graphs and Charts”
105 CD Lectures Disk 3, 15.1 “Frequency Distributions and Graphs”
105 Interact Disk 2, 15.1

22. Basic I.V. Calculations

Calculating Drug Dosages, IV Calculations (CD)
Accu.Calc Chapter 11 “Intravenous Calculations (CD)”
WORKSHEET “IV Calculations”

23. Heparin Calculations

Calculating Drug Dosages, Titration of IV Medications (CD)
Accu.Calc Chapter 12 “Advanced Intravenous Calculations” (CD)
WORKSHEET “IV Calculations”

24. Critical Care Calculations

Calculating Drug Dosages, Titration of IV Medications (CD)
Accu.Calc Chapter 12 “Advanced Intravenous Calculations” (CD)
WORKSHEET “IV Calculations”