Course Description: This course includes reading, interpreting and solving calculation problems encountered in the preparation of medications, and conversion of measurements within and between the apothecary, household, and metric systems.


Supplies: Calculator

Course Goals/Objectives: Upon successful completion of the course the student will:
1. Develop skill and competence in using math concepts and processes.
2. Convert measurements among and between the metric, apothecary, and household systems.
4. Interpret medication labels accurately.
5. Interpret medication orders and medication administration records (MAR) accurately.
6. Read and measure dosages on a syringe, a medicine cup and other medication administration devices.
7. Calculate doses from reconstituted medications after determining the preparation of the solution from label directions.
8. Calculate dosages based on client weight and compare to recommendations for therapeutic and safe dosage administration.
9. Perform basic I.V. calculations, determining flow rates related to milliliter per hour and drops per minute.

Competencies: Differentiated Entry Level Competencies of Graduates of Texas Nursing Programs: Diploma/ADN (Dip/ADN) identified for this course are the following:

Provider of Care:
Use critical thinking approach to analyze clinical data and current literature as a basis for decision making in nursing practice.

Coordinator of Care
Collaborate with clients (individual and family) and the interdisciplinary health care team
for planning and delivery of care.

Member of a Profession:
Assume accountability and responsibility for the quality of nursing care provided to clients (individuals and family).

Student Contributions
Students need to bring their textbook, calculator, and note taking material to each class. Class attendance is expected. Notify the instructor if a class absence is anticipated.

Tutoring outside of class is available by request.

Evaluation of Students:
The course grade will be determined as follows:

Quizzes 15% (quizzes missed in class will not be made up—the 5 lowest scores will be dropped)
Exams 45%
*Final Exam 40%

*In order to pass the course the student must achieve an 80% on the final exam. There will be more than one opportunity to pass the final. Scores will be averaged when the final exam is taken more than once.

Course Schedule:
See attached Calendar.

SCANS Information:
The following SCANS skills are taught and/or reinforced in this course:

Basic Skills: The worker must read, write, perform arithmetic and mathematical operations, listen, and speak effectively. These skills include:

Reading: locate, understand, and interpret written information in prose and in documents such as manuals, graphs, and schedules. Students learn to read doctor’s orders, medication labels, and markings on syringes and small cups used for oral administration of medications.

Arithmetic and Mathematical Operations: perform basic computations and approach practical problems by choosing appropriately from a variety of mathematical techniques. Students use ratio-proportion and formula methods to solve dosage calculation problems.

Instructor’s Information:
Name: Dr. Becky Hammack
Office Location: Davidson Health Sciences Building 209
Office Telephone: 432-685-4589
E-Mail Address: bhammack@midland.edu
Office Hours: 8 am - 5 pm
Division Dean and Division Secretary: Dr. Becky Hammack and Kay Floyd
Division Office Location and Telephone: 209B HS, 685-4600

Rev. 8/08
Students are encouraged to contact the instructor at any time; however, making an appointment will guarantee the instructor’s availability at a specific time.