Course Syllabus

RNSG 1108

Dosage Calculations for Nursing

Catalog Description: Read, interpret and solve dosage calculation problems.

Prerequisites: None

Semester Credit Hours: 1
Lecture Hours per Week: 1
Lab Hours per Week: 0
Contact Hours per Semester: 16

State Approval Code: CIP 51.3801

Instructional Goals and Purposes: The purpose is to assist students who need either basic instruction/review or additional help with dosage calculation scenarios. This course is also being offered to higher level students for those desiring to improve their math solving skills.

Learning Outcomes:

1. Solve dosage calculation problems across the lifespan.
2. Apply concepts and principles necessary for the performance of math related to medication administration.

Specific Course Objectives (includes SCANS):
After studying all materials and resources presented in the course, the student will be able to:

1. Perform basic conversions from memory. (SCANS A iii)
2. Calculate basic/intermediate/advanced math problems (SCANS A iii)
3. Apply patient medication scenarios to administer medications using the six rights. (SCANS B v)

Methods of Instruction/Course Format/Delivery:

The course instruction includes skills demonstration, learning activities, internet resources, Canvas assignments and activities, digital resources and assignments, independent study.

Course Grade:
A Minimum of "C" is required to pass this course
Standard College grading to be used: 100-90 = A 89-80 = B 79-75 = C; Below 75 F
The Final Course Grade will be Pass/Fail

- Quizzes and Final Exam (80%)
- Required assignments (20%)

Text: Pickar, G.D. and Abernethy, A.P. (2013). Dosage Calculations (9th Edition). Clifton Park, NY: Thomson Delmar Learning.

- **Other:**
- For current texts and materials, use the following link to access bookstore listings: http://www.panolacollegestore.com
- For testing services, use the following link: http://www.panola.edu/elearning/testing.html
- If any student in this class has special classroom or testing needs because of a physical learning or emotional condition, please contact the ADA Student Coordinator in Support Services located in the Administration Building or go to http://www.panola.edu/student-success/disability-support-services/ for more information.
- Withdrawing from a course is the student's responsibility. Students who do not attend class and who do not withdraw will receive the grade earned for the course.
- Student Handbook, *The Pathfinder:* http://www.panola.edu/student-success/documents/pathfinder.pdf

SCANS CRITERIA

1) **Foundation skills are defined in three areas: basic skills, thinking skills, and personal qualities.**

   a) **Basic Skills**: A worker must read, write, perform arithmetic and mathematical operations, listen, and speak effectively. These skills include:
      i) Reading: locate, understand, and interpret written information in prose and in documents such as manuals, graphs, and schedules.
      ii) Writing: communicate thoughts, ideas, information, and messages in writing, and create documents such as letters, directions, manuals, reports, graphs, and flow charts.
      iii) Arithmetic and Mathematical Operations: perform basic computations and approach practical problems by choosing appropriately from a variety of mathematical techniques.
      iv) Listening: receive, attend to, interpret, and respond to verbal messages and other cues.
      v) Speaking: Organize ideas and communicate orally.

   b) **Thinking Skills**: A worker must think creatively, make decisions, solve problems, visualize, know how to learn, and reason effectively. These skills include:
      i) Creative Thinking: generate new ideas.
      ii) Decision Making: specify goals and constraints, generate alternatives, consider risks, and evaluate and choose the best alternative.
      iii) Problem Solving: recognize problems and devise and implement plan of action.
      iv) Visualize ("Seeing Things in the Mind's Eye"): organize and process symbols, pictures, graphs, objects, and other information.
      v) Knowing How to Learn: use efficient learning techniques to acquire and apply new knowledge and skills.
      vi) Reasoning: discover a rule or principle underlying the relationship between two or more objects and apply it when solving a problem.

   c) **Personal Qualities**: A worker must display responsibility, self-esteem, sociability, self-management, integrity, and honesty.
      i) Responsibility: exert a high level of effort and persevere toward goal attainment.
      ii) Self-Esteem: believe in one's own self-worth and maintain a positive view of oneself.
      iii) Sociability: demonstrate understanding, friendliness, adaptability, empathy, and politeness in group settings.
      iv) Self-Management: assess oneself accurately, set personal goals, monitor progress, and exhibit self-control.
      v) Integrity and Honesty: choose ethical courses of action.

2) **Workplace competencies are defined in five areas: resources, interpersonal skills, information, systems, and technology.**

   a) **Resources**: A worker must identify, organize, plan, and allocate resources effectively.
      i) Time: select goal-relevant activities, rank them, allocate time, and prepare and follow schedules.
      ii) Money: Use or prepare budgets, make forecasts, keep records, and make adjustments to meet objectives.
      iii) Material and Facilities: Acquire, store, allocate, and use materials or space efficiently.
      Examples: construct a decision time line chart; use computer software to plan a project; prepare a budget; conduct a cost/benefits analysis; design an RFP process; write a job description; develop a staffing plan.

   b) **Interpersonal Skills**: A worker must work with others effectively.
      i) Participate as a Member of a Team: contribute to group effort.
      ii) Teach Others New Skills.
      iii) Serve Clients/Customers: work to satisfy customer's expectations.

iv) Exercise Leadership: communicate ideas to justify position, persuade and convince others, responsibly challenge existing procedures and policies.
v) Negotiate: work toward agreements involving exchange of resources, resolve divergent interests.
vi) Work with Diversity: work well with men and women from diverse backgrounds.

Examples: collaborate with a group member to solve a problem; work through a group conflict situation, train a colleague; deal with a dissatisfied customer in person; select and use appropriate leadership styles; use effective delegation techniques; conduct an individual or team negotiation; demonstrate an understanding of how people from different cultural backgrounds might behave in various situations.

c) **Information**: A worker must be able to acquire and use information.
i) Acquire and Evaluate Information.
ii) Organize and Maintain Information.
iii) Interpret and Communicate Information.
iv) Use Computers to Process Information.

Examples: research and collect data from various sources; develop a form to collect data; develop an inventory record-keeping system; produce a report using graphics; make an oral presentation using various media; use on-line computer data bases to research a report; use a computer spreadsheet to develop a budget.

d) **Systems**: A worker must understand complex interrelationships.
i) Understand Systems: know how social, organizational, and technological systems work and operate effectively with them.
ii) Monitor and Correct Performance: distinguish trends, predict impacts on system operations, diagnose deviations in systems' performance and correct malfunctions.
iii) Improve or Design Systems: suggest modifications to existing systems and develop new or alternative systems to improve performance.

Examples: draw and interpret an organizational chart; develop a monitoring process; choose a situation needing improvement, break it down, examine it, propose an improvement, and implement it.

e) **Technology**: A worker must be able to work with a variety of technologies.
i) Select Technology: choose procedures, tools or equipment including computers and related technologies.
ii) Apply Technologies to Task: understand overall intent and proper procedures for setup and operation of equipment.
iii) Maintain and Troubleshoot Equipment: Prevent, identify, or solve problems with equipment, including computers and other technologies.

Examples: read equipment descriptions and technical specifications to select equipment to meet needs; set up and assemble appropriate equipment from instructions; read and follow directions for troubleshooting and repairing equipment.

Associate Degree Nursing

Student Acknowledgment

I have read the Panola College Associate Degree Nursing program syllabus for RNSG 1108 Dosage Calculations. I understand that it is my responsibility to seek any clarification that I may need from the instructor.

I will comply with the syllabus requirements as delineated. In addition, I will comply with the current ADN Student Handbook as found on the ADN web page. It is my understanding that this form will become part of my permanent file.

_____

Student Name (Printed)

_____

Student Signature

_____

Date