

Arkansas State University-Newport's mission is to provide an accessible, affordable, quality education that transforms the lives of our students, enriches our communities, and strengthens the regional economy.

MATH1213—Math for Nurses

Course Description: Provides instruction in dosage calculation using ratio to proportion as well as other means of calculation related to medication. Topics include: interpretation of drug labels, syringe types, conversions, military time, reconstitution, mixing medications, IV flow rates, and drip rates, interpretation of physician orders, dispensing, and proper documentation of medication.

Course Type: Lecture

Instructor Name:

Office:

Office Phone:

Email:

Office Hours:

Department Information

Course Department:

Academic Department:

Academic Coordinator:

Email:

Associate Dean:

Associate Dean Contact Number:

Email

Materials: Required and Optional

Required Text(s): Calculating Drug Dosages: A Patient-Safe Approach to Nursing and Math Author: Castillo & Werner-McCullough Publisher: FA Davis ISBN: 978-0-8036-2496-2

Optional Text(s): DAVISPlus

Required Materials:

- 1) ASUN campus email and “Canvas” username and password
- 2) Access to a computer (desktop or laptop, PC/Mac/Linux) with reliable internet access and equipped with
- 3) Microsoft Word, Microsoft PowerPoint, and Adobe Acrobat Reader.
- 4) Access to a printer to print PowerPoints, notes and homework assignments.
- 5) A basic four function calculator (nothing fancy; just something in the \$5 to \$20 range will work). You will not be allowed to use your phone, tablet, or laptop as a calculator in this course.

Optional Materials: None

Note: Students are expected to obtain the required text and materials for this course by the start of the term. Accommodations cannot be made concerning assignment due dates and class participation due to a student having not attained the required text and materials. Students participating in online courses are expected to have internet access. Accommodations cannot be made concerning assignment due dates and class participation due to a lapse or absence of internet service or access to a working computer and necessary software. ASUN has computer labs at each of our three campus locations available for students to access during normal hours of operation.

Institutional Learning Outcomes

Upon graduating from ASU-Newport with any Associate Degree, a student will be proficient in the following:

ILO1: Communication

Goal: Students will express ideas, knowledge, and concepts in a clear and concise manner.

- a) Written
- b) Verbal
- c) Interpersonal

ILO2: Reasoning

Goal: Students will apply reasoning skills in a variety of environments, which demonstrate problem-solving and applied knowledge.

- a) Explore
- b) Locate
- c) Interpret
- d) Evaluate
- e) Apply

ILO3: Responsibility

Goal: Students will participate in service activities that instill in them a sense of social responsibility.

- a) Civic
- b) Academic
- c) Financial

Institutional Grading Scale

Grading Scale:

- A: 93-100
- B: 85-92
- C: 78-84
- D: 70-77
- F: 0-69
- S: Satisfactory
- U: Unsatisfactory

Americans with Disabilities Act Compliance

In order to obtain appropriate disability related accommodations and services to which they are entitled, students with documented disabilities should voluntarily and confidentially provide the Office of Disability Services (870-512-7838 or disabilityservices@asun.edu) with appropriate medical documentation regarding the nature and extent of their disability, make their needs known to this Office and follow established procedures for acquiring needed services and accommodations in the classroom or online.

Information Technology Services

If you experience any problems or issues with Canvas, MyCampus, or other equipment, please contact ITS at 870-512-7783 or <http://its.asun.edu>. Canvas also has a 24/7 live chat. This is a valuable resource for those late-night tests or assignments that just do not seem to work properly.

ASU-Newport provides a number of different services to assist students in areas that directly impact their academic success. The following direct websites will help you get in touch with those services that may be needed during your time as an ASUN student:

Academic Support Center: <http://academicsupport.asun.edu>

Financial Aid: <http://financialaid.asun.edu>

Career Pathways: <http://pathways.asun.edu>

University Police: <http://cpd.asun.edu>

Information Technology Services: 512-7783 or its@asun.edu

Disability Services: http://www.asun.edu/disability_services

Admissions: <http://admissions.asun.edu>

Academic Dishonesty (as stated in the Student Handbook)

ASU-Newport enthusiastically promotes academic integrity and professional ethics among all members of the ASU-Newport academic community. Violations of this policy are considered serious misconduct and may result in disciplinary

action and severe penalties. Cheating in any form-including plagiarism, turning in assignments prepared by others, unauthorized possession of exams - may result in the student being dropped from the class with an “F” and/or being suspended from the College. Students who feel they have been unfairly accused of cheating may appeal to the Associate Dean of General Education.

Campus Safety Information

What to know and do to be prepared for emergencies at ASUN:

- Opt-in to receive ASUN’s School Messenger notifications regarding weather closings, emergencies, and other important notifications. All currently enrolled students will receive an email within the first two weeks of the semester prompting them to Opt-in to the messaging system.
- Know the safe evacuation route from each of your classrooms. Emergency evacuation routes are posted in on-campus classrooms.
- Listen for and follow instructions from your instructor or other designated authorities.
- For additional emergency information see the ASUN Emergency Response Guide in the Portal under “More” then select “Department of Safety”.
- Know the emergency phone number for ASUN Campus Police or dial 911.
- Report suspicious activities and objects found on campus.
- Keep your permanent address and emergency contact information current in My Campus.

Inclement Weather

In the event of inclement weather, class cancelation is left to the discretion of the Chancellor. You will be notified of class cancelation on the university website, through news media, and through our school messaging system.

Children in the Classroom:

ASUN classroom policy requires that the learning environment should be free of distraction in order to provide the highest learning opportunity for all students. In this light, students should not bring children to the classroom. If you must bring a child on campus, please have your child properly supervised in the public gathering areas.

Course Learning Outcomes

Upon the successful completion of this course, students will be proficient in the following:

| Learning Outcomes | Assessment |
|---|---|
| The student will demonstrate the ability to perform and solve problems using basic math. | Homework, quizzes, in class assignment, exams |
| The ability to communicate safe medical practices while calculating safe levels of medication. | Homework, quizzes, in class assignment, projects, exams |
| Demonstrate the ability to apply methods of calculation and systems of measurement. | Homework, quizzes, projects, exams |
| Use critical thinking with safety in medication administration and verify safe dosages of medication. | Homework, quizzes, in class assignment, projects, exams |
| MSA | Comprehensive Final Exam |

COURSE LEARNING ASSESSMENTS

The student will demonstrate a basic understanding of the following: reading and interpreting physician orders and drug labels, applying knowledge of the six rights of medication, demonstrate the ability to solve problems while working with: fractions, decimals, percentages, the metric system, the household measurement system, dimensional analysis and the formula method to calculate drug dosages. Calculating drug dosages for oral, parenteral, and reconstitution of medications in addition solving problems involving drugs measured in unit dosages. Performing the following tasks related to intravenous (IV) drugs: calculate IV infusion rates, determine infusion and completion time of an IV, label an IV bag and calculate the rate of administration for direct IV medications. Interpreting information from the drug reference material including: recommended doses, verifying safety of ordered dose and calculations and titrations regarding high alert IV medications based on physiological response of the patient. Identifying, calculating, and documenting the intake (oral and parenteral) and output based on the source. Identify drug reference information related to special populations, including the administration and calculation of enteral nutrition and replacement IV fluid therapy.

Course Policies and Procedures

Academic Calendar

Disclaimer

This syllabus and all documents associated with the syllabus are considered a contract between the student and the instructor. Students are expected to carefully read and review the syllabus and all associated documents in order to be familiar with course expectations and policies. This syllabus is subject to change at the discretion of the instructor, who will inform students of any changes. Students are responsible for keeping up with any changes.