

# PHRA – 1309: Pharmaceutical Calculations I

CRN #17183 – SPRING 2019

HCC Coleman Tower #TBA • Tuesdays & Thursdays # • 8am – 9:20am

3 hour lecture • 48 hours per semester • 16 weeks (Regular Term) • Face-to-Face (Web based/Lecture)

Professor	Professor Email	Professor Phone	Office Hours/Room at 1900 Pressler
Anson North	<a href="mailto:anson.north@hccs.edu">anson.north@hccs.edu</a>	N/A	Please email an on campus appointment proposal

## Course Description

Solving pharmaceutical calculation problems encountered in the preparation and distribution of drugs.

## Program Learning Outcomes (PSLOs)

1. Perform the calculations necessary to accurately prepare pharmaceutical products for dispensing within the pharmacy profession.
2. Model professional behavior and perform safely within the scope of the pharmacy technician profession.
3. Assemble prescriptions and prepare pharmaceutical products for dispensing in compliance with current legislation and established standards within the pharmacy profession.
4. Produce compounded sterile preparations using proper USP <797> aseptic technique.

## Course Prerequisites

Prerequisite(s):

1. Admission to the program
2. College level reading & writing
3. Eligible for MATH 0312
4. PHRA 1201
5. PHRA 1301

Frequent Prerequisite(s):

## Course Student Learning Outcomes (SLOs) and Learning Objectives

**SLO 1:** Outline the history of the pharmacy profession

1. Describe the origins of modern day pharmacy
2. Trace the development of drugs in the US

**SLO 2:** Describe the role of the pharmacy technician in a variety of settings (**ASHP Goal #42**)

1. Differentiate between, Retail, home healthcare, and institutional pharmacy settings
2. Describe the main duties and responsibilities for a pharmacy technician in Retail, home healthcare and institutional pharmacy.

## SCANS and/or Core Curriculum Competencies

**Solve problems using addition, subtraction, multiplication, and division of whole numbers, mixed numbers, fractions and decimals and percentages.**

Foundation Skills - Basic -Mathematics

**Demonstrate conversion from Roman numerals to Arabic numerals.**

Foundation Skills - Basic -Reading

Foundation Skills - Basic -Mathematics

**Solve pharmaceutical problems that require conversion between different systems for measurement including household, metric, apothecary, and avoirdupois.**

Foundation Skills - Thinking -Problem Solving

Foundation Skills - Thinking -Reasoning

**Calculate the proper dose for an adult or pediatric patient.**

Foundation Skills - Thinking -Problem Solving

**Calculate the correct flow rate for IV admixtures to deliver the appropriate amount of the drug and/or fluid prescribed.**

Foundation Skills - Thinking -Seeing Things in the Mind's Eye

Foundation Skills - Thinking -Reasoning

## Student Assessments & Assignments

Assessments:

### **Solve basic math problems and demonstrate conversion between various systems of measurement**

In-class discussions

Quizzes/Tests which may include: definitions, matching, multiple choice, true/false, short answer, brief essay

### **Perform advanced dosage calculations including alligations, body surface area, formula enlargement/reduction, and IV flow rate calculations.**

In-class discussions

Quizzes/Tests which may include: definitions, matching, multiple choice, true/false, short answer, brief essay.

#### **Assignments:**

### **Solve basic math problems and demonstrate conversion between various systems of measurement**

Discussions Lab Exercises

Homework Exercises Readings

### **Perform advanced dosage calculations including alligations, body surface area, formula enlargement/reduction, and IV flow rate calculations.**

Discussions Lab Exercises

Homework Exercises Readings

All quizzes, exams and the course final exam must be taken at the schedule time and scheduled day. You must complete the quiz, exams and the final exam within the class time allocated for the assessment. Students who arrive late will not have additional time in which to complete. If you arrive after any student has completed the quiz, exam or the final exam and left the room, you **WILL NOT** be allowed to take the quiz, exam or final exam and will be given a grade of zero "0".

The only exceptions to the above policy are hospitalization or a physician's statement prohibiting the student from taking the final exam. If a student misses the final exam due to an exception, the make-up for the final exam exception will be at the discretion of the instructor and must be taken within thirty (30) days after the end of the semester. Not being properly prepared will not be considered an exception.

All course assessments and assignments will be timed; therefore, students will be expected to complete them in a quick, efficient, and effective manner. Students must complete assignments, quizzes, and tests, etc. in the allotted time.

Students are expected complete all reading assignments before the beginning of the class period in which the reading is due. Additional readings/homework not listed on the course schedule may also be assigned. In addition, students are required to complete and turn in all homework assigned by the instructor. For assignments submitted in person, the assignments are due at the BEGINNING of the class period. Be sure to include (at the top of the submission) name, date, PHRA 1309, and name of assignment.

Quizzes, Assessments, Assignments, Final Exam (announced or unannounced) will be given periodically during the course. Only students who are present at the time the quiz, assessment, or final exam is distributed will be allowed to participate. Students late for class will not be allowed to take the quiz, assessment, or final exam. If a student is absent at that time a grade of "0" will be awarded. **There are no make-ups**

**Late assignments will not be accepted. There are no make-ups allowed.**

## Instructor and Requirements

#### **As your Instructor, it is my responsibility to:**

1. Provide the grading scale and detailed grading formula explaining how student grades are to be derived
2. Facilitate an effective learning environment through class activities, discussions, and lectures
3. Description of any special projects or assignments
4. Inform students of policies such as attendance, withdrawal, tardiness and make up
5. Provide the course outline and class calendar which will include a description of any special projects or assignments
6. Arrange to meet with individual students before and after class as required

#### **To be successful in this class, it is the student's responsibility to:**

1. Come to class regularly. You cannot learn if you are not present.
2. While in class, be PRESENT. It's not enough just to be in the room. Consciously attend to what is going on. Take part in exercises and discussions
3. Come to class prepared. The majority of what you learn takes place OUTSIDE OF CLASS. The information covered in class is only preparation for the learning you do in between sessions.
3. LISTEN! You were given two ears and one mouth. See how much you can learn from the ideas of others.
4. CONCENTRATE. Concentration is a SKILL. You are capable of doing it. You do it all the time. Find out what distracts you, and control it. Find out what helps you concentrate, and use it.
5. Develop INTERNAL MOTIVATION. Self-motivation is the key to success in any area of life. Studying and being present in class is no exception. The key to self-motivation is finding how each subject applies to you and your own world. Only YOU can self-motivate!

6. ALWAYS COME TO CLASS PREPARED! Unprepared, you cannot take advantage of what is happening in class, or add to learning experience. TAKE NOTES!
7. Ask QUESTIONS. Questions are a major link to real learning. Ask questions in class to clarify your understanding. The only bad question is the one that goes unasked. Your brain does not like unanswered questions. If you really ASK, your brain will look for answers.

## Other Course Policies

### Student User ID:

Your Eagle Online (Canvas) login user ID will be your HCC User ID (sometimes referred to as the “W” number). All HCC students have a unique User ID. If you do not know your User ID, use the direct link to access the Student Sign In page: <https://eagleonline.hccs.edu/login/ldap>

### HCC-Eagle Online Canvas Policies:

This course utilizes HCC Eagle online as the learning management system for PHRA 1309. Most course content for PHRA 1309 will be made available by the instructor on the course homepage. To facilitate success in this course, students should log-in and check their PHRA 1309 online course on a DAILY basis. For technical support, please visit: support <http://www.hccs.edu/online/technical-support/>.

### Internet Outage Policy:

If your instructor experiences an Internet service outage or a power outage that significantly affects the timing of distributing on-line assignments, or in any way appreciably hinders the professor in communicating with students, adjustments to due dates and/or grades will be made appropriately. If there is any official notification from HCCS concerning downtime of the BB Internet course server that would affect distributing assignments, or in any way appreciably hinders the professor in communicating with students, adjustments to due dates and/or grades will be made appropriately. This policy pertains only to the **professor's** INTERNET SERVICE or to **HCCS's** Internet course servers, not the students' computers or Internet access. No one at HCCS can monitor or verify outages at student sites and student access is not the responsibility of HCCS. Students are responsible for making sure that they have continuous, reliable Internet access in order to complete this course. It is YOUR responsibility to make sure that I have received any assignments that have been submitted online.

### Academic Honesty:

The HCCS Student Handbook states: “**Scholastic dishonesty includes, but is not limited to, cheating on a test, plagiarism, and collusion.**” Possible punishment may include a grade of 0 to F for the assignment, failure in the course, and/or recommendation for probation or dismissal from the college system.

A student who is academically dishonest is, by definition, not showing that the coursework has been learned, and that student is claiming an advantage not available to other students. The instructor is responsible for measuring each student's individual achievements and also for ensuring that all students compete on a level playing field. Thus, in our system, the instructor has teaching, grading, and enforcement roles. You are expected to be familiar with the University's Policy on Academic Honesty, found in the catalog. What that means is: If you are charged with an offense, pleading ignorance of the rules will not help you. Students are responsible for conducting themselves with honor and integrity in fulfilling course requirements. Penalties and/or disciplinary proceedings may be initiated by College System officials against a student accused of scholastic dishonesty. “Scholastic dishonesty”: includes, but is not limited to, cheating on a test, plagiarism, and collusion.

Cheating on a test includes:

1. Copying from another students' test paper;
2. Using materials not authorized by the person giving the test;
3. Collaborating with another student during a test without authorization;
4. Knowingly using, buying, selling, stealing, transporting, or soliciting in whole or part the contents of a test that has not been administered;
5. Bribing another person to obtain a test that is to be administered.

Plagiarism means the appropriation of another's work and the unacknowledged incorporation of that work in one's own written work offered for credit.

Collusion mean the unauthorized collaboration with another person in preparing written work offered for credit. Possible punishments for academic dishonesty may include a grade of 0 or F in the particular assignment, failure in the course, and/or recommendation for probation or dismissal from the College System. (See the Student Handbook)

The HCCS Student Handbook states: “...**mature, responsible adults**...**Students will not interfere with or disrupt the orderly educational process of the college system.**” Everyone is expected to display both courtesy and cooperation in the classroom. A student who either cannot or will not comply may not continue in the course.

As your instructor and as a student in this class, it is our shared responsibility to develop and maintain a positive learning environment for everyone. Your instructor takes this responsibility very seriously and will inform members of the class if their behavior makes it difficult for him/her to carry out this task. As a fellow learner, you are asked to respect the learning needs of your classmates and assist your instructor achieve this

critical goal.

### Student Attendance:

Students will be expected to attend all class lectures, lab meetings, and field trips. Any student who is absent for more than 2 class periods (lecture or lab) will be subject to administrative withdrawal from the course, without notification. Further, any student more than 15 minutes late for class will be counted as absent. Each tardy (15 minutes or less) will add up and count towards total hours absent (2 tardies = 1 absence). All absences will result in a deduction from the student's attendance/participation grade. Likewise, not staying for the entire class period or leaving early will also result in a deduction from the student's attendance/participation grade. Leaving class 15 minutes or more before the scheduled ending time will count towards total hours absent (2 early departures = 1 absence).

Poor attendance records tend to correlate with poor grades. If you miss any class, including the first week, you are responsible for all material missed. It is a good idea to find a friend or a buddy in class who would be willing to share class notes or discussion or be able to hand in paper if you unavoidably miss a class.

**Class attendance equals class success.**

All pharmacy technician students are required to call in to report any absences or tardies from lecture/lab. Students are required to call BEFORE the missed class is scheduled to begin. For example: A student who is going to be absent from a 7:30 a.m. lecture must call & leave a message reporting the absence before 7:30 a.m. Students who fail to call in or call in after the missed lecture was scheduled to begin will be subject to a reduction in their grade.

### Withdrawal Deadline:

If you feel that you cannot complete this course, you will need to withdraw from the course prior to the final date of withdrawal. Before, you withdraw from your course; please take the time to meet with the instructor to discuss why you feel it is necessary to do so. The instructor may be able to provide you with suggestions that would enable you to complete the course. Your success is very important. Beginning in fall 2007, the Texas Legislature passed a law limiting first time entering freshmen to no more than **SIX** total course withdrawals **throughout** their educational career in obtaining a certificate and/or degree.

If you do not withdraw before the deadline, you will receive the grade that you have on the last day of the semester as your final course grade.

**The withdrawal deadline for the Spring 2019 semester is Friday, February 19, 2019.** Please see calendars on <http://www.hccs.edu/student-experience/events-calendar/#/?i=2> for more detailed information.

### Use of Camera and/or Recording Devices:

As a student active in the learning community of this course, it is your responsibility to be respectful of the learning atmosphere in your classroom. To show respect of your fellow students and instructor, you will turn off your phone and other electronic devices, and will not use these devices in the classroom unless you receive permission from the instructor.

Use of recording devices, including camera phones and tape recorders, is prohibited in classrooms, laboratories, faculty offices, and other locations where instruction, tutoring, or testing occurs. Students with disabilities who need to use a recording device as a reasonable accommodation should contact the Office for Students with Disabilities for information regarding reasonable accommodations

### Early Alert:

Students will receive **early warning alerts** from each instructor and/or the Pharmacy Dept. Chair for not following program guidelines listed in: 1) The Student Handbook, 2) Pharmacy Program Syllabi, or any 3) Pharmacy Technician Program Handouts. Students who receive 2 or more early warning alerts are subject to dismissal without warning from individual courses and labs. The Pharmacy program can choose to dismiss any student who does not abide by the early warning alert directions.

If you plan on withdrawing from your class, you **MUST** contact a HCC counselor or your professor prior to withdrawing (dropping) the class for approval and this must be done **PRIOR** to the withdrawal deadline to receive a "W" on your transcript. \*\*Final withdrawal deadlines vary each semester and/or depending on class length, please visit the online registration calendars, HCC schedule of classes and catalog, any HCC Registration Office, or any HCC counselor to determine class withdrawal deadlines. **Remember to allow a 24-hour response time when communicating via email and/or telephone with a professor and/or counselor. Do not submit a request to discuss withdrawal options less than a day before the deadline.** If you do not withdraw before the deadline, you will receive the grade that you are making in the class as your final grade.

### Academic Interventions:

- Mandatory Meetings with Program Director/Course Instructors - Pharmacy technician instructors will refer any student who scores below a passing grade an exam or major skills assessment to meet with the Program Director. This REQUIRED meeting with the program director will be used to discuss the student's current academic status and develop an appropriate intervention plan. If the student

chooses not to meet with the program director, that student will not be allowed to take any additional assessments in the course from which they were referred until they meet with the director.

- Pharmacy technician instructors may also require a student have a mandatory meeting with them or refer the student to meet with the program director for a number of reasons, not only failing an exam. Other reasons for referral include, but are not limited to, poor overall academic performance, disruptive behavior, failure to maintain program safety, absences, etc. Failure to attend a mandatory meeting may result in dismissal from the pharmacy technician program.
- To help students avoid having to drop/withdraw from any class, HCC has instituted an Early Alert process by which your professor may “alert” you and HCC counselors that you might fail a class because of excessive absences and/or poor academic performance. It is your responsibility to visit with your professor or a counselor to learn about what, if any, HCC interventions might be available to assist you – online tutoring, child care, financial aid, job placement, etc. – to stay in class and improve your academic performance.
- Students will receive early warning alerts from each instructor and/or the Pharmacy Dept. Chair for not following program guidelines listed in: 1) The Student Handbook, 2) Pharmacy Program Syllabi, or any 3) Pharmacy Technician Program Handouts. Students who receive 2 or more early warning alerts are subject to dismissal without warning from individual courses and labs. The Pharmacy program can choose to dismiss any student who does not abide by the early warning alert directions.
- If you plan on withdrawing from your class, you MUST contact a HCC counselor or your professor prior to withdrawing (dropping) the class for approval and this must be done PRIOR to the withdrawal deadline to receive a “W” on your transcript. \*\*Final withdrawal deadlines vary each semester and/or depending on class length, please visit the online registration calendars, HCC schedule of classes and catalog, any HCC Registration Office, or any HCC counselor to determine class withdrawal deadlines. Remember to allow a 24-hour response time when communicating via email and/or telephone with a professor and/or counselor. Do not submit a request to discuss withdrawal options less than a day before the deadline. If you do not withdraw before the deadline, you will receive the grade that you are making in the class as your final grade.

### **Social Media and Social Networking:**

The HCC and the pharmacy technician program strive to protect the privacy of patients, students and college personnel. Before making any type of social media post regarding HCC, the pharmacy technician program and its faculty, staff &/or students, be sure you are aware and understand HCC policy regarding discrimination and harassment.

Students in health care programs must adhere to federal laws regarding HIPPA protected information and college policies regarding protection of privacy of the student’s patients. Students may not post any photos, videos, patient information, or any other data regarding patients or clinic affiliations on any type of Social Media or Social Networking site, including but not limited to Facebook, Instagram, Snap Chat, Twitter, or YouTube.

In an effort to protect this privacy, the pharmacy technician program prohibits the use of social media/networking at any time during their classroom and lab. Additionally, students are prohibited from making social media posts regarding any specific pharmacy technician program individuals including fellow HCC students, HCC faculty and staff, clinic supervisors, clinic co-workers, clinic employees or clinic patients. **Pharmacy technician students are PROHIBITED from taking and posting photographs/videos that include any HCC Coleman College Pharmacy Technician faculty, staff or student.**

### **Dropped due to Non-Payment:**

Any student who is dropped from any pharmacy technician course will be removed from class and will NOT be allowed to continue until the student has been re-instated. Currently, HCC policy does not allow a student to be re-instated into a class after they have been dropped for non-payment. In these instances, the student will not be able to continue in their class until the pharmacy technician course is offered again. It is the student’s responsibility to ensure that they maintain current course registration at all times.

### **Disruptive Student(s) Policy:**

Pharmacy Technician students who demonstrate disruptive and at-risk behaviors in the PHRA-1309 classroom & lab, aids others in compromising the learning environment, and are unable to provide safe and quality education to other students shall be subject to disciplinary action by the course instructor.

Disruptive behaviors include but are not limited to:

1. Persistent speaking in classroom/lab without permission
2. Engaging in activities not related to the class subject
3. Inappropriate use of electronic devices such as cell phones, tablets, laptops, cameras, camcorders, etc.
4. Sleeping in classroom/lab
5. Frequently entering classroom/lab late or leaving early



6. Eating/drinking in classroom/lab without permission
7. Disputing authority and arguing with faculty and other students in class and outside the class period
8. Threats of any kind
9. Harassment of any kind
10. Physical altercations
11. Destruction of property
12. Any type of behavior that puts the safety of the instructor or students in the classroom/lab in jeopardy

### Disciplinary Procedures:

When disruptive behavior occurs in a classroom or lab,

1. The instructor will warn the student verbally, explaining to the student(s) that his/her behavior or action is disruptive and that it must cease immediately or the student(s) will face removal from the classroom or lab.
2. If the student(s) fails to comply with the instructor's verbal warning, the student(s) will be asked to leave the classroom or lab immediately. Thereafter, the student(s) will be given a written warning explaining the behavior or action that lead to him/her being asked to leave the classroom/lab. If the student(s) refuses to leave as instructed, the instructor will summon the TMC police or the college police to remove the student(s).
3. If the disruptive behavior or action persists or escalates even after the written warning, the student(s) will be dismissed from the course immediately and he/she will be referred to program director for further disciplinary action. TMC police or the college police may be called to escort the student(s) off the premises.

## Course Grading

Your PHRA 1309 course grade will be based on the following:

<b>Lecture</b>	
Presentations / Homework	25%
Assignments	25%
Lecture Exams	25%
Final Assessment	25%
Total:	100%

**Online Gradebook:** The instructor utilizes a web-based grade tracking system (**CANVAS**) to record student grades. After a grade has been entered by the instructor, the student will receive an email stating that their grades have been updated. **Students will have access to their grades at all times and are expected to regularly check grades for accuracy.**

Students should check their grades a minimum of 1 to 2 times a week. Any student with a grading discrepancy should contact the instructor as soon as the discrepancy is discovered. When meeting with the instructor, the student must bring the original graded assignment to the meeting. Student grades can be accessed on CANAS.

Grading Scale:

- A = 100 - 90%
- B = 89 - 80%
- C = 79 - 70%
- F = 60 - 69%
- D = Below 60%

**Fx = (failure due to non -attendance).** FINAL GRADE OF FX: Students who stop attending class and do not withdraw themselves prior to the withdrawal deadline may either be dropped by their professor for excessive absences or be assigned the final grade of "FX" at the end of the semester. Students who stop attending classes will receive a grade of "FX", compared to an earned grade of "F" which is due to poor performance. Logging into a DE course without active participation is seen as non-attending. Please note that HCC will not disperse financial aid funding for students who have never attended class.

Students who receive financial aid but fail to attend class will be reported to the Department of Education and may have to pay back their aid. A grade of "FX" is treated exactly the same as a grade of "F" in terms of GPA, probation, suspension, and satisfactory academic progress.

**Attention: Any grade below a C is considered not passing and will prevent the student from progressing. In order to pass this course, the student must earn a grade of C or better.**

## Instructional Materials

1. This course will utilize an open educational resource math textbook which will be posted online on the PHRA 1309 Canvas Online homepage.
2. A Non-programmable calculator.
3. "Generic-Brand Comparison Handbook", Publisher: Mylan/UDL Laboratories (optional)
4. Basic non-programmable Calculator - no cell phones, PDA's, etc. allowed
5. Small Spiral notepad (pocket size) for lab notes & 1 1/2 - 2" three-ring binder for lab
6. Active e-mail address

NOTE: Students WILL be REQUIRED to bring all necessary materials/supplies (such as pens/pencils, calculators, handouts, books, etc.) with them to all lecture and lab periods. Students without the necessary materials/supplies will not be allowed to participate in that particular lab session. Students will receive a "0" on any missed lab assignment/lab/quiz/test and will not be allowed to make up the missed item due to not being properly prepared with the necessary materials/supplies.

<http://www.hccs.edu/about-hcc/procedures/student-rights-policies--procedures/>

### **Health Science Program Requirements:**

Texas HB 1508 requires the following information be given to students. If you are applying for admission to a program that prepares an individual for an initial occupational license or certification and/or if you later decide to change to a program that prepares you for an initial occupational license or certification, in accordance with state law, please be advised of the following:

1. An individual who has been charged or convicted of an offense or who is on probation may not be eligible for issuance of an occupational license or certification upon completion of the educational program.
2. It is the responsibility of the individual to immediately report to the program any change in status that would affect that individual's eligibility to apply for a license or certification.
3. Local, state or national licensing and certification authorities may issue additional guidelines related to criminal history. Applicants should contact their respective licensing or certification authority for more details.

Most health care programs require all students, admitted to the program, to submit to a national background check which may include fingerprinting. Applicants are encouraged to review all applicable eligibility requirements related to the respective occupational license or certification. Questions related to eligibility requirements should be directed to the individual program and applicable licensing or certification authority.

### **3-Repeaters:**

The State of Texas encourages students to complete college without having to repeat failed classes. To increase student success, students who repeat the same course more than twice, are required to pay extra tuition. The purpose of this extra tuition fee is to encourage students to pass their courses and to graduate. Effective fall 2006, HCC will charge a higher tuition rate to students registering the third or subsequent time for a course. If you are considering course withdrawal because you are not earning passing grades, confer with your instructor/counselor as early as possible about your study habits, reading and writing homework, test taking skills, attendance, course participation, and opportunities for tutoring or other assistance that might be available

### **Ability Services (ADA):**

HCCS recognizes its responsibility to not discriminate against anyone who has a documented disability that substantially limits one or more major life activities; has a record of such impairment; or is regarded as having an impairment. Specific policies enable students with documented disabilities who are otherwise qualified, to request accommodations, which would allow them equal access to the College under Section 504 of the Rehabilitation Act of 1973, and under the Americans with Disabilities Act of 1990.

Obtaining reasonable accommodations is an interactive process. It begins with the student's disclosure of his/her disability directly with the ADA Counselor in Ability Services, which is located in room 101 of the Learning Success Center (LSC). The ADA Counselor may also be reached by phone at (713) 718-7376.

### **Discrimination, Sexual Harassment, Sexual Misconduct, Pregnancy and Parental Status:**

HCC prohibits discrimination in its educational programs or activities on the basis of race, color, national origin, age, religion, disability, sex or gender-including pregnancy or parental status, gender identity, gender expression, sexual orientation, Veteran status or genetic information. Furthermore, HCC prohibits all forms of sexual misconduct, including but not limited to, sexual harassment, rape, sexual assault, sexual exploitation, domestic violence, interpersonal violence, dating violence and stalking.

HCC will comply with state and federal laws such Title IX of the Education Amendments of 1972, Title VI and Title VII of the Civil Rights Act, the Americans with Disabilities Act, Section 504 of the Rehabilitation Act of 1973, the Vietnam Era Veterans Readjustment and Rights Act, and other similar laws that prohibit discrimination.

Any student that requires an academic accommodation due to pregnancy and pregnancy related conditions (i.e., pregnancy, childbirth, false pregnancy, termination of pregnancy, conditions arising in connection with pregnancy, and recovery from any of these conditions) or parental status, should consult with an [Abilities Services Counselor](#) to initiate an academic accommodation request. An academic accommodation may include, but is not limited to, receiving a grade of an "I" (Incomplete) on a course, an official withdrawal from a course, voluntarily leave of absence from the program with a conditional return, or the opportunity to resume enrollment at a later time without being subjected to a new admission process.

Students may report an incident of discrimination, sexual misconduct, or discrimination based on pregnancy or parental status to the Title IX Coordinator listed below. Individuals may also report incidents [online](#) or to any [Title IX Contact](#).

Title IX Coordinator  
James David Cross, Director of EEO/Compliance  
Office of Institutional Equity

3100 Main, Suite 702  
Houston, Texas 77002  
713.718.8271  
[Institutional.equity@hccs.edu](mailto:Institutional.equity@hccs.edu)

For more information and resources related to HCC's non-discrimination policies and Title IX, visit: <http://www.hccs.edu/departments/institutional-equity/>

### **HCCS Student Services:**

To help students avoid having to drop/withdraw from any class, HCC has instituted an Early Alert process by which your professor may "alert" you and HCC counselors that you might fail a class because of excessive absences and/or poor academic performance. It is your responsibility to visit with your professor or a counselor to learn about what, if any, HCC interventions might be available to assist you – online tutoring, child care, financial aid, job placement, etc. – to stay in class and improve your academic performance. Students will receive early warning alerts from each instructor and/or the Pharmacy Program Director for unsatisfactory academic performance or for not following program guidelines listed in: 1) The HCC Student Handbook, 2) Pharmacy Program Handbook, or any 3) Pharmacy Technician Program Syllabi. Students who receive 2 or more early warning alerts are subject to dismissal without warning from individual courses and labs. The Pharmacy program can choose to dismiss any student who does not abide by the early warning alert directions.

### **EGLS3 -- Evaluation for Greater Learning Student Survey System:**

At Houston Community College, professors believe that thoughtful student feedback is necessary to improve teaching and learning. During a designated time near the end of the term, you will be asked to answer a short online survey of research-based questions related to instruction. The anonymous results of the survey will be made available to your professors and department chairs for continual improvement of instruction. Look for the survey as part of the Houston Community College Student System online near the end of the term.

### **Student assistance:**

Any student who faces challenges securing their food or housing and believes this may affect their performance in the course is urged to contact the Dean of Students for support. Furthermore, please notify the professor if you are comfortable in doing so.

### **Campus Carry Policy:**

At HCC the safety of our students, staff, and faculty is our first priority. As of August 1, 2017, Houston Community College is subject to the Campus Carry Law (SB11 2015). For more information, visit the HCC Campus Carry web page at <http://www.hccs.edu/departments/police/campus-carry/campus-carry-and-open-carry-faqs/>

**The instructor of PHRA 1309 reserves the right to make changes to this syllabus at their discretion**





**Now assisting Pharmacy Mathematics**  
(PHRA 1309, PHRA 1247)

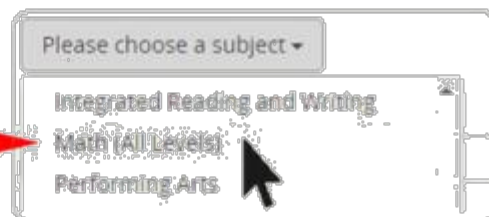
[www.hccs.upswing.io](http://www.hccs.upswing.io)

To access service: Go to our website. Login using your student ID (W number) and HCC student email password. It's that easy!

Once logged in,

- click "Upload an assignment for review"
- fill out the form\*
- click "Submit"
- expect a reply within 24 hours, often sooner

\*For questions about Pharmacy Math, choose "Math (All Levels)" for your subject.



*Some friendly advice from our math tutors...*

"Please help us give you targeted feedback by attaching a picture of your handwritten work. Thank you!"

**Not just math!!**

Upswing has a vast array of subject area tutoring services...

English 1301/1302; ESOL; Integrated Reading & Writing; Creative Writing; Student Success; Teacher Education; Psychology; Sophomore Literature; History; Art; Business; Humanities; Government; Economics; Philosophy; Chemistry; Human Services/Social Work; Sociology; Physics; Geology; Technical Writing; Geography



**PHRA 1309 – Pharmaceutical Mathematics I**  
**Course Calendar – CRN #17183 Spring – 2019; 16 Weeks**

**Calendar Legend**

OMT:	Online Math Textbook (Canvas Online)
WS:	Worksheet – most worksheets are part of the online math textbook and some are passed out during the lecture course.
Online:	Can be found on Canvas online. Student is responsible for printing, completing, & bringing to class on the day it is due.

Dates	Quiz	Lesson	Reading	Homework
Jan 15		<b>Lesson:</b> Numerical Systems (Roman Numerals), Fractions & Decimals Conversion Factors Ratio/Proportion Percentage	<b>Reading:</b>	<b>Homework:</b> Worksheet 1
Jan 17	<b>Quiz:</b> Roman Numerals, rounding, SIMPLE calculations – NO CALCULATORS!	<b>Lesson:</b> Basic Medication Calculations Ratios/Proportions Rounding Military Time	<b>Reading:</b> Ratio/Proportion Percentage & Basic Medication Calculations	<b>Homework:</b> DECIMAL WORKSHEET
Jan 22	<b>Quiz:</b> Rounding, SIMPLE calculations – NO CALCULATORS!	<b>Lesson:</b> Basic Medication Calculations & Days' Supply Ratios/Proportions Rounding Military Time	<b>Reading:</b> Basic Medication Calculations & Days' Supply  <b>CHAPTER 7!!!*****</b>	<b>Homework:</b> Worksheet 1
Jan 24	<b>Quiz:</b> Roman Numerals, Rounding, Simple Calculations, Time conversions – NO CALCULATORS!	<b>Lesson:</b> Basic Medication Calculations & Days' Supply Simple Algebra Units of Measure	<b>Reading:</b> <b>CHAPTER 7!!!*****</b>	<b>Homework:</b> DECIMAL WORKSHEET & MILITARY TIME
Jan 29	<b>Quiz:</b> Roman Numerals, Rounding, Simple Calculations, Time conversions, Ratios/Proportions, Simple drug calculations	<b>Lesson:</b> Basic Medication Calculations & Days' Supply Reduced Ratios Drug Labels	<b>Reading:</b> <b>CHAPTER 7!!!*****</b>	<b>Homework:</b> MILITARY TIME & MILITARY/STANDARD TIME Worksheet
Jan 31	<b>Quiz:</b> Drug Labels	<b>Lesson:</b> Basic Medication Calculations & Days' Supply Drug labels Conversion factors	<b>Reading:</b> Basic Medication Calculations & Days' Supply	<b>Homework:</b> Understanding Drug Labels
Feb 5	<b>Quiz:</b> Roman Numerals, fractions, Ration & Proportions, Drug Labels, Rx calculations	<b>Lesson:</b> <b>REVIEW FOR EXAM #1</b> Basic Medication Calculations & Days' Supply	<b>Reading:</b> Basic Medication Calculations & Days' Supply	<b>Homework:</b> MILITARY/STANDARD TIME Worksheet

Dates	Quiz	Lesson	Reading	Homework
Feb 7	<b>Exam #1</b> <b>Numerical Systems used in Pharmacy, Fractions &amp; Decimals, Conversion Factors, ration/Proportion, &amp; Percent.</b>			
Feb 12	<b>Exam #1 Follow Up &amp; Review</b>			
Feb 14	<b>Quiz:</b> TBA (yes there will be always a quiz)	<b>Lesson:</b> Basic Medication Calculations, Days' Supply, & Dosage Calculations Based on Body Weight	<b>Reading:</b> Dosage Calculations Based on Body Weight	<b>Homework:</b> Worksheet Day's Supply 1
Feb 19	<b>Quiz:</b> Fractions, Ration & Proportions, Drug Labels, Rx calculations	<b>Lesson:</b> Basic Medication Calculations, Days' Supply, & Dosage Calculations Based on Body Weight	<b>Reading:</b> Dosage Calculations Based on Body Weight	<b>Homework:</b> Understanding Drug Labels
Feb 21	<b>Quiz:</b> TBA (yes there will be always a quiz)	<b>Lesson:</b> Basic Medication Calculations, Days' Supply, Dosage Calculations Based on Body Weight	<b>Reading:</b>	<b>Homework:</b> Worksheet Day's Supply 1 Worksheet Day's Supply 2
Feb 26	<b>Quiz:</b> TBA (yes there will be always a quiz)	<b>Lesson:</b> Basic Medication Calculations, Days' Supply, Dosage Calculations Based on Body Weight	<b>Reading:</b>	<b>Homework:</b> Solid Drug Dosages/Day's Supply/RX Qty Worksheet 2
Feb 28	<b>Quiz:</b> Rx calculations, Day's Supply, Rx Qty	<b>Lesson:</b> Suspensions/Inhalers Calculations	<b>Reading:</b>	<b>Homework:</b> Worksheet Day's Supply 2 Worksheet #4
Mar 5	<b>Quiz:</b> TBA (yes there will be always a quiz)	<b>Lesson:</b> Day's Supply BSA Calculations Pediatric Dosages	<b>Reading:</b>	<b>Homework:</b> Solid Drug/Day's Supply/RX Qty Worksheet 2
Mar 7	<b>Quiz:</b> TBA (yes there will be always a quiz)	<b>Lesson:</b> BSA Calculations & Pediatric Doses	<b>Reading:</b> BSA Calculations Pediatric Doses	<b>Homework:</b> Pharmacy Worksheet
Mar 12	<b>Quiz:</b> TBA (yes there will be always a quiz)	<b>Lesson:</b> BSA Calculations & Pediatric Doses	<b>Reading:</b> BSA Calculations Pediatric Doses	<b>Homework:</b> Worksheet #4
Mar 14	<b>Quiz:</b> Rx calculations, Day's Supply, Rx Qty, Clark/Fried/Young & BSA	<b>Lesson:</b> BSA Calculations & Pediatric Doses, Single Dose vs. Daily Dosing	<b>Reading:</b> BSA Calculations & Pediatric Doses	<b>Homework:</b> Pharmacy Worksheet Clark/Fried/Young & BSA

Dates	Quiz	Lesson	Reading	Homework
Mar 17-24 *Spring Break No Class*				
Mar 26	Quiz: TBA (yes there will be always a quiz)	Lesson: BSA Calculations & Pediatric Doses	Reading: BSA Calculations & Pediatric Doses	Homework: Clark/Fried/Young & BSA
Mar 28	Quiz: TBA (yes there will be always a quiz)	Lesson: Drug labels Review Rx Pricing	Reading:	Homework: Pediatric Dosages &
Apr 2	Quiz: TBA (yes there will be always a quiz)	Lesson:	Reading:	Homework: Worksheet #7 Worksheet #6 Pediatric Dosages
Apr 4	Quiz: TBA (yes there will be always a quiz)	Lesson: Mg/Kg Dosing mMol/mEq dosing	Reading:	Homework: Worksheet #7
Apr 9	Quiz: TBA (yes there will be always a quiz)	Lesson: Mg/Kg Dosing vs. BSA Dosing Rx Pricing	Reading:	Homework: Worksheet Rx pricing
Apr 11	Quiz: TBA (yes there will be always a quiz)	Lesson: Temperature Conversions	Reading:	Homework: Temp. conversions
Apr 16	Quiz: TBA (yes there will be always a quiz)	Lesson: IV-Rate & Infusion Rates	Reading:	Homework: IV Rate

Apr 18	Quiz: TBA (yes there will be always a quiz)	Lesson: Reconstitution of Oral Drugs, Reading Powder	Reading:	Homework: Reconstituting Drug Worksheet
Apr 23	<b>Exam #2</b> Pediatric Dosages, BSA/Body Weight, Military Time, Rx Pricing, Reconstitution of Oral Drugs, Reading Powder IV Vials			
Apr 25	Exam #2 Follow Up & Review			
Apr 30	Final Exam Review/Practice			
Mar 2	TBA	TBA	TBA	TBA
May 7	<b>Comprehensive Final Exam</b> <b>Ration/Proportion &amp; Percent; Basic Medication Calculations: Drug Dosage Calculations (IV &amp; Solid drugs), Days' Supply &amp; Rx Quantities; Pediatric Dosages - Clark/Fried/Young Formula, mg/kg &amp; BSA; Military Time; Rx Pricing; Reconstitution of Oral Drugs; Reading Powder IV Vials</b>  <u>Please plan on leaving your residence early, arrive early and don't be late.</u>  You will need a basic math calculator, NOT A PROGRAMMABLE CALCULATOR (YOU CANNOT USE YOUR CELL PHONE/I-PHONE/I-TOUCH/I-POD AS A CALCULATOR).  No backpacks/purses are allowed in the classroom. Your backpack/purse needs to be either in the locker or in your car.			

**This course calendar is tentative and is subject to change at the Instructor's discretion. In addition, supplemental readings & assignments not listed on the calendar may be required throughout the semester.**