

**PHM 183F - Basic Intravenous Admixtures LECTURE
FALL 2016**

Unique # 59335, 59340, 59345, 59350

Class Meets: Thursdays 11:30 AM – 12:30 PM (Central time): PHR 3.106
ITV to: UTHSCSA, UTEP, and UTRGV

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***Schedule of Lectures can be found at the end of this syllabus**

COURSE DESCRIPTION

Basic Intravenous Admixtures (PHM 183F) Lecture describes the theory, preparation, use, and route of administration of sterile products and incorporates mathematical calculations, clinical applications, and drug information skills.

Course Objectives:

- Demonstrate proficiency in dose and rate calculations
- Outline methods to minimize contamination of IV preparations
- Describe the facilities, equipment, supplies and references used to prepare IV admixtures
- Explain benefits and risks associated with IV therapy
- Discuss implications of USP <797> and <800>

Course Prerequisites: PHR356C/PHM388M – Pharmaceutics and PHR156P/PHM188P – Pharmaceutics Lab

Course Co-requisites: credit or registration for PHR183G/PHM183G – Basic IV Admixtures Pre-Lab and Lab

COURSE REQUIREMENTS

Lecture Notes: Course materials will be posted in Canvas at least 24 hours before each lecture. It is the student's responsibility to print out the notes if a hard copy is desired.

Optional reference:

Buchanan E. Clyde and Schneider Phillip J. *Compounding Sterile Preparations*, 3rd edition. Bethesda, Maryland; American Society of Health-System Pharmacists, 2009.
(Available in the LRC and from the UT libraries via STAT!Ref)

Grading Criteria:

Exam 1	38.5% of final grade (100 points)
Exam 2	38.5% of final grade (100 points)
Math Quiz	11.5% of final grade (30 points)
Interim Assignments	11.5% of final grade

Grading Scale:

93% - 100% = A	90% - 92% = A-	
87% - 89% = B+	83% - 86% = B	80% - 82% = B-
77% - 79% = C+	73% - 76% = C	70% - 72% = C -
69% - 68% = D+	67% - 66% = D	65% = D-
		Below 65% = F

Exams:

Exam questions will cover learning objectives given at the beginning of each topic. Format will include multiple choice, multiple/multiple choice, true/false, fill in the blank, matching, and/or short answer questions.

Make-up exams will be administered only in the case of verifiable emergency, serious illness, or other excused absence approved in advance by the faculty through student submission of the "Student Request for Alternative Examination Time" form. Format of make-up exams may vary from the original exam and is usually comprised of short-answer or essay questions. No quiz or exam grades will be dropped. For approved absences from exams, the student has one week from the day of the exam to make up the exam unless prior arrangements have been made with the local coordinator. If the exam is not made up within the specified time period, a zero will be given.

Unexcused absences from exams will result in a grade of zero for the exam. Late arrival for exams (15 minutes after the beginning of the exam or after any students have left the room, whichever comes first) will not be permitted; a grade of zero will be given unless a verifiable emergency caused the late arrival.

Students will not be permitted to leave the room and return once an exam has started unless it is a verifiable emergency. Please take a restroom break before the exam begins. Any other items

that might be needed during an exam, such as tissues or water, should be brought into the exam room by the student.

Students in San Antonio will return their original exam for grading. The decision of whether or not to use scantrons for exams is at the discretion of the local course coordinators. Austin students will return their original exam and their scantron for grading. Grading of exam scantrons by the Measurement and Evaluation Center along with statistical analysis and review of exam questions will be the responsibility of the instructor, who may choose to grant credit for statistically poor questions.

After this process is finalized, students will be given the opportunity to review their exam during class or lab. Students who choose to do so may submit written reconsideration requests accompanied by valid documentation to the course coordinator via email within 24 hours of the exam review. All reconsideration requests will be reviewed by the instructor responsible for the question, who will determine whether to give full credit, partial credit or no credit. Students will receive information regarding their reconsideration request via email from the course coordinator. This process may take up to one week to finalize.

Original exams will be numbered and retained by the instructor. Failure to return the original exam will result in a grade of zero for the exam.

Exams may not be photocopied, photographed or otherwise reproduced. If a student is found to be copying the exam contents in any format, they will receive a zero for the exam and referred to Student Judicial Services.

The last examination will NOT be cumulative. It will cover material presented after the first exam and calculations utilizing the material covered in the total course. Old examinations are not available.

Alternate Examination Location Request: Examinations are to be taken at your assigned campus. If you wish to take an exam at a location other than your assigned campus, you must e-mail the course coordinator with a request to take the examination at an alternate campus. The request must be submitted to the course coordinator at least ***TWO WEEKS*** prior to the examination. The coordinator will review requests on a case-by-case basis and respond at least a week before the exam.

The request should include assigned location, date of exam, desired location and reason for request.

POLICIES & RESOURCES

Attendance: It is your responsibility to attend class and conduct yourself in a manner respectful to both faculty and fellow students in the classroom. If you miss a class for any reason, you will be held responsible for all material covered and announcements made in your absence. Attendance will be taken at the beginning of each lecture and pre-lab session via sign-in sheet,

roll call, or Canvas quiz. Students should bring a laptop or tablet to each lecture. Attendance is factored into grades for PHM 183G.

If you are absent from lecture, you are responsible for watching the lecture prior to attending your next scheduled laboratory section. Lecture and pre-lab will be recorded and videostreamed in Canvas. The lab coordinator may deny admission to any student who was absent from lecture and/or pre-lab who did not watch the recording prior to coming to lab.

Permission to Miss Class for Attendance at Professional Meetings: It is the student's responsibility to ASK permission IN ADVANCE if he/she plans to attend a professional meeting, which would necessitate missing an exam, assignment, etc. It is at the discretion of the instructor as to whether to grant permission and allow the student to make up any missed work.

Religious Holy Days: By UT Austin policy, you must notify the instructor of your pending absence at least fourteen days prior to the date of observance of a religious holy day. If you must miss a class, an examination, a work assignment, or a project in order to observe a religious holy day, you will be given an opportunity to complete the missed work within a reasonable time after the absence.

Cell/Smart Phones and Laptops:

- Cell phones should never be heard during class. Out of respect to others in the class, including the instructor, silence phones or turn them off prior to the beginning of class.
- Cell phones should not be used during class. Sending or reading text messages during class or lab is unacceptable.
- Sending or reading emails during class or lab is unacceptable.
- Laptops may be used during class for taking notes.
- Using your laptop for activities other than taking notes causes a disruption to the classroom environment to those around you.
- Penalties for misuse are at the discretion of the instructor.

Course Website and Communications: Accessible only to students registered in the course via Canvas at <http://canvas.utexas.edu> -- UTEID and password required. Canvas will contain copies of PowerPoint slide presentations, learning objectives, case studies, the course syllabus, and other course materials.

Messaging through Canvas is the official method for faculty to communicate with students in this course. Please keep your email address on UT DIRECT current at all times. Support for Canvas is provided by the ITS Help Desk. Help desk link: <http://it.utexas.edu/students>. Link to Canvas student tutorials: <https://utexas.instructure.com/courses/633028/pages/student-tutorials>.

Use of E-Mail for Official Correspondence to Students: E-mail is recognized as an official mode of university correspondence; therefore, you are responsible for reading your e-mail for university and course-related information and announcements. You are responsible to keep the university informed about changes to your e-mail address. You should check your e-mail regularly and frequently—I recommend daily—to stay current with university-related

communications, some of which may be time-critical. Link to update your email address in UTDIRECT: https://utdirect.utexas.edu/apps/utd/all_my_addresses.

Canvas Communications: Please make sure to set your Canvas settings such that you receive emails and announcement notifications in a timely manner. The student is responsible for accessing and reading any announcement that is posted in Canvas.

To edit your Canvas settings, click on “Account” on the left hand column of the screen. Then, select “Notifications”. You can select how often you receive notifications from the course via Canvas. I recommend setting Announcements, Conversations, et al to be sent to you right away so that you receive emails immediately. You can choose how often you want to receive notifications from Canvas – either right away, daily, weekly or never. Regardless of your personal settings, you are responsible for any course changes or communications that are posted in Canvas. In addition, if you click on “Settings” in the left hand column, you may link your settings to additional email accounts, Facebook, Twitter, etc.

Redistribution of Class Recordings: Our classroom is equipped with a lecture recording system. These recordings are made available by the University of Texas, and are intended solely for the purpose of review by students currently enrolled in this class. Students utilizing class recordings should be careful to not compromise the privacy of either themselves or other users (<http://registrar.utexas.edu/students/records/ferpa>). Any additional distribution of University- or student-generated recordings (regardless of format) is prohibited without the written and signed permission of the presenter and all students identifiable on the recording.

Please remember that this service is offered to supplement (not replace) lecture attendance. An issue might arise that could prevent material from being made available in a timely fashion or at all. Although every effort will be taken to keep the system running, UT does not guarantee the availability of these recordings. Attending class is the only way to insure your viewing of the professor's presentation.

University of Texas Honor Code: The core values of The University of Texas at Austin are learning, discovery, freedom, leadership, individual opportunity, and responsibility. Each member of the university is expected to uphold these values through integrity, honesty, trust, fairness, and respect toward peers and community.

College of Pharmacy Honor Code: Students are also expected to uphold the University of Texas at Austin College of Pharmacy Honor Code, which may be located for your review at <https://pharmacy.utexas.edu/students/programs-of-study/pharm-d-program/pharm-d-student-handbook/codes-of-conduct-and-professionalism/#honorcode> .

Scholastic Dishonesty: Students are expected to work independently on examinations and quizzes. Any student engaging in academic dishonesty will be given an appropriate penalty, including possible failure of the course. Any case of academic dishonesty will be reported to the Dean’s Office of the College of Pharmacy and to the University Dean of Students, as per University regulations.

Students who violate University rules on scholastic dishonesty are subject to disciplinary penalties, including the possibility of failure in the course and/or dismissal from the University. Since such dishonesty harms the individual, all students, and the integrity of the University, policies on scholastic dishonesty will be strictly enforced. Also, you should refer to the Student Judicial Services website at <http://deanofstudents.utexas.edu/sjs/> to assess the official University policies and procedures on scholastic dishonesty as well as further elaboration on what constitutes scholastic dishonesty.

Common examples of scholastic dishonesty include, but are not limited to, the following:

1. Looking at and copying answers from another student's exam or quiz paper.
2. The use of crib notes or crib sheets.
3. Writing information for testing purposes on concealed paper, desks, skin, clothing or other material.
4. Stealing copies of the exam.
5. Changing answers after the exam period is completed.
6. Use of programmable calculators or computers for concealing information.
7. Talking to another student during an exam or quiz.
8. Any other act which gives a student an unfair advantage on an exam or quiz as compared with classmates.

Emergency Evacuation: Occupants of buildings on the UT Austin campus are required to evacuate and assemble outside when a fire alarm is activated or an announcement is made. Please be aware of the following policies regarding evacuation: Familiarize yourself with all exit doors of the classroom and the building. Remember that the nearest exit door may not be the one you used when you entered the building.

If you require assistance to evacuate, inform me in writing during the first week of class. In the event of an evacuation, follow my instructions or those of class instructors. Do not re-enter a building unless you are given instructions by the Austin Fire Department, the UT Austin Police Department, or the Fire Prevention Services office.

Qualified Students with Disabilities: The University of Texas at Austin provides, upon request, appropriate academic adjustments for qualified students with disabilities. All University rules concerning accommodations must be followed, including the student arranging for special accommodations at least two weeks *prior* to the examination. In the absence of such *prearrangement*, the student will be expected to take the exam with the rest of the class at the regularly scheduled exam time. Students with disabilities may request appropriate academic accommodations from the Division of Diversity and Community Engagement, Services for Students with Disabilities, 512-471-6259 (voice) or 512-232-2937 (video phone) or <http://diversity.utexas.edu/disability/2013/03/welcome/>.

Behavior Concerns Advice Line (BCAL): If you are worried about someone who is acting differently, you may use the Behavior Concerns Advice Line to discuss by phone your concerns about another individual's behavior. This service is provided through a partnership among the Office of the Dean of Students, the Counseling and Mental Health Center (CMHC), the

Employee Assistance Program (EAP), and The University of Texas Police Department (UTPD). Call 512-232-5050 or visit <https://operations.utexas.edu/units/csas/bcal.php>

Campus Carry: Students should familiarize themselves with the information provided by the University regarding the implementation of “Campus Carry” legislation. You will find an information sheet specifically for students (as well as sheets for parents, visitors, faculty, and staff) at <http://campuscarry.utexas.edu/info-sheets>.

**TENTATIVE LECTURE AND PRE-LAB SCHEDULE
PHM 183F AND PHM 183G**

Date	Topic
August 27	Course Introduction
August 30	Introduction to Basic Intravenous Admixtures
September 1	Introduction to Basic Intravenous Admixtures – continued
September 6	Pre-Lab for Lab 1 Sterile Product Containers and IV Therapy
September 8	Sterile Product Containers and IV Therapy – continued Math Quiz
September 13	Pre-Lab for Lab 2
September 15	Laminar Air Flow Hoods/Isolators and Techniques James P. Wilson, PharmD, PhD
September 20	Pre-Lab for Lab 3 <i>Laminar Air Flow Hoods/Isolators and Techniques - continued</i>
September 22	Introduction to References
September 27	Pre-Lab for Lab 4 Reference Quiz Review
September 29	Routes and Dosage Forms of Parenteral Therapy
October 4	Pre-Lab for Lab 5 Introduction to USP <797>
October 6	Exam 1
October 11	Pre-Lab for Lab 6 USP <797> – continued
October 13	Handling Hazardous Drugs James P. Wilson, PharmD, PhD
October 18	Pre-Lab for Lab 7 Handling Hazardous Drugs – continued
October 20	<i>Fluids and Electrolytes</i> <i>J. Nile Barnes, EMT-P(LP), PharmD, BCPS</i>
October 25	Pre-Lab for Lab 8 <i>Fluids and Electrolytes – continued</i>
October 27	Total Parenteral Nutrition
November 1	<i>Medication Errors/Patient Safety</i> <i>James P. Wilson, PharmD, PhD</i>
November 3	Home Health Care Ernie Faucher, Stonegate Pharmacy
November 8	<i>TSBP and Issues related to Sterile Compounding</i> <i>Ben Santana, RPh, Chief of Compliance, Texas State Board of Pharmacy</i>
November 10	Exam 2
November 15	Exam review and course evaluation (Letters of completion will be passed out at conclusion of review and evaluations. Letters are required for internships during the P4 year in which sterile compounding is involved.)