

CASPER COLLEGE COURSE SYLLABUS
Calculations for Health Care
PHTK 1000- 01

Semester/Year: Fall 2015

Lecture Hours: 1

Credit Hours: 1

Class Time : Tuesday 11:00-11:50 **Room:** L.H. 103

Instructor's Name: Amy Raymond, BS, CPhT, RPT

Instructor's Contact Information: **Office Phone:** 268-3311 **E-mail:** araymond@caspercollege.edu

Office: L.H. 104

Office Hours: Tuesday 9:00-11:00 a.m.; Wednesday 1:00-2:00 p.m.; Thursday 9:00-11:00 a.m.; and Friday by appointment only. If I am not in my office, **email** is the best way to contact me!

Course Description: A review of basic arithmetic, an introduction to the metric and apothecary systems, and computation of medication dosages.

Statement of Prerequisites:

Admission to the pharmacy technology program or permission of the instructor. Students must an ACT score of 21 or better if out of high school less than two years, a COMPASS score of 40 or better, or have a "C" or better in MATH 0920.

ASHP Course Goals and Outcomes:

- 1. The technician displays the ability to assist the pharmacist in collecting, organizing, and evaluating information for direct patient care, medication use review, and departmental management.
- 3a. The technician performs arithmetical calculations required for usual dosage determinations and solutions preparation.
- 4. The technician performs arithmetical calculations required to verify the measurements, preparation, and/or packaging of medications produced by other technicians.
- 10. The technician demonstrates the ability to control the inventory of medications, equipment, and devices according to an established plan.

Outcomes:

At the end of this course, students will be expected to know and understand how to:

1. Solve problems using critical thinking and creativity
2. Appreciate aesthetic and creative activities
3. Use quantitative analytical skills to evaluate and process numerical data

Course Objectives:

Students will understand how to perform calculations specific to the healthcare setting while learning the standard of patient safety as well as the devastation of medication errors in the field. (GE outcome 3,5,8)

Methodology:

The material for this course will be accessed by reading the required text with application, in-class discussion; problems in the text and on the accompanying CD-ROM, discussions and content provided online, weekly quizzes, and a proctored final exam.

Evaluation Criteria:

DESCRIPTION	POINTS
Homework: 13 @ 20 pts. each	260
Quizzes: 13 @ 20 pts. Each	260
1 Discussion Question	30
Final Exam	200
Total Points Available	750

Grading System:

GRADE	POINTS	%AGE
A	675-750	90-100
B	600-674	80-89
C	525-599	70-79
D	450-524	60-69
F	0-449	59 or below

Required Text, Readings, and Materials:

Curren, A.M., Witt, M.H. Math for Meds: Dosages and Solutions, 11th Edition, Clifton Park, NY: Delmar, Cengage Learning. The text is accompanied by practice software for computer based interactive learning.

Computer & Internet Requirements:

If, at any time, you experience computer difficulties, please contact me through the **e-mail account available within this course** or by calling the **office phone** listed above. Please do not use my Casper College e-mail as many times unknown mail is blocked by the server

Class Policies:

Last Date to Change to Audit Status or to Withdraw with a W Grade: November 12, 2015

Attendance: Attendance is mandatory. An absence is defined as attending less than 75% of the class period. **Three absences may be excused;** further absences will result in a lowering of one letter grade for each absence. An absence will be excused **only if the instructor is notified prior to the absence.**

Class Participation: Is expected. A penalty will be assessed to the final grade at the instructor's discretion.

Make-up policy: Quizzes and tests may not be made up! Homework will need to be turned in before the class is missed.

Exams: Exams must be submitted prior to the student leaving the room. Penalty is at the discretion of the instructor.

Late assignments: **NO** late assignments will be accepted.

****Assignments must be turned in at the start of class time on the date that they are due. ****

Cell Phones: There is a no tolerance cell phone policy in all classes of the Pharmacy Technology program. Cell phones are to be turned on silent when entering the classroom. Cell phones may never be used as calculators.

Computer Labs:

Students who do not have access to a personal computer at home, may use the following Casper College computer labs which offer internet access:

- Casper College Library
- Thorson Business Building, 4th floor
- Administration Building, Room 6

Saunders Health Science Building, Multimedia Center, 2nd floor, room HS 211. Please check with the academic assistant, for available hours (268-2235).

Student Rights and Responsibilities: Please refer to the Casper College Student Conduct and Judicial Code for information concerning your rights and responsibilities as a Casper College Student.

Chain of Command: If you have any problems with this class, you should first contact the instructor to attempt to solve the problem. If you are not satisfied with the solution offered by the instructor, you should then take the matter through the appropriate chain of command starting with the Department Head/Program Director, the Dean, and lastly the Interim Vice President for Academic Affairs.

Academic Dishonesty - (Cheating & Plagiarism) Casper College demands intellectual honesty. Proven plagiarism or any form of dishonesty associated with the academic process can result in the offender failing the course in which the offense was committed or expulsion from school. See the Casper College Student Code of Conduct for more information on this topic.

Official Means of Communication: Casper College faculty and staff will employ the student's assigned Casper College email account as a primary method of communication. Students are responsible to check their account regularly.

ADA Accommodations Policy: If you need academic accommodations because of a disability, please inform me as soon as possible. See me privately after class, or during my office hours. To request academic accommodations, students must first consult with the college's Disability Services Counselor located in the Gateway Building, Room 344, (307) 268-2557, bheuer@caspercollege.edu . The Disability Services Counselor is responsible for reviewing documentation provided by students requesting accommodations, determining eligibility for accommodations, and helping students request and use appropriate accommodations.

Conduct: There is an expectation that students will conduct themselves in a civil and respectful manner during class sessions and in individual interactions with their instructors and peers.

Calendar or schedule indicating course content:

CLASS TIME	SUBJECT/READING
August 25 th	Chapter 1: Relative Value, Addition and Subtraction of Decimals Chapter 2: Multiplication and Division of Decimals Chapter 3: Solving Common Fraction Equations
September 1 st	Quiz #1: Ch. 1,2,3 Chapter 4: Metric/International System Chapter 5: Unit, Percentage, Milliequivalent, Ratio, and Household Measures.
September 8 th	Quiz #2: Ch. 4,5 Chapter 6: Oral Medication Labels and Dosage Calculations Chapter 7: Safe Medication Administration
September 15 th	Quiz #3: Ch. 6,7 Chapter 8: Hypodermic Syringe Measurement Chapter 9: Parenteral Medication Labels and Dosage Calculations Chapter 10: Reconstitution of Powdered Drugs
September 22 nd	Quiz #4: Ch. 8,9,10 Chapter 12: Ratio and Proportion
September 29 th	Quiz #5: Ch. 12 Chapter 13: Dimensional Analysis/Units Conversion

October 6 th	Quiz #6: Ch. 13 Chapter 14: Formula Method
October 13 th	Quiz #7: Ch. 14 Chapter 11: Measuring Insulin Dosages
October 20 th	FALL BREAK- NO CLASS
October 27 th	Quiz #8: Ch. 11 Chapter 15: Adult and Pediatric Dosages Based on Body Weight Chapter 16: Adult and Pediatric Dosages Based on Body Surface Area.
November 3 rd	Quiz #9: Ch. 15,16 Chapter 17: Introduction to IV Therapy Chapter 18: IV Flow Rate Calculation
November 10 th	Quiz #10: Ch. 17,18 Chapter 19: Calculation IV Infusion and Completion Times
November 17 th	Quiz #11: Ch. 19 Chapter 20: IV Medication and Titration Calculations Chapter 21: Heparin Infusion Calculations
November 24 th	Quiz 12: Ch. 20,21 Chapter 22: Pediatric Oral and Parenteral Medications Chapter 23: Pediatric Intravenous Medications
December 1 st	WORK DAY
December 8 th	Quiz #13: Ch. 22,23 Lab time will be used to review for final exam. REVIEW FOR FINAL EXAM
December 14-17 th	FINALS WEEK TBA