

AHS 126

Health Calculations

Course: Health Calculations

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Office Hours: Office hours posted outside office door each semester and by appointment with individuals.

PREREQUISITES: MAT 150 with a grade of "C" or better.

DESCRIPTION:

This course is a study of the mathematical concepts needed in health science studies.

CREDIT HOURS: 1 credit

TEXTBOOK(S) OR ALTERNATIVE:

Required:

Ogden, S.J. (2007). *Calculation of Drug Dosages*: A work text. 8th ed.
MO: Mosby/Elsevier. ISBN 978-0-323-04588-9

Recommended:

MATERIALS (specifying those to be purchased by student):

COLLATERAL READING:

Collateral reading may be assigned and content may be used in exam questions.

CLASS MANAGEMENT ACTIVITIES (Attendance, tardies, testing, etc.):

Academic Dishonesty:

NETC honors the state SCTCS Student Code with regard to Academic Dishonesty. Students should read page 46 of the NETC College Catalog. A copy of the Student Code is available at www.netc.edu.

Electronic Devices:

All electronic devices (cell phones, pagers, etc.) must be turned off during class/clinical time. These devices are not part of the instructional environment and may be confiscated by the instructor if utilized during these times. This includes anyone caught text-messaging during class. If your cell phone should ring a 2nd time during the semester, it will be confiscated and sent to **Dr. Robertson** and you can talk to him to get it - **after** I have talked to him. If you are a member of emergency preparedness, you must have authorization from the Vice-President of Student Services (Dr. Robertson) to keep your device on during these times.

Identification Badges

The College requires that students wear their Northeastern Technical College Identification Badge at all times while on campus and within the clinical setting areas. Failure to wear ID badge will result in the student not being allowed to enter into the classroom or clinical setting.

Testing/Final Exams:

Tests will consist of information gathered from: text, assigned reading, handouts in class/on web or assigned and video content.

- a. There will be no retests. Makeup tests will be allowed only for valid excuses for missing the examination and prior contact is made. A grade of "F" will be recorded for any tests missed. If a problem should arise, a test may be taken early at a time established by the Instructor. To be eligible to makeup a test, the student must contact the instructor prior to the class time of the day the test is issued. The student may leave a phone message or email explaining their situation and the timestamp on message must meet the deadline stated in the previous sentence. The instructor will return the call or respond to the email indicating if the excuse is acceptable and the day and time the test can be taken.
- b. If you are allowed to make up the test, you are expected to make up the missed test on your first day back to school (clinical or lecture) - **NO EXCEPTIONS**. Failure to do so will result in a grade of zero (0) for that test. The test will be left in the Success Center. You will need your student ID card in order to take the test. The instructor reserves the right to administer a full discussion test or a test other than the original test.
- c. Any unscheduled quizzes that are missed will not be allowed to be taken at a later time and a grade of zero (0) will be given for that quiz.
- d. Drug calculations on tests/exams are to be rounded with decimals to one decimal place unless otherwise directed for all metric answers. Include a zero preceding a decimal number if there is no whole number. Do not include zeros at the end of decimal numbers. Apothecary or household answers should be expressed in fractions unless otherwise requested by instructor.
- e. Assignments are to be turned in at the designated assignment time. If you are unable to turn in the assignment, make arrangements to have the assignment turned in for you.

Tests will be returned as soon as possible. Tests will not be returned until all students have taken the test. Tests are not to be taken from the classroom and must be returned to the instructor after review. The time allotted for review of test will be designated by the instructor.

Final exams will only be administered on the designated date and during the designated time for that particular class.

Statement on Written Assignments:

The instructor reserves the right to refuse any paper or test, which is messy or unreadable, or appears to be copied. Your name must be included on your paper/test for you to receive credit for that paper/test. You will be expected to use the correct symbols or abbreviations for each answer you give. If you use incorrect symbols or abbreviations the answer will be considered wrong and that answer will count against your grade.

Attendance and Tardy Policy:

- a. CLASSROOM - The student is responsible for material covered in any class or lab. A student may miss a maximum of up to 10% of scheduled class hours. It is strongly advised that students attend all classes. Three tardies will equal one absence. A student will be considered tardy if he/she comes into the classroom after the roll has been called. You will be dropped from the class after you have exceeded the 10% time frame.
- b. CLINICAL - No clinical required for this course.

Classroom Etiquette:

An integral part of an education is developing a sense of integrity and responsibility, not only toward instructors, but also toward other students. In the classroom, as on the job or in your home, exhibiting appropriate behavior reflects on your maturity. Arriving late to class, being unprepared, inappropriate talking while class is in session, text messaging, etc. negatively reflects on you and your fellow students. Please be considerate.

RESOURCES (A-V, persons, tools/equipment):

Lecture, audio-visual aids, class discussion, pencil and paper tests, written assignments, skill demonstrations, Moodle on-line enhancement assignments or material (If you don't have a Moodle password, you need to contact Moodle Adm. for one to have access to this material).

COURSE TOPICAL OUTLINE (List topics and sub-topics of course) and Calendar or approximate length of time devoted to topic.

TENTATIVE SCHEDULE

Chapter 6	Metric and Household Measurements
Chapter 7	Apothecary and Household Systems
Chapter 8	Equivalents between Apothecary and Metric Measurements
Chapter 9	Safety in Medication Administration
Chapter 10	Interpretation of the Physician Orders and Abbreviations & Symbols
Chapter 11	How to Read Drug Labels
Chapter 12	Dimensional Analysis and the Calculation of Drug Dosages
Chapter 13	Oral Dosages
Chapter 14	Parenteral Dosages
Chapter 15	Dosages Measured in Units
Chapter 16	Intravenous Flow Rates
Chapter 17	Critical Care Intravenous flow rates

Chapter 18 Pediatric Dosages
Chapter 19 Automated Medication Dispensing Systems
Chapter 20 Special Considerations for the Administration of Medications to the Elderly

The above outline is a tentative outline and the instructor reserves the right to add to or delete as needed. Test schedule for above outline is listed on grade sheet for this subject.

LEARNING OUTCOMES:

Student will be able to:

1. State with accuracy the household, apothecaries and metric systems of measurement and conversion between systems.
2. Act as a patient advocate demonstrated by the ability to provide safe, direct patient care by calculating correct dosages for oral and parental medications for adults and children.
3. State the meaning of terms and abbreviations commonly used in the administration of medications.
4. Utilize information provided in course to teach health-related information for patients and family members on medication administration.

COLLEGE WIDE COMPETENCIES:

Identify and use sources of information by utilizing information processing skills compatible with job demands in a computer-literate society.

Solve problems incorporating effective decision-making, reasoning and creativity.

Apply mathematical/computational skills to solve problems.

Practice interpersonal skills and teamwork in their lives and chosen careers.

INSTRUCTIONAL METHODS TO COMPLETE OUTCOMES: Lecture, audio-visual aids, class discussion, group and/or individual project(s), pencil and paper tests (unit & pop-test), reference readings, computer-assisted software.

ASSESSMENT TOOLS: May include:

1. Objective tests
2. Written assignments & Projects

EVALUATIVE METHODS TO APPRAISE OUTCOMES:

Course grades will be derived from theory and practice. A grade below 75 in theory constitutes failure of the course.

TEST GRADE COMPUTATION

UNIT TESTS	70%
Quizzes, Projects	10%
FINAL EXAM (cumulative)	20%
TOTAL	100%

**** If no quizzes or projects are given, the tests will be worth 80%.**

GRADING SCALE:

A	93-100	4 Quality Points
B	86-92	3 Quality Points
C	75-85	2 Quality Points
D	70-74	1 Quality Points
F	69 & below	0 Quality Points

GUIDELINES FOR AHS-126 STUDENTS:

1. All written work must have your name on it or you will receive a zero.
2. One half (1/2) point will be taken off for each misspelled word. This applies if the same word is misspelled more than once.
3. Students are expected to be fully prepared for each class. This includes having read all assigned materials.
4. Assignments are to be turned in at the assigned time. If you are unable to turn in the assignment, make arrangements to have the assignment turned in for you.
5. There is to be no drinking or eating in the classroom, simulated lab, or computer area.
6. Students with disabilities are encouraged to contact the Vice-President for Student services to discuss needs or concerns as they pursue an academic program and participate in campus life. The Vice-President for Student Services will provide guidance regarding official documentation of disabilities and/or accommodation of needs. (See Catalog, pg. 23)

ALL STUDENTS MUST MAINTAIN A "C" OR BETTER IN EACH COURSE TO REMAIN IN THE NURSING PROGRAM.