SYLLABUS for PHR 183G
Basic Intravenous Admixtures Pre-Lab and Lab
FALL SEMESTER 2015
Unique # 58410, 58415, 58420, 58425, 58430
Pre-Lab: Tuesday 11:30 AM – 12:30 PM (Central) PHR 3.106
ITV to: UTHSCSA, UTPA, UTEP
Labs: Austin – Tuesdays 1:30 – 4:30 PM, Wednesdays 1:00-4:00 PM PHR 3.108
El Paso – Thursdays 12:30 – 3:30 PM (Mountain)
RGV – Thursdays 1:30 – 4:30
San Antonio – Wednesdays 1:00 – 4:00 PM

Course Description: Basic Intravenous Admixtures (PHR 183G) – Pre-Lab/Laboratory

This course describes the theory, preparation, and use and route of administration of sterile products. Mathematical, clinical, and use of drug information will also be reviewed.

Instructor: Holli Temple, PharmD, BCPS, CGP
Office: PHR 2.222E
Office Phone: 512-232-1214
E-mail: holli.temple@austin.utexas.edu
Office Hours: By appointment

Other Faculty: James P. Wilson, PharmD, PhD
Office: 3.210A
Office Phone: (512)471-6978
E-mail: wilsonj@mail.utexas.edu
Office Hours: By appointment

El Paso Coordinator: Jose O. Rivera, Pharm.D.
Office Phone: 915-747-8535
Email: jrivera@utep.edu

Rio Grande Valley Co-Coordinators:
Bianca Cruz, PharmD, BCPS
Office Phone: 956-665-3761
Email: bianca.cruz@utrgv.edu
Daniela Bazan, PharmD
Email: daniela.bazan@utrgv.edu

San Antonio Co-Coordinators: Beth Perz, MS, PharmD, BCPS
Email: perz@uthscsa.edu
Kelly Reveles, Pharm.D, PhD
Email: kdaniels46@utexas.edu
Austin Teaching Assistants:

San Antonio Teaching Assistants:

Course Prerequisites: PHR 156P

Course Co-requisites: PHR 183 F and PHR 183 G or previous successful completion of PHR 183F or PHR 183G

Optional reference:

Grading Criteria:

<table>
<thead>
<tr>
<th>Attendance</th>
<th>10% – attendance for lecture and pre-lab</th>
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</thead>
<tbody>
<tr>
<td>Participation</td>
<td>10% - problem boxes and lab attendance</td>
</tr>
<tr>
<td>Graded laboratory work</td>
<td>35% - a total of 2 IV preparations (17.5% each)</td>
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<tr>
<td>Media fill</td>
<td>10% – minus 1 point for each minute over 30</td>
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<tr>
<td>Final product</td>
<td>35% - Must receive a 75 on this product to pass this course</td>
</tr>
<tr>
<td>Total</td>
<td>100% Final Grade</td>
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</tbody>
</table>

Grading scale:

| 90% - 100% = A | 80% - 89% = B | 75% - 79% = C | 70% - 74% = D | Below 70% = F |

NOTE: A passing grade of 75 is required on the final product. A student not passing the final product will receive an “F” in the course.

The media fill must be completed without contamination in order to pass the class. Students whose media fill is contaminated must repeat the media fill until they are able to do so without contaminating. If necessary, a student will receive an “Incomplete” for the lab until the media fill is successfully completed.
Attendance: It is your responsibility to attend pre-lab and lab, and conduct yourself in a manner respectful to both faculty and fellow students. If you miss pre-lab or lab 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 pre-lab session. Austin attendance will be taken via a sign in sheet. El Paso, PanAm and San Antonio attendance will be taken via role call or Turning Point clickers. ALL students should bring Turning Point clicker to every pre-lab.

If you are absent from pre-lab, you are responsible for watching the lecture prior to attending your next scheduled laboratory section. Pre-lab will be taped and videostreamed in Canvas.

Students missing lab must make up all activities that they missed prior to moving on to the next lab’s materials.

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.

Course Website and Communications: Accessible only to students registered in the course via Canvas at canvas.utexas.edu. UTEID and password required. Canvas will contain copies of PowerPoint slide presentations, learning objectives, case studies, readings, the course syllabus, and other course materials. The Canvas listserv is the official method for the faculty to communicate with students in this course; please keep your email address on the UT computer mainframe current at all times. Canvas will be used to distribute course materials, to communicate and collaborate online, and to post grades. You can find support in using Canvas at the ITS Help Desk at 475-9400, Monday through Friday, 8 AM – 6 PM, so plan accordingly.

Set your Canvas settings to receive emails and announcement notifications in a timely manner. The student is responsible for reading announcements posted in Canvas.

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. You can find UT Austin’s policies and instructions for updating your e-mail address at http://www.utexas.edu/its/help/utmail/1564.

Lecture Notes and Checklists: Course materials will be posted in Canvas at least 24 hours before each lecture or pre-lab session. It is the student’s responsibility to print out the notes if a hard copy is desired.
Permission to Miss Class for Attendance at Professional Meetings: It is the student’s responsibility to ASK permission IN ADVANCE when planning to attend a professional meeting which necessitates 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.

Cell Phones and Laptops:
- Cell phones should never be heard during class. Out of respect to others in the class, including the instructor, turn them off or to silent 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.

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. The University’s Honor Code can be found at: http://registrar.utexas.edu/catalogs/gi09-10/ch01/index.html.

College of Pharmacy Honor Code: Students are also expected to uphold the University of Texas College of Pharmacy Honor Code, which may be located for your review at http://www.utexas.edu/pharmacy/students/handbook98/3code.html. Students are expected to uphold the principles of the honor code.

Scholastic Dishonesty: Students are expected to work independently on graded products, problem boxes, and math 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://www.utexas.edu/depts/dos/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.

Qualified Students with Disabilities: The University of Texas at Austin provides upon request appropriate academic accommodations for qualified students with disabilities. For more information, contact the Division of Diversity and Community Engagement, Services for Students with Disabilities, 471-6259, http://www.utexas.edu/diversity/ddce/ssp/. It is the student’s responsibility to inform faculty at the beginning of each semester to arrange for appropriate accommodations when necessary.

Emergency Evacuation Policy: 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.

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 http://www.utexas.edu/safety/bcal
STUDENT POLICIES AND PROCEDURES FOR PHR 183G

Please read and examine the following course rules and information. It is extremely important that you understand these rules for the course.

1. Lab will start on time. The lab door will remain locked until instruction is complete and the first 30 minutes of lab have elapsed. Students entering after instruction will be responsible for catching up on what was missed without disrupting fellow classmates. Students will be expected to be ready to enter the lab for the final product 15 minutes prior to their assigned time.

2. No daily laboratory work will be dropped. Grades will be assessed for a mid-term product, a media fill product, a pre-final product and the final product. In addition, problem boxes will be available during some lab periods. These boxes must be completed during the lab they are available. They will be graded and count as the participation grade.

3. Students with an unapproved absence for any laboratory session or a final product will be given a zero for the grade of that session. A student who cannot attend a laboratory section may request from the instructor to change laboratory sections. Requests must be made in writing (paper or electronic) at least 24 hours prior to the start of the scheduled laboratory session. Notification must be made and acknowledged prior to the beginning of the scheduled laboratory session or the student will be considered to have an unexcused absence.

4. For approved absences from laboratory sessions, the student will be asked to repeat the missed laboratory.

5. If the student cannot attend a laboratory section, it is the student's responsibility to notify the instructor before the laboratory section meets.

6. Daily lab work on graded products of less than 75 points may be re-made without penalty one time. One additional re-make may be done with 10 points deducted. In total, the student has three attempts for a passing grade. First attempt, student begins at 100 points. Second attempt, student begins at 100 points. Third attempt, student begins at 90 points. The grade on the third attempt stands, whether the students scores 75 points or not. Daily lab work grades must be completed prior to the student being allowed to make the final product. If the student is unable to complete their third attempt prior to the end of their designated lab period immediately preceding the final product lab, the grade of the last graded product will stand.

7. If a student’s grade on a daily lab work graded product is less than a 75 due to time, then the points deducted for time will be adjusted such that the student receives a passing grade of 75 on the product. This policy applies for first attempts only. In other words, a student will not receive a failing grade on the first attempt at daily work because of time. Second and third attempts will be graded as is and any points deducted for time will be fully enforced.
8. A student must receive 75 points on the final product. A student not passing the final product will receive an F for the course. The student has three attempts to pass the final product. The student will receive a 10 point deduction to their grade for each redo after the initial attempt (i.e., first attempt has no deduction, second attempt has a 10 point deduction, and third attempt has a 20 point deduction). These deductions equate to one letter grade for each retest. Deductions will be taken after the product has been graded such that the student can pass the product with a score of greater than 75 yet receive a score of less than 75 for the product. For example, a student fails the final product on their first attempt. On the second attempt, the student scores 83 points. The student has passed the final product because they scored higher than 75 points, however, the student will receive a grade of 73 (83 minus 10 points for the retest) for the final product. The student’s final grade in the course will be calculated using the 73, not the 83.

9. When you come to the laboratory sessions, you may either wear scrubs or dress business casual (no jeans/denim). You must wear closed toe shoes (no sandals, flip flops, etc.). Short sleeves are advised. And, you must wear your nametag until we begin dressing in our personal protective equipment (PPE). No jewelry from the elbows down to the fingertips (watches, bracelets, rings, etc.), no necklaces around the neck, and no jewelry from the neck up (ear rings and other facial piercings). If the jewelry can be seen prior to garbing in the lab, then it is not allowed in the lab. Once PPE is issued, it is the student’s responsibility to bring it to each lab session. You will not be allowed to participate in lab if you do not meet dress code. Students on campuses other than Austin may have additional dress code requirements instituted locally by their campuses.

10. MSDS and chemical information about the drugs used in this laboratory may be found at the following UT homepage link: http://www.utexas.edu/safety/ehs/msds/

11. In the event of a needle stick or cut from an ampule that requires medical attention: During the school day, the Student Health Center (SHC) on Main Campus is available for routine care for students who are injured or ill. Students on other campuses should visit their local Student Health Center.
<table>
<thead>
<tr>
<th>DATE</th>
<th>TOPICS</th>
</tr>
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<tbody>
<tr>
<td>27 August</td>
<td>Course Introduction</td>
</tr>
<tr>
<td>1 September</td>
<td>Introduction to Basic Intravenous Admixtures</td>
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<tr>
<td>3 September</td>
<td>(continued)</td>
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<tr>
<td>8 September</td>
<td>Sterile Product Containers and IV Therapy</td>
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<tr>
<td>10 September</td>
<td>Math Quiz, Sterile Product Containers and IV Therapy continued</td>
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<tr>
<td>15 September</td>
<td>PreLab for Lab 1 (Hood Cleaning, Handwashing)</td>
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<td>Lab 1 (September 15 - 17)</td>
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<td>17 September</td>
<td>Laminar Air Flow Hoods/Isolators and Techniques</td>
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<td><em>James P. Wilson, PharmD, PhD</em></td>
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<tr>
<td>22 September</td>
<td>PreLab for Lab 2</td>
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<td>Lab 2 (September 22 – September 24)</td>
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<tr>
<td>24 September</td>
<td>Introduction to References</td>
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<tr>
<td>29 September</td>
<td>(continued)</td>
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<td>Lab 3 (September 29 – October 1)</td>
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<tr>
<td>1 October</td>
<td>Routes and Dosage Forms of Parenteral Therapy</td>
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<tr>
<td>6 October</td>
<td>USP &lt;797&gt;</td>
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<td></td>
<td>Lab 4 (October 6 – 8)</td>
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<tr>
<td>8 October</td>
<td>Exam 1</td>
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<tr>
<td>13 October</td>
<td>USP &lt;797&gt; continued</td>
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<td></td>
<td>Lab 5 (Mock Graded Product: October 13 – 15)</td>
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<tr>
<td>15 October</td>
<td>Handling Anti-neoplastic and Chemotherapeutic Agents</td>
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<td></td>
<td><em>James P. Wilson, PharmD, PhD</em></td>
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20 October (continued)

Lab 6 (Mid-Term Graded Product: October 20 – 22)

22 October Fluids and Electrolytes

27 October (continued)

Lab 7 (Media Fill, Chemo: October 27 – 29)

29 October Total Parenteral Nutrition

3 November Home Health Care
Ernie Faucher, AMD Healthcare

Lab 8 (Pre-Final Graded Product: November 3 – 5)

5 November Medication Errors/Patient Safety
James P. Wilson, PharmD, PhD

10 November TSBP Update
Ben Santana, RPh
Chief of Compliance
Texas State Board of Pharmacy

Lab 9 (Final Product: November 10 – 12)

12 November Exam 2

17 November 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.)
<table>
<thead>
<tr>
<th>Lab</th>
<th>Week of</th>
<th>TOPICS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>14 Sept</td>
<td>Introduction, orientation to lab procedures and policies, hand washing, hood cleaning, use of syringes and needles</td>
</tr>
<tr>
<td>2</td>
<td>21 Sept</td>
<td>Ampules, filter needles and straws, use of syringes and needles</td>
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<tr>
<td>3</td>
<td>28 Sept</td>
<td>Fractional saline, mEq, assorted products</td>
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<tr>
<td>4</td>
<td>5 Oct</td>
<td>Powder reconstitution, use of references, fractional saline</td>
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<tr>
<td>5</td>
<td>12 Oct</td>
<td>Powder reconstitution, use of references, assorted products <strong>Mock graded product</strong></td>
</tr>
<tr>
<td>6</td>
<td>19 Oct</td>
<td>Complex infusion rates, compatibility and stability, assorted products, environmental testing <strong>Graded product (Mid-Term)</strong></td>
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<tr>
<td>7</td>
<td>26 Oct</td>
<td>Cytotoxics, media fill, isolator <strong>Graded product (Media Fill)</strong></td>
</tr>
<tr>
<td>8</td>
<td>2 Nov</td>
<td>Complex infusion rates, compatibility and stability, assorted products <strong>Graded product (Pre-Final)</strong></td>
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<tr>
<td>9</td>
<td>9 Nov</td>
<td><strong>Graded product (Final Product)</strong></td>
</tr>
<tr>
<td>10</td>
<td>16 Nov</td>
<td>Final examination product(s) retesting, if necessary</td>
</tr>
</tbody>
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