

TEMA 1050 - Pharmacology (3 Credits)

Course Description

The Pharmacology course familiarizes the student with pharmaceuticals. Instruction includes commonly prescribed medications, trade and generic names, mode of action, side effects, and usual doses. Concepts covered include the proper administration of oral, injectable, and non-injectable medications. There will be a review of the math skills required to perform medical math conversions and dosage calculations.

Course Objectives

- Demonstrate calculation of basic mathematical concepts and units of measurement as related to the ambulatory care setting.
 - Describe commonly prescribed medications uses, names, classifications, and risks.
 - List and explain the rights of medication administration.
 - Identify and interpret common medication abbreviations.
 - Demonstrate the proper handling and administration of prescriptions and medications.
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Course Outline

- Pharmacology Fundamentals
- Measurement Systems and Dosage Calculations
- Administering Oral and Noninjectable Medications
- Administering Injections and Immunizations

Assignments and Assessments

Welcome
Orientation
Syllabus and Course Agreement
Drug Card Guidelines
Course Timeline
Read: Chapter 49 Pharmacology Fundamentals
PowerPoints: Chapter 49 Pharmacology Fundamentals
Pharmacology Fundamentals Concept Check
Check Your Understanding: Chapter 49 Pharmacology Fundamentals
Case Study: Identifying Medications (Chapter 49 Pharmacology Fundamentals)
Video Quiz: DEA & Controlled Substances (Chapter 49 Pharmacology Fundamentals)
MOSS 49.1 Training: Preparing an Electronic Prescription (Bachmayer)
MOSS 49.2 Training: Preparing an Electronic Prescription (Egger)
MOSS 49.3 Training: Preparing Electronic Prescriptions (Lorenzo)
MOSS 49.4 Training ADVANCED: Preparing an Electronic Prescription (Berger)
MOSS 49.5 Training: Printing a Prescription (Fransson)
MOSS 49.6 Training: ADVANCED Printing a Prescription (Wolf)
Skill - Prepare a Prescription and Call in to Pharmacy Examples
Skill Reflection 1 - Prepare a Prescription and Call in to Pharmacy
Skill Reflection 2 - Prepare a Prescription and Call in to Pharmacy
Skill Reflection 3 - Prepare a Prescription and Call in to Pharmacy
Prepare a Prescription and Call in to Pharmacy Pass-off
MOSS 49.1 Assessment: Preparing an Electronic Prescription (Bachmayer)
MOSS 49.2 Assessment: Preparing an Electronic Prescription (Egger)
MOSS 49.3 Assessment: Preparing Electronic Prescriptions (Lorenzo)
MOSS 49.4 Assessment ADVANCED: Preparing an Electronic Prescription (Berger)
MOSS 49.5 Assessment: Printing a Prescription (Fransson)
MOSS 49.6 Assessment: ADVANCED Printing a Prescription (Wolf)
Over the Counter Medications Worksheet
Quiz: Chapter 49 Pharmacology Fundamentals
Drug Cards 1-25
Flashcards: Chapter 49 Pharmacology Fundamentals
Pharmacology Fundamentals Exam - Requires Respondus LockDown Browser
Check point meeting- Module 1
Read: Chapter 50 Measurement Systems, Basic

Mathematics, and Dosage Calculations
PowerPoints: Chapter 50 Measurement Systems, Basic Mathematics, and Dosage Calculations
Measurement Systems, Basic Mathematics, and Dosage Calculations Concept Check
Dosage Calculations
Math Guidelines
Calculate Proper Dosages of Medication for Administration Worksheet
Case Study: Labeling a Syringe and Calculating the Dose (Chapter 50)
Video Quiz: The Metric System (Chapter 50 Measurement Systems, Basic Mathematics, and Dosage Calculations)
Quiz: Chapter 50 Measurement Systems, Basic Mathematics, and Dosage Calculations
Drug Cards 26-50
Flashcards: Chapter 50 Measurement Systems, Basic Mathematics, and Dosage Calculations
Measurement Systems, Basic Mathematics, and Dosage Calculations Exam - Requires Respondus LockDown Browser
Check point meeting- Module 2
Read: Chapter 51 Administering Oral and Noninjectable Medications
PowerPoints: Chapter 51 Administering Oral and Noninjectable Medications
Administering Oral and Noninjectable Medications Concept Checks
Check Your Understanding: Chapter 51 Administering Oral and Noninjectable Medications
Skill - Prepare and Administer Oral Medication Video
Skill Reflection 1 - Prepare and Administer Oral Medication
Skill Reflection 2 - Prepare and Administer Oral Medication
Skill Reflection 3 - Prepare and Administer Oral Medication
Prepare and Administer Oral Medication Pass-off
Competency Challenge: Administering Medications (Chapter 51 Administering Oral and Noninjectable Medications)
Video Quiz: Medication Errors, Documentation, and Administration (Chapter 51)
Skill - Administer Eyedrops and Instill Drops in the Ears Videos
Skill Reflection 1 - Administer Eyedrops
Skill Reflection 1 - Instill Drops in the Ears
Skill Reflection 2 - Administer Eyedrops
Skill Reflection 2 - Instill Drops in the Ears
Skill Reflection 3 - Administer Eyedrops
Skill Reflection 3 - Instill Drops in the Ears
Administer Eyedrops Pass-off
Instill Drops in the Ears Pass-off
Quiz: Chapter 51 Administering Oral and Noninjectable

Medications

Drug Cards 51-75

Flashcards: Chapter 51 Administering Oral and Noninjectable Medications

Administering Oral and Noninjectable Medications Exam- Requires Respondus LockDown Browser

Check point meeting- Module 3

Read: Chapter 52 Administering Injections and Immunizations

PowerPoints: Chapter 52 Administering Injections and Immunizations

Administering Injections and Immunizations Concept Check
Check Your Understanding: Chapter 52 Administering Injections and Immunizations

Skill - Preparing to Administer Injections Videos

Skill Reflection 1 - Withdraw Medication from an Ampule

Skill Reflection 1 - Prepare Medication from a Multi- or Single-Dose Vial

Skill Reflection 1 - Reconstitute a Powder Medication

Skill Reflection 1 - Mix Two Medications in One Syringe

Skill Reflection 2 - Withdraw Medication from an Ampule

Skill Reflection 2 - Prepare Medication from a Multi- or Single-Dose Vial

Skill Reflection 2 - Reconstitute a Powder Medication

Skill Reflection 2 - Mix Two Medications in One Syringe

Skill Reflection 3 - Withdraw Medication from an Ampule

Skill Reflection 3 - Prepare Medication from a Multi- or Single-Dose Vial

Skill Reflection 3 - Reconstitute a Powder Medication

Skill Reflection 3 - Mix Two Medications in One Syringe

Withdraw Medication from an Ampule Pass-off

Prepare Medication from a Multi- or Single-Dose Vial Pass-off

Reconstitute a Powder Medication Pass-off

Mix Two Medications in One Syringe Pass-off

Learning Lab: Pharmacology and Medication Administration (Chapter 52)

Schedule Your Final Scenario

Skill - Practice Injection Angles

Skill - Injections and Immunizations Videos

Skill Reflection 1 - Administer an Intradermal Injection

Skill Reflection 2 - Administer an Intradermal Injection

Skill Reflection 3 - Administer an Intradermal Injection

Skill Reflection 1 - Administer a Subcutaneous Injection

Skill Reflection 2 - Administer a Subcutaneous Injection

Skill Reflection 3 - Administer a Subcutaneous Injection

Skill Reflection 1 - Administer an Intramuscular Deltoid Injection

Skill Reflection 2 - Administer an Intramuscular Deltoid Injection

Skill Reflection 3 - Administer an Intramuscular Deltoid Injection

Skill Reflection 1 - Administer an Intramuscular Gluteal Injection

Skill Reflection 2 - Administer an Intramuscular Gluteal

Injection

Skill Reflection 3 - Administer an Intramuscular Gluteal Injection

Skill Reflection 1 - Administer an Intramuscular Ventrogluteal Injection

Skill Reflection 1 - Administer an Intramuscular Injection by 2-Track Method

Skill Reflection 2 - Administer an Intramuscular Injection by 2-Track Method

Skill Reflection 3 - Administer an Intramuscular Injection by 2-Track Method

Video Quiz: Z-Track Intramuscular Injection Technique (Chapter 52 Administering Injections and Immunizations)

Case Studies for Adult Immunizations

Quiz: Chapter 52 Administering Injections and Immunizations

Drug Cards 76-100

Flashcards: Chapter 52 Administering Injections and Immunizations

Administering Injections and Immunizations Exam- Requires Respondus LockDown

Browser

Check point meeting- Module 4

Professionalism Evaluation

Skills List

Final Scenario

End of Course Survey

Subject to change. Please consult your Canvas course for the most current instructions and updates.

Classroom Hours

Mo, Tu, W, Th, Fr
8:00 AM - 11:00 AM
12:00 PM - 3:00 PM

For a full list of course hours visit: [Course Schedule](#)

Instructor Contact Information

Dusty Hunter — dhunter@stech.edu
Candice Cox — ccox@stech.edu

Office Hours: By appointment

Email is the preferred method of communication; you will receive a response within 24 hours during regular business hours.

Canvas Information

Canvas is the where course content, grades, and communication will reside for this course.

- stech.instructure.com
- For Canvas passwords or any other computer-related technical support contact Student Services.
- For regular Hours and Weekdays call (435) 586 - 2899.
- For after Hours & Weekends call (435) 865 - 3929 (Leave a message if no response).

Course Policies

Policies-Students must adhere to the Program Safety, Work Ethic, and Dress Code as outlined in the Medical Assistant Policies & Orientation. Attendance is important to your success in the Medical Assistant program. You are responsible for the schedule that you set at the beginning of your course and to sign in at the clock-in station at the beginning of your first hour and sign out after your last hour. You are allotted one 15-minute break during each 3-hour block of time, breaks should not be taken within the first or last 30 minutes of your schedule. Problems with signing in must be reported to an instructor as soon as possible. You must maintain 80% attendance in the program. Failure to meet the required attendance standard will result in academic corrective action being taken. If you are going to be absent, communication with the instructor is required to set up time to make up the time missed. This makeup time will be scheduled at the convenience of the instructors and the availability of the classroom and clinic. If you do not have a schedule for ten (10) consecutive days, you will be withdrawn from Southwest Tech. Students are expected to complete coursework according to the scheduled amount of hours designated for the course. All students in the program must stay on task and maintain a minimum 67% progress to retain financial aid eligibility. Failure to meet these requirements shall result in the student completing an Academic Intervention Plan with the Medical Assistant program leadership team and possibly academic warning, probation, and withdrawal from the program if not brought up by the end of each quarter. Cell phones should be on silent and are not allowed in the clinic area. Be courteous to your classmates and take phone calls out in the hall. Excessive cell phone use can hinder progress. Grading- Each assignment is awarded points according to how well the submission follows the assignment's requirements. Written submissions are graded according to the college writing guidelines. Students must have a minimum of 80% on each module to pass off the module and all modules must be passed off before students are allowed to sign up for the next class. Some assignments may be submitted more than once. If that is the case the assignment will clearly state this. At the end of each module, students are asked to submit a "Module Checkpoint Meeting" showing that they have completed all module requirements.

High School Power School Grades: Quarter student grades will be determined by student progress percentage. Faculty will use the higher percentage of either 1) quarter progress, or 2) cumulative progress for the current training plan year. The progress percentage will be used with the grading scale to determine the minimum grade. High School Grade Scale: The following grading scale will be used to determine a letter grade from the progress percentage:

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|-----------------|-----------------|-----------------|-----------------|
| • A : 94 - 100% | • B : 83 - 86% | • C : 73 - 76% | • D : 63 - 66% |
| • A- : 90 - 93% | • B- : 80 - 82% | • C- : 70 - 72% | • D- : 60 - 62% |
| • B+ : 87 - 89% | • C+ : 77 - 79% | • D+ : 67 - 69% | • F : 0 - 59% |

Additional Information

InformaCast Statement: Southwest Tech uses InformaCast to ensure the safety and well-being of our students. In times of emergency, such as weather closures and delays, this app allows us to promptly deliver notifications directly to your mobile devices. To stay informed and receive real-time updates, we encourage all students to sign up for notifications. Your safety is our priority, and staying connected ensures a swift response to any unforeseen circumstances. More information and directions for signing up are available at: <https://stech.edu/emergency-notifications/>

Internet Acceptable Use Policy: The student is expected to review and follow the Southwest Technical College Internet Safety Policy at: <https://stech.edu/students/policies/>

Student Code of Conduct Policy: The student is expected to review and follow the Southwest Technical College Student Code of Conduct Policy at: <https://stech.edu/students/policies/>

Accommodations: Students with medical, psychological, learning, or other disabilities desiring accommodations or services under ADA, must contact the Student Services Office. Student Services determines eligibility for and authorizes the provision of these accommodations and services. Students must voluntarily disclose that they have a disability, request an accommodation, and provide documentation of their disability. Students with disabilities may apply for accommodations, based on an eligible disability, through the Student Services office located at 757 W. 800 S., Cedar City, UT 84720, and by phone at (435) 586-2899. No diagnostic services are currently available through Southwest Technical College.

Safety and Building Maintenance: The College has developed and follows a variety of plans to ensure the safe and effective operation of its facilities and programs. The following plans are available online:

1) Facilities Operations and Maintenance Plan; 2) Technical Infrastructure Plan; and 3) Health and Safety Plan.

Withdrawals and Refunds: Please refer to the Southwest Technical College Refund Policy at: <https://stech.edu/students/policies/>

Any high school or adult student, who declares a technical training objective is eligible for admission at Southwest Technical College (Southwest Tech). Program-specific admissions requirements may exist and will be listed on the Southwest Tech website. A high school diploma or equivalent is not required for admission but is mandatory for students seeking Title IV Federal Financial Aid.

Non-Discriminatory Policy: Southwest Technical College affirms its commitment to promote the goals of fairness and equity in all aspects of the educational enterprise, and bases its policies on the idea of global human dignity.

Southwest Tech is committed to a policy of nondiscrimination. No otherwise qualified person may be excluded from participation in or be subjected to discrimination in any course, program or activity because of race, age, color, religion, sex, pregnancy, national origin or disability. Southwest Technical College does not discriminate on the basis of sex in the education programs or activities that it operates, as required by Title IX and 34 CFR part 106. The requirement not to discriminate in education programs or activities extends to admission and employment. Inquiries about Title IX and its regulations to STECH may be referred to the Title IX Coordinator, to the Department of Education, and/or to the Office for Civil rights.

If you believe you have experienced discrimination or harassment on our campus, please contact the Title IX Coordinator, Cory Estes: cestes@stech.edu, (435) 865-3938.

For special accommodations, please contact the ADA Coordinator, Cyndie Tracy: ctracy@stech.edu, (435) 865-3944.

Southwest Technical College

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