# CASPER COLLEGE COURSE SYLLABUS Calculations for Health Care PHTK 1000- N1

Semester/Year: Fall 2015

Lecture Hours: 1 Credit Hours: 1

Online please plan on signing in daily

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

**Instructor's Contact Office Phone**: 307-268-3311 **E-mail**: araymond@caspercollege.edu

**Information:** 

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:**

Students must an ACT score of 21 or better if out of high school less than two years, 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 preform 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:**

This course will be done entirely on the Internet. The material for this course will be accessed by reading the required text with application problems in the text and on the accompanying CD-ROM, discussions and content provided online, weekly quizzes, and a proctored final exam. Each quiz will open on Wednesdays at 1:00 a.m. and close on Tuesdays at 11:55 p.m.

#### **Evaluation Criteria:**

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

## **Grading System:**

GRADE	POINTS	%AGE
A	675-750	90-100
В	600-674	80-89
С	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.

#### **Class Policies:**

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

# **Late assignments**

NO late assignments will be accepted

Assignments must be turned in the following Tuesday by 11:55 PM.

Make-up policy: Quizzes and tests may not be made up!

<u>Exams and Quizzes</u>: Exams must be proctored. The instructor should be notified of approved proctor for use by the student **the first week of class. Quizzes may be taken without being proctored. Quizzes** will open on Wednesdays and close on Tuesdays at 11:55 pm.

# 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.

#### **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, 4<sup>th</sup> floor
- Liesinger Hall
- Saunders Health Science Building, Multimedia Center, 2<sup>nd</sup> floor, room HS 211. Please check with the academic assistant, for available hours (268-2235).

**NOTE:** This is an Internet based class. You are responsible for doing your work and scheduling yourself to keep pace. Computers malfunction. Be prepared. Contrary to wishful beliefs, Internet classes are not easier than regular classes. If you fall behind in this course, it will be difficult to catch up. I am here to help you understand the material, provide feedback and answer questions. I am happy to help as much as possible. If the information in the text and available online are not enough, email me any and all questions through the class email and I will respond as soon as possible.

**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, <a href="mailto:bheuer@caspercollege.edu">bheuer@caspercollege.edu</a>. 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:**

WEEK OF:	SUBJECT/READING			
August 24 <sup>th</sup>	Chapter 1: Relative Value, Addition and Subtraction of Decimals			
	Chapter 2: Multiplication and Division of Decimals			
	Chapter 3: Solving Common Fraction Equations			
August 31st	Quiz #1: Ch. 1,2,3			
	Chapter 4: Metric/International System			
	Chapter 5: Unit, Percentage, Milliequivalent, Ratio, and			
	Household Measures.			
September 7 <sup>th</sup>	Quiz #2: Ch. 4,5			
	Chapter 6: Oral Medication Labels and Dosage Calculations			
	Chapter 7: Safe Medication Administration			
	Quiz #3: Ch. 6,7			
	Chapter 8: Hypodermic Syringe Measurement			
	Chapter 9: Parenteral Medication Labels and Dosage Calculations			
September 14 <sup>th</sup>	Chapter 10: Reconstitution of Powdered Drugs			

September 21st	Quiz #4: Ch. 8,9,10			
	Chapter 12: Ratio and Proportion			
September 28 <sup>th</sup>	Quiz #5: Ch. 12			
	Chapter 13: Dimensional Analysis/Units Conversion			
October 5 <sup>th</sup>	Chapter 13: Dimensional Analysis/Units Conversion  Quiz #6: Ch. 13			
	Quiz not cit. 10			
41.	Chapter 14: Formula Method			
October 12 <sup>th</sup>	Quiz #7: Ch. 14			
	Chapter 11: Measuring Insulin Dosages			
October 19 <sup>th</sup>	FALL BREAK- NO CLASS			
October 26 <sup>th</sup>	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.			
	Quiz #9: Ch. 15,16			
November 2nd	Chapter 17: Introduction to IV Therapy			
	Chapter 18: IV Flow Rate Calculation			
November 9 <sup>th</sup>	Quiz #10: Ch. 17,18			
	Chapter 19: Calculation IV Infusion and Completion Times			
November 16 <sup>th</sup>	Quiz #11: Ch. 19			
	Chapter 20: IV Medication and Titration Calculations			
	Chapter 21: Heparin Infusion Calculations			
November 23 <sup>th</sup>	Quiz 12: Ch. 20,21			
	Chapter 22: Pediatric Oral and Parenteral Medications			
	Chapter 23: Pediatric Intravenous Medications			
November 30th	WORK DAY			
December 7th	Quiz #13: Ch. 22,23			
	Lab time will be used to review for final exam.  REVIEW FOR FINAL EXAM			
December 14-17 <sup>th</sup>	FINALS WEEK TBA			