I. INTRODUCTION

A. This course is a study of drug classifications, actions, therapeutic uses, adverse effects, routes of administration, and calculation of dosages. Content includes the safe administration of medications within a legal/ethical framework.

B. HPRS 2300 is a required prerequisite course for all students wishing to complete the Central Texas College Associate Degree Nursing program. However, it is open to all students in allied health disciplines. A student who has repeated HPRS 2300 more than once and earned grades of less than a “C” will be ineligible for admission in to the Central Texas College Associate Degree Nursing Program. HPRS 2300 courses greater than two years old will not be accepted by The Central Texas College Department of Nursing and Allied Health.

C. Prerequisites: Admission to Central Texas College

D. Recommended Co-requisites: BIOL 2401 Anatomy & Physiology I

E. Secretary’s Commission on Achieving Necessary Skills (SCANS) and Differentiated Essential Competencies (DECs) of Graduates of Texas Nursing Programs. Alphanumeric coding used throughout the syllabus denotes the integration of SCANS occupational competencies (C) (Resources, Information, Interpersonal, Systems and Technology); and foundation skills (F) (Basic Skills, thinking Skills, and Personal Qualities). For more on the Labor Secretary’s Commission on Achieving Necessary Skills, or SCANS, go to the U.S. Department of Labor site at http://wdr.doleta.gov/SCANS/.

F. The DEC competencies that are implemented in HPRS 2300 are also alphanumeric coded as Member of the Profession (MOP), Provider of Patient-Centered Care (PPCC), Patient Safety Advocate (PSA), and Member of the Health Care Team (MHCT). Numbers after these identifiers represent specific criteria met. For more information on the DECs go to the Texas Board of Nursing website.

II. LEARNING OUTCOMES

Upon successful completion of this course the student will:

A. Differentiate among actions, interactions, contraindications, adverse reactions, and side effects of drug classifications. (C7, C15, F1,2,5,7,8,9,11,12,13) (PSA: C1, C2)

B. Compare the physical/behavioral responses to drugs in clients across the lifespan. (C5,9,11, F16) (PPCC: B4, B7, E1)

C. Identify the relationship between physical systemic alterations and response to pharmacological agents. (C5,7,13,15; F9,16) (MHCT: A1; PPCC: B7)

D. Accurately calculate drug dosages and solutions using a mathematically proven method. Demonstrate the use of mathematical conversions. (C5,7.15.; F1-4, F9) (MOP: B4)
E. Demonstrate use of common pharmacological terminology and abbreviations. (C6,7,, F5,6,7,8,11,12) (MOP: B4)

F. Identify the need for continuous study of drug therapies through exposure to relevant evidence-based research findings. (C3,5,6,7,8,18,19; F1,7,8,9,11,12,13,) (PSA:C1; PPCC: A3, A4)

G. Identify the roles and responsibilities of the healthcare worker in administering pharmacological agents. (C1,7-10,15,16,18,19; F1-3,) (PSA: A2, A3, A5, B2, B3, B4)

H. Explain the safe utilization of medications. (C1,7-10,15,16,18,19; F1-3,) (PSA: A2, A3, A5, B2, B3, B4)

I. Describe how knowledge of pharmacology will be utilized to demonstrate safe administration of medications (C1,3,5,19; F1,2,5,6,12) (PSA: B1, B2, B3, B4)

J. Describe cultural, ethical and legal considerations in the administration of therapeutic drugs. (C59,11,14; F1,2,5,6,10,12,13,16) (MOP: A1, A2; PPCC: D1, D3, E1, E6; PSA: A; MHCT A4b)

III. INSTRUCTIONAL MATERIALS

Text:
The instructional materials identified for this course are viewable through www.ctcd.edu/books

A. Course Material: If you do not have your textbook or other required materials by the first day of class, contact your instructor IMMEDIATELY. Failure to do so within the first five (5) days of class may limit the options you have and may increase your financial burden for this course.


B. Computer Accessibility:
Accessibility to computer hardware and software that will support the completion of assignments on the internet, DVD, CD, or other electronic delivery is required. All HPRS courses, whether traditional, blended, or online utilize Blackboard Learning Management System tools for communication and course requirements. Other online components, such as publisher online resources, online activities or database searches may also be required. It is expected that students enrolled in HPRS courses have access to a computer with minimum technical requirements, have a consistent and reliable Internet connection, possess basic computer skills, and have the ability to download and install applications or plug-ins. Online components/requirements may be completed in a CTC computer lab or on a home computer. Students are recommended to familiarize themselves with the locations and available hours of CTC computer labs in the event that home computers or Internet access are unavailable or unreliable. No extensions or alternate due dates for assignments or exams will be granted due to computer or Internet difficulties.

C. Supplemental Instructional Materials:
1. Films, audio and videotapes as suggested by the instructor to enhance learning.
2. Professional journal articles as suggested by the instructor.

D. Library Resources: It is expected that all students will have a working knowledge of the Oveta Culp Hobby Memorial Library.
IV. COURSE REQUIREMENTS

A. **Reading Assignment:** In preparation for all classes, it is expected that the student first read the lecture objective and then the assigned required reading. The assigned chapters are listed on the Daily Plan.

B. **Projects, Case Studies, Book Projects, Research Papers:**
   1. Submitting assignments: Assignments are mandatory, not for extra credit. A student who does not complete assignments could be in jeopardy of failing this course. All assignments are to be completed independently. The student will complete eight assignments for this course: 3 dosage calculation and 5 discussion assignments. Refer to the calendar/daily plan for submission due dates for these assignments. Links to each assignment are located on Blackboard.

   - **3 Medication Calculation Assignments:** To earn full credit, all math work calculations/computations must be shown, and no partial credit will be given. Students must submit work via Blackboard before or on due date listed on the daily plan. No late submissions will be accepted. A student may always turn their work in early.

   - **5 Discussion Assignments:** Responses must be at least 150 words and relevant to the topic selected by the professor. The student must cite from at least one reference other than required textbooks or instructor provided materials. You must submit your work via Blackboard and it can be submitted before or on the due date listed on the daily plan. No late submissions will be accepted.

   - **Criteria for Discussion Assignments:**

     | CRITERIA                                      | POINTS POSSIBLE |
     |-----------------------------------------------|-----------------|
     | 1. Response thoroughly covers topics/questions | 2               |
     | 2. Response is at least 150 words             | 2               |
     | 3. Utilizes at least one source other than text | 2               |
     | 4. Grammar and punctuation is appropriate     | 2               |
     | Total Points                                 | 8               |

   2. The “Course & Testing Policy” fully explains the grading policy, exam dates and times, time limitations, review, challenge policy, and counseling. View this policy on Blackboard. This must be completed before you are able to access the modules/lessons. Please refer to the last page of this syllabus.

C. **Online Class Performance:**
   1. Attendance Policy: Student enrolled in HPRS 2300 will adhere to the expectations outlined by CTC student handbook.
   2. Examinations will be given on dates noted on the daily plan. (See V. Examinations for policy)
   3. The faculty reserves the right to adjust the student’s participation grade based upon classroom performance/behavior/civility.

D. **Online Participation:**
   Students are expected to be prepared, to contribute to class discussion, and to participate in all class activities. The participation grade for theory courses will include positive contributions to class, meeting activity objectives, and demonstrating civility. Failure to participate will result in grade point deduction. (See VI. Semester Grade Computation)
E. **Scholastic Honesty:** The following statement is published in the Central Texas College Catalog and all HPRS 2300 students are expected to abide by this policy.

“All students are required and expected to maintain the highest standards of scholastic honesty in the preparation of all course work and during examinations. The following are considered examples of scholastic dishonesty:

1. **Plagiarism** - the taking of passages from the writing of others without giving proper credit to the sources.
2. **Collusion** - using another’s work as one’s own, or working together with another person in the preparation of work, unless such joint preparation is specifically approved in advance by the instructor.
3. **Cheating** - giving or receiving information on examinations.

Students guilty of scholastic dishonesty will be administratively dropped from the course with a grade of “F” and subject to disciplinary action, which may include suspension and expulsion.”

V. **EXAMINATIONS**

Students are required to take six exams (five unit exams and a final comprehensive exam) with multiple choice format. For this course exams will be administered via Blackboard. All unit exams are “non-proctored” and can be taken from a home or campus computer. The final exam is “proctored” and will be taken on a campus computer during scheduled class time. You will be notified of the date/time of your final exam.

1. Refer to the Daily Plan for specific dates of examinations and chapters that will be covered in each of them.
2. The student will only be afforded the opportunity to take the exam during the allotted testing hours. The exam will “Auto-Submit” at the end of the allotted time.
3. Exams are to be taken individually and are not open book exams.
4. Exams consist but may not be exclusive of:
   a. Multiple choice questions
   b. Dosage calculations
5. Examination grades alone will not ensure successful completion of the course.
6. Grades will not be given out over the telephone or e-mail.
7. Students can schedule to review their exam with their instructor and are encouraged to do so if they score less than 75% on any exam. Exam review must occur prior to the next scheduled exam. Once a subsequent exam has been administered review of previous exams is not permitted (ex: exam 1 can no longer be reviewed after exam 2 has been administered).

VI. **SEMESTER GRADE COMPUTATIONS**

There are 400 possible points for this course. Students must earn at least 75% cumulative exam average to pass HPRS 2300. This is a minimum of 258.75 out of an available 345 examination points. Points for assignments (5 discussions and 3 calculations) will be added only after the student has earned at least 75% of the possible examination points. A student could be in jeopardy of failing the course if assignments are not completed.
The course grade will be calculated as follows:

**Unit Exams 1-5**
50 questions x 1 point each = 275 points

**Comprehensive Final**
70 questions x 1 point each = 70 points

**Total Exam Points**
= 345 points

**Assignments**
Discussions (5) x 8 points each = 40 points
Dosage Calculations (3) x 5 points each = 15 points

**Total Assignment Points**
= 55 points

**Total for Course**
= 400 points

There is no rounding off of final theory average.

**Final Grade Computations:**
A = 360-400 points (this is 90.0-100.0% of 400 points)
B = 320-359 points (this is 80.0-89.9% of 400 points)
C = 300-319 points (this is 75.0-79.9% of 400 points)
D = 240-299 points (this is 60-74.9% of 400 points)
F = 239 points and below (this is 59% or below of 400 points)

The faculty reserves the right to adjust the student’s grade based upon classroom behavior/civility.

**VII. NOTES AND ADDITIONAL INSTRUCTIONS FROM THE INSTRUCTOR**

A. **Course Withdrawal:** (Consistent with CTC policy)
B. **Administrative Initiated Withdrawals:** (Consistent with CTC policy)
C. **Incomplete Grade:** (Consistent with CTC policy)
D. **Cellular Phones and Beepers:** Cellular phones and beepers will be turned off while the student is in the classroom or laboratory or clinical area.
E. **Disability Support Services Program:** Disability Support Services provide services to students who have appropriate documentation of a disability. Students requiring accommodations for class are responsible for contacting the Office of Disability Support Services (DSS) located on the central campus. This service is available to all students, regardless of location. Explore the website at [www.ctcd.edu/disability-support](http://www.ctcd.edu/disability-support) for further information. Reasonable accommodations will be given in accordance with the federal and state laws through the DSS office.

F. **Instructor Discretion:** The instructor reserves the right of final decision in course requirements.

G. **Civility:** Individuals are expected to be cognizant of what a constructive educational experience is and respectful of those participating in a learning environment. Failure to do so can result in disciplinary action up to and including expulsion.
H. **Support Services:** The College offers a variety of support services to students. Refer to the [Student Services website](#).

I. **Non-Discrimination:** Central Texas College District is an equal opportunity, affirmative action institution. We are unequivocally committed to a policy of equal access and equal opportunity in employment practices, admissions, educational programs, and all other college activities. The college does not discriminate on the basis of race, color, religion, national origin, gender, age, disability, veteran status, genetic information, sexual orientation, gender identity or transgender status. Accordingly, it is the **policy of the college** to maintain an academic and work environment free of discrimination and harassment in accordance with all applicable federal, state and local statutes and regulations.

J. **Inclement Weather:** Information about class cancellation or delay because of inclement weather can be obtained by listening to KNCT-FM (91.3 on the FM dial) or by calling (254) 501-3100 (Central Texas College Inclement Weather Information Line).

VIII. **COURSE OUTLINE**

**Math Module**

**Medication Administration Module**

**Module I:**
A. Introduction to Pharmacology  
B. Pharmacokinetics and Factors of Individual Variation  
C. Geriatric Pharmacology  
D. Drugs Affecting the Autonomic Nervous System  
E. Drugs Affecting the Sympathetic Nervous System  
F. Drugs Affecting the Parasympathetic Nervous System

**Module II:**
A. Local Anesthetics  
B. General Anesthetics  
C. Opioid Analgesics  
D. Non-opioid Analgesics, Nonsteroidal Anti-inflammatory Drugs  
E. Sedative-Hypnotic Drugs and Alcohol  
F. Antipsychotic and Antianxiety Drugs  
G. Antidepressants, psychomotor stimulants and Lithium  
H. Antiepileptic Drugs  
I. Antiparkinson Drugs

**Module III:**
A. Treatment for Heart failure  
B. Antianginal Drugs  
C. Diuretics  
D. Antihypertensive Drugs  
E. Anticoagulants and Coagulants  
F. Hypolipidemic Drugs  
G. Antianemias
Module IV:
A. Antihistaminic Drugs and Mast Cell Release Inhibitors
B. Respiratory Pharmacology, Treatment of Asthma and COPD
C. Therapy of Gastrointestinal Disorder: Peptic Ulcers, GERD, and Vomiting
D. Drugs Affecting the Thyroid and parathyroid Glands and Bone Degeneration
E. Pancreatic Hormones and Antidiabetic
F. Posterior Pituitary Hormones: Antidiuretic Hormone

Module V:
A. Immunopharmacology
B. Antibacterial Agents
C. Antifungal and Antiviral Drugs
D. Parasitic Infections: Antiprotozoal and Anthelmintic Drugs
E. Antiseptics and Disinfectants
F. Antineoplastic Agents

IX. TEACHING LEARNING ACTIVITIES
A. Auto-Tutorial: For some units of study, audiovisual materials, electronic media methods, and computer software, including internet accessible textbook-related programs, may be assigned. These interactive media programs may be viewed in the learning laboratory. Videos will be viewed in classroom. The student will be tested over material from these supplemental assignments.

B. Self-Directed Study: Each student enters the program with varied backgrounds, educational preparations and rate of learning; therefore, to enhance the teaching-learning process, the student is expected to develop an attitude of self-direction in acquiring knowledge. This course is fast paced, with new material covered daily. Class time is designed to supplement and clarify assigned learning activities. Please set up an appointment time with the appropriate faculty, if further assistance is needed.
COURSE & TESTING POLICY

1. I understand that exams 1-5 consists of 55 questions and the final consist of 70 questions with each weighing 1 point each.

2. I understand that a minimum total of **258.75 out of a possible 345 points** (75%) must be achieved on exams before the written assignment (3 calculation assignments and 5 discussions) points are added to the course total.

3. I understand that the written assignments are mandatory for a passing score and not meant as extra credit.

4. I understand that written assignments and exams are to be completed independently.

5. **I understand that I must earn a total of 300 points (75%/C) to pass HPRS 2300 and that there is no rounding off of the final theory average.**

6. I understand that examinations can be taken only on the dates noted on the daily plan and that they are not open book exams.

7. One hour and 30 minutes will be the maximum time limit for the completion of all unit exams. A maximum of two hours will be allotted to complete the final exam.

8. I understand that I can schedule to review my exams with my instructor and am encouraged to do so if I score less than 75% on any exam. Exam review must occur prior to the next scheduled exam. Once a subsequent exam has been administered review of previous exams is not permitted (ex: exam 1 can no longer be reviewed after exam 2 has been administered).

9. I understand that the instructor may refer me to the Academic Studio for further assistance.

10. I understand that the faculty reserves the right to adjust the student’s grade based upon classroom performance/behavior/civility

My signature acknowledges I understand and agree to comply with the policies as they are laid out in this HPRS 2300 syllabus and that I have access to the HPRS 2300 Syllabus via Blackboard.

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