

MDCA 1448

Pharmacology & Administration of Medications

Fall 2026 1A1



INSTRUCTOR CONTACT INFORMATION

Instructor: TAMANNA ASSIH

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Office Phone: 409-241-7502

Office Location: WATC 332

Office Hours: Please refer to Starfish

CREDIT

SCH 4 (3 hours lecture, 3 hours lab)

MODE OF INSTRUCTION

Face to Face/ online

PREREQUISITE/CO-REQUISITE

HPRS

COURSE DESCRIPTION

Instruction in concepts and application of pharmacological principles. Focuses on drug classifications, principles and procedures of medication administration, mathematical systems and conversions, calculation of drug problems, and medico-legal responsibilities of the medical assistant.

COURSE OBJECTIVES

Prepare, administer, and document oral and percutaneous medications; calculate drug dosages for administration by standard routes for adult and pediatric patients; demonstrate inventory handling and storage; and adhere to governmental health care guidelines and biohazard protocols.

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

- Identify the medical assistant's role in pharmacology and medication administration
- Recognize major drug categories, drug names, and their actions
- Use credible sources to obtain drug information
- Understand legal requirements including DEA registration and controlled substances

- Perform dosage calculations accurately, including conversions and body weight/surface area calculations
- Demonstrate procedures for administering oral and parenteral medications
- Understand special considerations for pediatric, pregnant, breastfeeding, and geriatric patients
- Educate patients on medication use and document medication administration accurately

REQUIRED TEXTBOOK AND MATERIALS

- Medical Assisting: Administrative and Clinical Procedures.
ISBN with the Connect access is 9781266765377
- **Access to McGraw Hill Connect is mandatory**
- **Proctorio Chrome Lockdown Browser is mandatory to take any tests in Connect**
- Access to LIT's Blackboard LMS is mandatory

ATTENDANCE POLICY

1. **There will be no make-up assignments/tests for any online portion of this class. NO EXCEPTIONS.**
2. Be aware of the lab attendance policy. It is your responsibility to ensure that you sign-in weekly. **NO EXCEPTIONS.**
 - Class attendance is crucial. The student must remain in lab until class is dismissed. Leaving the lab early will result in an absence.
 - Laboratory – On the third absence, the student will be dropped one letter grade from his/her final semester average. On the fourth absence, the student will receive an F for the semester. Remember this lab class is only one day per week.
3. Lab attendance is MANDATORY and will be taken every week at the beginning of class. If you are tardy, it is the student's responsibility to inform the instructor to ensure that you are marked present.
4. Class starts promptly on time and tardiness of more than 5 minutes will be noted. For every 3 late occurrences, an absence will be recorded.
5. If you are absent from lab, it is your responsibility to contact your instructor and provide documentation of the absence. Several lab assignments/daily grades are participation grades; therefore, if you are absent, a participation grade cannot be earned. Absences without approved documentation prior to class time are not eligible for a makeup assignment.
6. At the instructor's discretion, any missed lab test will be taken the next class day and documentation must be provided in-person. You will need to contact the instructor before class to plan for the test to be made up. You will also be responsible for finding a student to volunteer to be your patient if a patient is required for that test.

COURSE CALENDAR

	TOPIC	READINGS	ASSIGNMENTS Due
Module 1	Introduction to Pharmacology and the Medical Assisting Role	Ch 1, 51	Sep 3rd
Module 2	Drug Classifications and Names	Ch 2, 51	Sep 10th
Module 3	Sources of Drug Information and Legal Aspects (DEA, Controlled Substances)	Ch 3, 51	Sep 17th
Module 4	Medication Orders, Abbreviations, and Symbols	Ch 4, 51	Sep 24th
Module 5	Dosage Calculations	Ch 6, 7, 51, 52	Oct 1 st
Module 6	Midterm		Oct 8 th
Module 7	Rights of Drug Administration and Medication Safety	Ch 53	Oct 15th
Module 8	Drug Routes	Ch 9, 53	Oct 22 nd
Module 9	Oral Medication Administration Procedures	Ch 10, 53	Oct 29th
Module 10	Administration by Injection	Ch 11, 53	Nov 5th
Module 11	Parenteral Medication Administration by Other Routes	Ch 12, 53	Nov 12th

Module 12	Special Patient Considerations (Pediatric, Pregnant, Geriatric)	Ch 13, 53	Nov 19th
Module 13	Patient Education and Documentation of Medication Administration	Ch 14, 53	Nov 29th
Module 14	Review Skills		Dec 3rd
Module 15	Finals		Dec 10th

COURSE EVALUATION

Final grades will be calculated according to the following criteria:

GRADE BREAKDOWN

- Lecture 60%
Homework/Quiz- 30%
Midterm- 15%
Final 15%
- Lab 40%
Skills Fair Group Project 10%
Group Simulation Video 10%
Route Master Poster Creation 5%
Administration Skills Test 15%

GRADE SCALE

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

TECHNICAL REQUIREMENTS

For the latest technical requirements, including hardware, compatible browsers, operating systems, etc., review the Minimum Computer and Equipment Requirements on the LIT Online Experience page. 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. 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. Please note that the online version of the LIT Catalog and Student Handbook supersedes all other versions of the same document.

ARTIFICIAL INTELLIGENCE STATEMENT

Lamar Institute of Technology (LIT) recognizes the recent advances in Artificial Intelligence (AI), such as ChatGPT, have changed the landscape of many career disciplines and will impact many students in and out of the classroom. To prepare students for their selected careers, LIT desires to guide students in the ethical use of these technologies and incorporate AI into classroom instruction and assignments appropriately. Appropriate use of these technologies is at the discretion of the instructor. Students are reminded that all submitted work must be their own original work unless otherwise specified. Students should contact their instructor with any questions as to the acceptable use of AI/ChatGPT in their courses.

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

These policies are designed to promote fairness, accountability, and academic success. Students are expected to read and follow all guidelines outlined in the LIT Catalog and Student Handbook.

1. No food, drinks, or use of tobacco products in class.
2. Cellphones, MP3 players, tablets, notebook/netbook(s) and any other electronic devices must be turned off while in class.
3. Do not bring children to class.
4. No late assignments will be accepted. Any assignment submitted after the Blackboard cut-off time will result in a '0'. Make-up work is at the discretion of the instructor and will only be granted with excused absences; students must initiate the request in person and not via email.
5. Tests/ Exams: Students that miss a test are not allowed to make up the test. Students that miss a test will receive a grade of '0'.
6. If you wish to drop a course, the student is 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.
7. A grade of 'C' or better must be earned in this course for credit toward degree Requirement.
8. All assignments will be completed using Blackboard/ Connect. Assignment may not be submitted via email.
9. Attendance: Students should be present and punctual for all lab classes. It is your responsibility to sign in beginning of each class to mark attendance. Any missed sign-up will result in an absence. Any assignment missed due to absence will result in a zero.
10. Tardiness: If tardy, enter quietly and do not disturb the class. Students that are tardy or miss a class are responsible for all work and/or discussion missed. The student is responsible for obtaining missed material from a classmate. Do not expect your instructor to repeat a lecture & do not interrupt your instructor.
11. Do not talk, type, or print while the instructor is talking to the class or when a student is asking a question that pertains to the class.
12. Refrain from "surfing" the Web during class, unless directed by your instructor.