COURSE SYLLABUS

COURSE NUMBER AND TITLE:
MDCA 1348 – Pharmacology and Administering Medications

COURSE (CATALOG) DESCRIPTION:
Instruction in concepts and application of pharmacological principles. Focuses on drug classification, administration, mathematical systems and conversions, calculation of drug problems, and medico-legal responsibilities of the medical assistant.

Instructor:  Alicia Lugo, R.N., BSN  
Office: U-138

Instructor Phone: 956-364-4806  
Office Hours: Tues. 8:30 - 10:00 a.m.  
or by appointment

Lab Instructors: Cinthya Valdez, CMA, AAS  
Jessica Juarez, CMA, AAS
Instructor E-mail: malugo@tstc.edu (use if can’t access Moodle Messages or Course Discussion Forums)

MAJOR COURSE REQUIREMENTS:

• Orientation to Medications
• Principles of Drug Action
• Measurement and Dosage Calculations
• Medications Therapy
• Vitamins, Minerals, and Herbs
• Antibiotics and Antifungals
• Administering Parenteral Medications
• Drugs for the Geriatric Patient
• Drugs for the Pediatric Patient

This course has been divided into 8 units. In each unit you will be given a lecture/demonstration and then be expected to perform the assignments for each unit. Each assignment will be demonstrated and explained so that you can complete it. After each unit there will be a knowledge exam and a performance exam. Each exam is based on the information discussed during the lecture, the reading assignments and the lab assignments given.

LEARNING OUTCOMES:

• Define pharmacology, pharmacodynamics, pharmacy, anatomy, physiology, and pathology.
• List the major sources of drugs and give examples of each
• List the seven uses of drugs
• Use drug references to prepare a drug card
• Name three majors drug laws and list their main features
• State the four basic drug actions
• State the difference between psychological and physical drug dependence
• State the difference between the therapeutic effect and side effects
• Convert grams to milligrams and vice versa
• Calculate an adult’s dose of medication
• Calculate child’s dose of medication
• Apply Standard Precautions
• Name and describe the major routes of parenteral administration
• Identify the parts of a needle and syringe
• List various forms of medication, ranging from liquids to solids
• Demonstrate accurate, complete, and organized charting
• Verbalize the food groupings according to MyPyramid
• State the recommended daily allowance of the major vitamins and minerals
• Describe the correct procedure for hand washing before and after giving medications
• Differentiate between the external and internal immune system
• State three primary ways a health care worker can be exposed to hepatitis B virus and human immunodeficiency virus
• Identify the external parts of the eye and ear
• Describe the major disorders of the eye and ear for which medications are given
• Follow proper procedures for instilling eye drops, eye ointment, and ear drops

REQUIRED TEXT AND MATERIALS:


Drug Guide Book of your choice, i.e. Davis Drug Guide or Mosby’s Drug Guide, Scantron answer sheet (Scantron forms 882-ES)
Two sets of scrubs and one Lab jacket (color TBA) with school patch on left sleeve and name on left chest. With name embroidered on left chest in white thread. White leather shoes, (all white, no color trim or designs) with white socks only. White socks without designs on them. Watch with second-hand Stethoscope and Blood Pressure Cuff Black ink pen and notebook paper, and #2 pencils

Internet Access:
• Internet accessibility (high speed)
• Browser – Mozilla Firefox (download for free)
• Adobe Reader - Can be downloaded for free at (http://get.adobe.com/reader/)
• Access to Moodle (https://mycourses.tstc.edu/). For questions, contact the Online Learning Office (956-364-4950) or Help Desk via phone: 1-800-592-8784, email: tstchelpdesk@tstc.edu, or Yahoo IM: tstchelpdesk.
- On the Moodle site run the Moodle Browser check to ensure that your computer will run Moodle and course quizzes and tests properly.
- For more information on TSTC Moodle System Requirements, access the Moodle Quick Start Guide for Students on the Moodle Homepage
<table>
<thead>
<tr>
<th>Week</th>
<th>Dates</th>
<th>Topics and Required/Recommended Readings</th>
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<tr>
<td>1</td>
<td>May 11</td>
<td>Review of syllabus and class expectations</td>
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<tr>
<td></td>
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<td>Lecture Chapter 1 Orientation to Medications  pgs.1-21</td>
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<td>May 13</td>
<td>Completion of Chapter 1</td>
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<td><strong>Homework Due May 18</strong>- Chapter 1 Review 1-29 &amp;  Chapter 2 Review 1-52 &amp; 55-63</td>
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<td>May 15</td>
<td>Lecture- Chapter 2 Principles of Drug Action pgs. 22-41</td>
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<td>2</td>
<td>May 18</td>
<td><strong>Chapters 1 &amp; 2 Test</strong></td>
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<td><strong>Introduction of Drug Cards</strong></td>
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<td>May 20</td>
<td>Introduction of Chapter 5 Medication Therapy pgs. 110-165</td>
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<td><strong>Homework Due May 27</strong> Chapter 5 Review 1-90</td>
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<td>May 22</td>
<td>Continuation of Chapter 5/ Lab</td>
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<td>May 25</td>
<td><strong>Holiday- Happy Memorial Day</strong></td>
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<td>May 27</td>
<td>Chapter 5 Lab</td>
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<td><strong>Test Chapter 5</strong></td>
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<td>May 29</td>
<td>Introduction of Chapter 3- Measurement and Dosage Calculations</td>
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<td>June 1</td>
<td>Lecture-Chapter 3  <strong>Homework Due June 5</strong> Chapter 3 Review 1-124 and 127-168</td>
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<td>June 3</td>
<td>Chapter 3 Calculations cont.</td>
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<td>June 5</td>
<td><strong>Chapter 3 Test</strong></td>
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<td>5</td>
<td>June 8</td>
<td>Lecture- Chapter 6 Vitamins, Minerals, and Herbs pgs. 166-186</td>
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<td>June 10</td>
<td><strong>Homework Due June 12</strong> Chapter 6 Review 1-34 &amp; 37-41</td>
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<td>Continuation of Chapter 6 Lab</td>
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<td>Date</td>
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<td>June 12</td>
<td><strong>Chapter 6 Test</strong>&lt;br&gt;Lecture Chapter 7 Antibiotics &amp; Antifungals pgs. 187-217&lt;br&gt;Homework Due June 17 Chapter 7 Review 1-36</td>
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<td>June 15 Completion of Chapter 7&lt;br&gt;June 17 <strong>Chapter 7 Test</strong>&lt;br&gt;June 19 Chapter 8 Lecture- Drugs for the Eye and Ear&lt;br&gt;<strong>Homework Due June 24</strong> Chapter 8 Review</td>
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<td>June 22 Completion of Chapter 8/ Lab&lt;br&gt;June 24 <strong>Chapter 8 Test</strong>&lt;br&gt;Lecture- Chapter 4 Administering Parenteral Medications pgs. 74-109&lt;br&gt;<strong>Homework Due July 1</strong> Chapter 4 Review 1-35&lt;br&gt;June 26 Continuation of Chapter 4&lt;br&gt;Chapter 4 Lab</td>
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<td>8</td>
<td>June 29 Chapter 4 Lab Continued&lt;br&gt;July 1 <strong>Chapter 4 Test- Lab</strong>&lt;br&gt;July 3 <strong>Holiday- Happy 4th of July</strong></td>
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<td>July 6 Lecture on Chapter 20 Drugs for Pediatric Patients&lt;br&gt;<strong>Homework Due March 30</strong> Chapter 20 Review 1-33&lt;br&gt;July 8 Lecture on Chapter 21 Drugs for Geriatric Patients&lt;br&gt;<strong>Homework Due July 8</strong>- Chapter 21 Review 1-31&lt;br&gt;July 10 <strong>Chapters 20 &amp; 21 Tests</strong></td>
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<td>10</td>
<td>July 13 <strong>Oral Drug Administration</strong>&lt;br&gt;Crash cart Presentation&lt;br&gt;July 15 Chapters 9-19 Medications&lt;br&gt;July 17 Chapters 9-19 Medications</td>
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<td>11</td>
<td>July 20 Chapters 9-19 Medications&lt;br&gt;July 22 <strong>Chapters 9-19 Test</strong></td>
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The Texas State Technical College System uses the following grading system in the Medical Assistant Program:

<table>
<thead>
<tr>
<th>GRADING CRITERIA</th>
<th>GRADING SCALE</th>
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<tbody>
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<td>Unit Tests</td>
<td>93-100</td>
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<td>Assignments/Quizzes</td>
<td>86-92</td>
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<td>Critical Thinking/drug cards</td>
<td>78-85</td>
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<td>Lab</td>
<td>70-77</td>
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<td>Professionalism Rubric</td>
<td>0-69</td>
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<tr>
<td>Final Exam</td>
<td>Withdrawal</td>
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<tr>
<td>Total</td>
<td>In Progress</td>
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IP (In progress). Course is not completed due to an excused absence of insufficiency. IP Will become a grade of “F” if course is not completed within the time period according to TSTC policies.

The student must maintain a grade of 78 or better to pass the course. *Below required performance and will not be counted for graduation requirement.

DEPARTMENTAL PARTICIPATION POLICY:

Class participation in this course is MANDATORY and is a part of the Grading Policy. Student must maintain all class discussion, quizzes, and all other assignments at the passage rates located in the Grading Criteria and Grading Scale for each activity or face a grade of “F” at the end of the term.

Less than 95% participation will be grounds for mandatory withdrawal from the class. Participation will be reviewed on a case-by-case basis by both the instructor and the program chair prior to dropping a student from the class. The decision of the faculty is final. Prior notification of non-participation in class/or clinical rotations will be required on all occasions. Early departure will be counted as non-anticipation.

In order for an absence to be excused, the student must:

A. Notify the instructor of the absence BEFORE the class period.
B. Notice may be given by calling the instructor – not through email. **THIS NUMBER HAS A 24-HOUR VOICE MAIL, SO CALLS MAY BE RECEIVED AT ANY TIME OF THE DAY OR NIGHT.**

C. If a student notifies an instructor before class, this **DOES NOT** mean the absence will be excused. **The course instructor determines whether an absence is excused or unexcused.**

Students will be referred to their Department chair for advisement if they are unsatisfactorily participating in class.

**A student is considered unsatisfactorily participating in class when:**

The student fails to participate in the class by not completing daily assignments, tests, quizzes, class projects, participating in class discussions, handing in work promptly, and completing any other assignments required by your instructor at the passage rates indicated in the **GRADING CRITERIA AND SCALE.**

**Class participation will be recorded in the following manner:**

A. Class participation begins at the time class is scheduled to begin, the **FIRST DAY OF CLASS.**

B. A daily quiz **MAY** be given at the time class is scheduled to begin. This will count as a grade. If the student is tardy, or absent and unexcused, he/she will receive a 0 for the quiz grade.

C. The student will be counted absent from class if the student arrives 15 minutes, or more late for class, leaves the class for an extended period of time, leaves the classroom to answer the cellphone (without prior permission from the instructor) or exits the classroom without notifying the instructor. **THIS MEANS ALL WORK FOR THAT DAY WILL BE A “0” AS THE STUDENT WILL BE ABSENT.**

D. Students arriving late to class must **SIGN IN** at the instructor’s desk at the end of the class. **FAILURE TO DO THIS WILL RESULT IN THE STUDENT BEING COUNTED ABSENT.**

If a student fails to adhere to the class participation policy, it will be **STUDENT’S RESPONSIBILITY** to “W” (withdraw) from the course. This withdrawal process will no longer be initiated by the instructor. Students wishing to withdraw must file a **SCHEDULE CHANGE FORM** with the Admissions Office.

Students must remain in constant contact with their instructor to understand what their class participation status is at any time during the term.
MAKE-UP WORK:

A. No makeup work will be given for excused absences.
B. If an absence is unexcused, a grade of 0 will be given for all missed work.
C. Tests will be made up for **EXCUSED ABSENCES** only.
D. Only one test may be made up in a semester. There will be two test make up days. One, before mid-term and the other towards the end of the semester before finals. Any missed tests must be made up on one of these two days. **NO EXCEPTIONS.**
E. If a student is not excused, the student will receive a 0 for the missed tests, as well as any missed work.
F. In order to complete the class, students must complete all work and assignments, as these courses progress on a cumulative basis. All missed work **MUST** be turned in the next day class is attended.
G. *Late work will not be accepted* for a grade.
H. Daily quizzes will not count against students with excused absences.
I. If a daily quiz is missed, students with unexcused absences will receive a 0 for the daily quiz.

TARDINESS

A. If a student is tardy to class and a daily quiz is being given, the student will not be allowed to take the quiz, and will receive a 0 for the quiz grade.
B. If a student is tardy to class on the day a test is given, the student will take the test with 10 points deducted and must complete the test within the allotted time set for the rest of the class. If multiple tests are given that day, the student will receive 10 points off each test and must complete each test within the allotted time set.

ACOMMODATIONS:

If you have a documented disability which will make it difficult for you to carry out classwork as outlined and/or if you need special accommodations due to a disability, please contact (956) 364-4520 or visit the Support Services Office in the Auxiliary Services Building as soon as possible to make appropriate arrangements.

CONDUCT:
The need to conduct oneself in a professional manner is not limited to behavior during clinical and practicum, but is equally applicable in the classroom, on any area of the college campus, during any involvement in college-related activities, and at any time that a TSTC-Medical Assistant uniform is being worn. The college reserves the right to require the withdrawal of any student at any time, if the student’s actions are deemed to be contrary to the best interest of the student body or the College. In addition to the above policy, all rules of conduct as described in the TSTC Student Manual will be followed. Foul language is NOT acceptable at any time.

APPEARANCE
- Earrings-one set of studs only, no larger than 5mm in size will be permitted; loop ear rings, ear cuffs, nose rings, eye brow rings, lip rings, or tongue rings will not be permitted.
- Rings: wedding band only
- Nails must be no longer than finger tip length and only clear polish is permitted
- Hair style and facial make-up must be conservative in keeping with the professional environment.
- Females-hair must be tied back, out of face and off the neck
- Males-hair must be out of face and neatly trimmed off the neck, No pony tails
- No hair ornaments are allowed
- No necklaces or chains are permitted
- Tattoo must be covered at all times
- Hickies must be covered at all times
- No strong perfumes or cologne
- Beards or mustaches must be neatly trimmed and off the lip
- The student appearance must always be neat and clean IE: shoes polish, uniform ironed
- The TSTC Medical Assistant uniform is not to be worn at anytime other than to class, clinical or practicum internship, or at the specific instructions of the program for a special event. Medical Assistant uniforms MUST NEVER be worn in a bar or club, or while buying alcoholic beverages.
- No skirts, dresses, halter tops, tank tops, sandals or similar footwear will be allowed during lab or class time.
- REFUSAL TO FOLLOW THE DRESS CODE WILL RESULT IN THE STUDENT BEING SENT HOME WITH AN ABSENCE FOR THE DAY.
- Please refer to the Medical Assistant Handbook and Professionalism Rubric

If a student’s actions are determined to be unprofessional, the first offense will result in verbal counseling, the second offense will result in a conference
with the Program Chair, who will decide if any other action is warranted at the time.

SAFETY AND SECURITY STATEMENT:
In the event of an emergency, students should familiarize themselves with building and classrooms emergency exits/evacuation routes and be able to locate the nearest fire extinguisher. When an emergency alarm is activated, students should immediately leave the classroom, exit the building, and go to a designated safe area until clearance is given to go back into the building. Students should also register and be familiar with the Emergency Notification System.

COPYRIGHT STATEMENT:
The materials used in the course (textbooks, handouts, media files (podcast, MP3, Videos, RSS (Feeds), and all instructional resources on the colleges learning Management System (Moodle)) are intended for use only by students registered and enrolled in this course and are only to be used for instructional use, activities associated with, and for the duration of the course. All materials generated for this course, which includes but are not limited to syllabi, quizzes, exams, lab problems, in-class materials, review sheets, and any additional materials.

These materials may not be retained in another medium or disseminated further. They are provided in compliance with the provisions of the Teach Act. These materials may not be reproduced, displayed, modified or distributed without the express prior written permission of the copyright holder or TSTC. For further information contact your instructor.

COMMUNICATION WITH YOUR INSTRUCTOR (MyMail Email System)
Your instructor will correspond with you within your TSTC Moodle course via the News Forum, Discussion Forums, and Moodle Messaging. Although you may receive messaging notifications to your personal email account, your responses should be made within the Moodle environment by responding to the appropriate Discussion Forum post or Moodle message. It is your responsibility to check Course Discussion Forums and Messages on a daily basis. In the event that Moodle is down or if the instructor advises, you may email the instructor at malugo@tstc.edu. All correspondence to the instructor at this email address must come from your TSTC student mymail.tstc.edu email address and must contain the course you are enrolled in within the email subject line.

Your instructor will make every attempt to respond to your emails within 24 hours, except on Saturdays and holidays. Any technical questions should be
directed to the TSTC Help Desk at 1-800-592-8784, tstchelpdesk@tstc.edu or Yahoo IM: tstchelpdesk.

**Tutoring Statement**

The Supplemental Instruction & Tutoring Program at TSTC offers free tutoring and academic support services to help you achieve your academic and career goals. You can access the most up-to-date Supplemental Instruction & Tutoring Schedule, as well as MyTSTC Video Tutor Library, by using your smart phone to scan over the QR code below or visiting our webpage at: [http://www.tstc.edu/harlingenoss/situtoringprogram](http://www.tstc.edu/harlingenoss/situtoringprogram)

For more information, please contact the Office of Student Success at 956.364.4163 or the Supplemental Instruction & Tutoring Program at 956.364.4170.

**Office of Student Success**

**Useful Links & QR Codes**

**Office of Student Success**
[http://www.tstc.edu/harlingenoss](http://www.tstc.edu/harlingenoss)

**Supplemental Instruction & Tutoring Program**
[http://www.tstc.edu/harlingenoss/situtoringprogram](http://www.tstc.edu/harlingenoss/situtoringprogram)

**MyTSTC Video Tutor Library** (direct link)
[http://www.tstc.edu/harlingenoss/videotutorlibrary](http://www.tstc.edu/harlingenoss/videotutorlibrary)

Over 100 short tutoring videos are available to students at the click of a mouse or tap of
Videos cover English, College Algebra, Biology, Chemistry, History, technical subjects, and other areas.

Access to Success Mentoring Program
http://www.tstc.edu/harlingenosss/mentoring
Peer Mentors help students navigate college, as well as online learning tools and resources such as Moodle, Mymail, WebAdvisor, etc. Peer Mentors serve as a support system for students throughout the semester.

AVID Academic Achievement Center (Resources/Laptops)
http://www.tstc.edu/harlingenosss/academicachievementcenter
The center houses the Peer Mentors as well as an Advisor. All are available to help students navigate through college, make the AVID connection from high school to college, learn Cornell Note-Taking, provide information on scholastic policies, GPA & Completion Rate Calculation, and other services. The Advisor also refers students to campus and community resources

WIA (Workforce Investment Act)
http://www.tstc.edu/harlingenwia/services

VIDA (Valley Initiative for Development & Advancement)
http://www.vidacareers.org
Both WIA and VIDA provide financial support for eligible students, including help with tuition, fees, books, tools, and other college-related expenses.

**Financial Aid’s Standards of Academic Progress**
[http://www.tstc.edu/harlingenfinancialaid/sap](http://www.tstc.edu/harlingenfinancialaid/sap)
This site provides students with information on the academic requirements to maintain financial aid eligibility.

**Calculate Your Term GPA**
This site helps students forecast their Term GPA.

**How to Raise Your GPA**
[www.back2college.com/raisegpa.htm](http://www.back2college.com/raisegpa.htm)
This site helps students forecast their Cumulative GPA and also helps them determine what type of grades are needed to increase their Cumulative GPA.

*Developed by the Office of Student Success*
*956.364.4163/LRC, 2nd Floor*