

Course Outline of Record

1. Course Code: HS-067
2.
 - a. Long Course Title: Introduction to Med/Dosage Calculations
 - b. Short Course Title: INTRO MED/DOSAGE CALC
3.
 - a. Catalog Course Description:

This course provides a basic foundation for the study of pharmacology and covers the general principles of drug administration with a review of arithmetic and the calculation of math dosages. It utilizes a nursing process approach which focuses on the understanding of pharmacological principles, medication administration, and the evaluation of the client's responses in the health care setting. This course is designed for the beginning vocational nursing student and other allied health care disciplines.
 - b. Class Schedule Course Description:

This course is designed for those interested in health care professions. It covers the general principles of drug administration with a review of arithmetic and the calculation of math dosages.
 - c. Semester Cycle (if applicable): N/A
 - d. Name of Approved Program(s):
 - VOCATIONAL ESLN Certificate of Completion
 - VOCATIONAL NURSING Certificate of Achievement
4. Total Units: 1.00 Total Semester Hrs: 18.00
 Lecture Units: 1 Semester Lecture Hrs: 18.00
 Lab Units: 0 Semester Lab Hrs: 0
 Class Size Maximum: 35 Allow Audit: No
 Repeatability No Repeats Allowed
 Justification 0
5. Prerequisite or Corequisite Courses or Advisories:

Course with requisite(s) and/or advisory is required to complete Content Review Matrix (CCForm1-A)

 Advisory: MATH 060
 Advisory: ENG 061
6. Textbooks, Required Reading or Software: *(List in APA or MLA format.)*
 - a. Mulhollan, Joyce (2011). *The Nurse, The Math, The Meds* (2th/e). St. Louis, Missouri Elsevier. ISBN: 978-0-323-069
 College Level: Yes
 Flesch-Kincaid reading level: N/A
7. Entrance Skills: *Before entering the course students must be able:*
 - a. Read, comprehend, and summarize 8th grade level readings and identify main ideas and supporting details.
 - ENG 061 - Demonstrate the ability to read and respond in writing beyond the literal interpretation of the text.
 - b. Apply the basic operations appropriately to solve application (word) problems that involve their use.
 - MATH 060 - Apply the basic operations to solve application problems that involve whole numbers, integers, and rational numbers.
8. Course Content and Scope:

Lecture:

- a. Week I: Introduction to Pharmacology and review of math principles
- b. Week II: Math Equivalencies utilized in the field of Pharmacology
- c. Week III: Principles of medication administration
- d. Week IV: Administration of oral medications
- e. Week V: Administration of parenteral medications
- f. Week VI: Review of anatomical sites with parenteral medications and reconstitution of medications
- g. Week VII: Administration of topical and pediatric medications
- h. Week VIII: Finals week: Final exam

Lab: (if the "Lab Hours" is greater than zero this is required)

9. Course Student Learning Outcomes:

1.

Demonstrate the ability to interpret medication orders and calculate medication dosages for clients of all ages.

10. Course Objectives: *Upon completion of this course, students will be able to:*

- a. Perform basic mathematical computations that involve Arabic numbers, Roman numerals, fractions, and decimals
- b. Describe the basic systems of measurement used to calculate dosages
- c. Recognize and select the proper equipment for medication administration
- d. Interpret the notation for dosage, route, and frequency of drugs
- e. Recognize and interpret drug labels
- f. Utilize basic formulae to calculate med dosages for oral and parenteral needs
- g. Calculate dosages for the pediatric client
- h. Chart procedures as they relate to clients' responses both prior and post medication administration

11. Methods of Instruction: (*Integration: Elements should validate parallel course outline elements*)

a. Lecture

Other Methods:

b. Handouts c. Computer resources d. Small groups

12. Assignments: (*List samples of specific activities/assignments students are expected to complete both in and outside of class.*)

In Class Hours: 18.00

Outside Class Hours: 36.00

a. In-class Assignments

Practice math problems during class.

b. Out-of-class Assignments

Students are assigned chapter readings, practice math problems and exercises which are reviewed in class on a weekly basis. Computer resources are available which can be reviewed at home or in the computer lab

13. Methods of Evaluating Student Progress: *The student will demonstrate proficiency by:*

- Computational/problem solving evaluations
Weekly quizzes and Final exam
- Other
Written exams using varied format; i.e., multiple choice, matching, fill-in-the-blank, and computations

14. Methods of Evaluating: Additional Assessment Information:

15. Need/Purpose/Rationale -- *All courses must meet one or more CCC missions.*

PO - Career and Technical Education

Apply critical thinking skills to research, evaluate, analyze, and synthesize information.

IO - Personal and Professional Development

Self-evaluate knowledge, skills, and abilities.

16. Comparable Transfer Course

University System	Campus	Course Number	Course Title	Catalog Year
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17. Special Materials and/or Equipment Required of Students:

18. Materials Fees: Required Material?

Material or Item	Cost Per Unit	Total Cost
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19. Provide Reasons for the Substantial Modifications or New Course:

2-year periodic review

20. a. Cross-Listed Course (*Enter Course Code*): *N/A*
 b. Replacement Course (*Enter original Course Code*): *N/A*

21. Grading Method (*choose one*): Letter Grade Only

22. MIS Course Data Elements

- a. Course Control Number [CB00]: CCC000001450
- b. T.O.P. Code [CB03]: 129900.00 - Other Health Occupations
- c. Credit Status [CB04]: D - Credit - Degree Applicable
- d. Course Transfer Status [CB05]: C = Non-Transferable
- e. Basic Skills Status [CB08]: 2N = Not basic skills course
- f. Vocational Status [CB09]: Possibly Occupational
- g. Course Classification [CB11]: Y - Credit Course
- h. Special Class Status [CB13]: N - Not Special
- i. Course CAN Code [CB14]: *N/A*
- j. Course Prior to College Level [CB21]: Y = Not Applicable
- k. Course Noncredit Category [CB22]: Y - Not Applicable
- l. Funding Agency Category [CB23]: Y = Not Applicable
- m. Program Status [CB24]: 1 = Program Applicable

Name of Approved Program (*if program-applicable*): VOCATIONAL ESLN,VOCATIONAL NURSING

Attach listings of Degree and/or Certificate Programs showing this course as a required or a restricted elective.

23. Enrollment - Estimate Enrollment

First Year: 0
 Third Year: 0

24. Resources - Faculty - Discipline and Other Qualifications:

- a. Sufficient Faculty Resources: Yes
- b. If No, list number of FTE needed to offer this course: *N/A*

25. Additional Equipment and/or Supplies Needed and Source of Funding.

N/A

26. Additional Construction or Modification of Existing Classroom Space Needed. (*Explain:*)

HS 067-Introduction to Med/Dosage Calculations

N/A

27. FOR NEW OR SUBSTANTIALLY MODIFIED COURSES

Library and/or Learning Resources Present in the Collection are Sufficient to Meet the Need of the Students Enrolled in the Course: Yes

28. Originator Monica Camargo Origination Date 10/12/17