

Pharmaceutical Mathematics I (PHRA 1209)

**Credit: 2 semester credit hours (2 hours lecture)**

**MODE OF INSTRUCTION**

Face to Face

**PREREQUISITE/CO-REQUISITE:**

Complete the TSI Assessment Tests with 343/Mathematics, 347/Reading, and 357/4/Writing

**COURSE DESCRIPTION**

Pharmaceutical mathematics including reading, interpreting, and solving calculation problems encountered in the preparation and distribution of drugs.

**COURSE OBJECTIVES**

Upon completion of this course, the student will be able to

1. Solve basic math problems and demonstrate conversion between various systems of measurement including temperature, household, metric, apothecary, and avoirdupois.
2. Develop pharmacy literacy.
3. Calculate using ratio and proportions.
4. Perform adult and pediatric dosage calculations.

**INSTRUCTOR CONTACT INFORMATION**

Instructor: S.J. Lewis, M. Ed., BGS, RPhT, CPhT

Email: [sjlewis@lit.edu](mailto:sjlewis@lit.edu)

Office Phone: 409-257-0060

Office Location: 3871 Stagg Drive, Suite 194, Beaumont, Texas 77701

Office Hours: Wednesdays 10 am -2 pm  
Fridays 10 am – 12 pm or by appointment

**REQUIRED TEXTBOOK AND MATERIALS**

- Pharmacy Calculations, 6th Edition  
Author(s): Mary F. Powers, David R. Bright  
Morton Publishing  
ISBN-13: 978-1-61731-897-9
- Pencil(s) with erasers
- Basic Calculator (Scientific calculators and calculators with complex functions will not be allowed on exams.)



**LAMAR INSTITUTE  
OF TECHNOLOGY**

## **ATTENDANCE POLICY**

Attendance Policy: Class attendance is important to ensure that a student receives the knowledge and skills necessary to be successful in the Pharmacy Technology program. Students are expected to be in class on time. When it becomes necessary to miss a session, it is the responsibility of the student to contact the instructor and to inquire about assignments. I will not distribute the PowerPoints missed. The student must get the notes from a classmate or access Blackboard for retrieval. If a major test is missed, the test will be administered at the first day the student returns to class or at a time designated by the instructor. Make-up exams will only be administered for excused absences ONLY.

## **DROP POLICY**

If you wish to drop a course, you are responsible for initiating and completing the drop process. If you stop coming to class and fail to drop the course, you will earn an “F” in the course.

## **COURSE CALENDAR**

| <b>Week</b> | <b>Assignment Name<br/>and Readings</b>   | <b>Due Date</b>        |
|-------------|---|------------------------|
| <b>1</b>    | <b>Syllabus and Class<br/>Introduction</b>  | <b>Monday, 8/21/23</b> |
| <b>2</b>    | <b>Chapter 1: Roman Numerals<br/>Chapter 2: Numerators,<br/>Denominators, and<br/>Reciprocals</b>               | <b>Monday, 8/28/23</b> |
| <b>3</b>    | <b>Chapter 3: Adding and<br/>Subtracting Fractions<br/>Chapter 4: Multiplying<br/>and Dividing Fractions</b>    | <b>Monday, 9/4/23</b>  |
| <b>4</b>    | <b>Chapter 5: Rounding Decimals<br/>Chapter 7: Percents, Ratios to<br/>Percents, and Ratios to<br/>Decimals</b> | <b>Monday, 9/11/23</b> |
| <b>5</b>    | <b>Exam #1: Chapters 1-5 and 7</b>  | <b>Monday, 9/18/23</b> |
| <b>6</b>    | <b>DEA Numbers</b>  | <b>Monday, 9/25/23</b> |

|    |   |                           |
|----|---|---------------------------|
| 7  | <b>Chapter 6: Using Ratio and Proportion or Dimensional Analysis to Solve Pharmacy Calculations</b>                       | <b>Monday, 10/2/2023</b>  |
| 8  | <b>Chapter 6: Continued...<br/>Chapter 8: Interpreting Prescriptions and Converting Household and Metric Measurements</b> | <b>Monday, 10/9/2023</b>  |
| 9  | <b>Chapter 8: Continued...<br/>Chapter 9: Converting Apothecary and Metric Measurements</b>                               | <b>Monday, 10/16/2023</b> |
| 10 | <b>Chapter 9: Continued</b>   | <b>Monday, 10/23/2023</b> |
| 11 | <b>Exam #2: Chapters 6-9</b>  | <b>Monday, 10/30/2023</b> |
| 12 | <b>Chapter 10: Converting Between the Different Temperature Scales and Calculations with Density and Specific Gravity</b> | <b>Monday, 11/6/2023</b>  |
| 13 | <b>Chapter 11: Calculations for Compounding</b>   | <b>Monday, 11/13/2023</b> |
| 14 | <b>Chapter 12: Calculations for Days Supply<br/>Chapter 13: Calculations for Days Supply of Insulin</b>                   | <b>Monday, 11/20/2023</b> |
| 15 | <b>Final Exam Review</b>  | <b>Monday, 11/27/2023</b> |
| 16 | <b>Final Exam</b>   | <b>Monday, 12/4/2023</b>  |

## **COURSE EVALUATION**

Final grades will be calculated according to the following criteria:

- Exams 30%
- Final Exam 20%
- Homework 40%
- Attendance/Participation 10%

## **GRADE SCALE**

|        |   |
|--------|---|
| 90-100 | A |
| 80-89  | B |
| 70-79  | C |
| 60-69  | D |
| 0-59   | F |

## **TECHNICAL REQUIREMENTS**

The latest technical requirements, including hardware, compatible browsers, operating systems, etc. can be online at <https://lit.edu/online-learning/online-learning-minimum-computer-requirements>. A functional broadband internet connection, such as DSL, cable, or WiFi is necessary to maximize the use of online technology and resources.

## **DISABILITIES STATEMENT**

The Americans with Disabilities Act of 1990 and Section 504 of the Rehabilitation Act of 1973 are federal anti-discrimination statutes that provide comprehensive civil rights for persons with disabilities. LIT provides reasonable accommodations as defined in the Rehabilitation Act of 1973, Section 504 and the Americans with Disabilities Act of 1990, to students with a diagnosed disability. The Special Populations Office is located in the Eagles' Nest Room 129 and helps foster a supportive and inclusive educational environment by maintaining partnerships with faculty and staff, as well as promoting awareness among all members of the Lamar Institute of Technology community. If you believe you have a disability requiring an accommodation, please contact the Special Populations Coordinator at (409)-951-5708 or email [specialpopulations@lit.edu](mailto:specialpopulations@lit.edu). You may also visit the online resource at [Special Populations - Lamar Institute of Technology \(lit.edu\)](#).

## **STUDENT CODE OF CONDUCT STATEMENT**

It is the responsibility of all registered Lamar Institute of Technology students to access, read, understand and abide by all published policies, regulations, and procedures listed in the *LIT Catalog and Student Handbook*. The *LIT Catalog and Student Handbook* may be accessed at [www.lit.edu](http://www.lit.edu). Please note that the online version of the *LIT Catalog and Student Handbook* supersedes all other versions of the same document.

## **STARFISH**

LIT utilizes an early alert system called Starfish. Throughout the semester, you may receive emails from Starfish regarding your course grades, attendance, or academic performance. Faculty members record student attendance, raise flags and kudos to express concern or give praise, and

you can make an appointment with faculty and staff all through the Starfish home page. You can also login to Blackboard or MyLIT and click on the Starfish link to view academic alerts and detailed information. It is the responsibility of the student to pay attention to these emails and information in Starfish and consider taking the recommended actions. Starfish is used to help you be a successful student at LIT.

### **ADDITIONAL COURSE POLICIES/INFORMATION**

- Do not turn in any assignment to be graded in INK. It will be returned ungraded and considered as late. \*Remember, NO late assignments will be accepted.
- Students must provide their own textbooks, writing instruments, and other necessary supplies for classes.
- Students must respect one another and all faculty.
- Internet Usage – Students are expected to use proper net etiquette while participating in course emails, assignment submissions, and online discussions.
- No cheating of any kind will be tolerated. Students caught cheating or helping someone to cheat can and will be removed from the class for the semester. Cheating can result in expulsion from LIT.
- All exams will be taken on the scheduled dates. If a test is missed due to an emergency situation, the student will have one week to make it up; otherwise a grade of “0” will be assigned. The instructor MUST be contacted to receive prior approval to take the exam late.
- All assignments are due when stated with no exceptions and no LATE assignments will be accepted unless proper documentation is provided.
- Students are expected to follow the Lamar Institute of Technology Code of Conduct and Disciplinary Policy.
- The instructor will respond to e-mail and voice mail communication within 24 hours Monday through Friday. Assignment grades will be published within 1 week.
- Demonstrate a positive professional demeanor (behavior, attitude, etc.) throughout this course. Keep any negative comments and remarks to yourself.
- Respectfully participate in class discussions when appropriate.
- Demonstrate leadership qualities by initiating study groups with fellow classmates, distributing contact information to fellow group members so that others may contact you, being prepared for class by having assignments ready, reading assignments, and/or study questions completed prior to class.
- Give your full and undivided attention to the instructor during class. This means no side conversations, excessive talking in class, no chatting on cell phones or text messaging, loud yawning, gum popping, etc. \*\*\*In the case of disruptive behavior, the instructor reserves the right to ask you to leave the classroom. The instructor also reserves the right NOT to allow you back in the class.