Renal Disorders
Summer 2015 6 Credits

Course Purpose:
PHA 5593 is one in a series of eight courses which are organized by body system. PHA5593 introduces the student to patient care concepts, patient assessment, pharmacokinetics, pharmacodynamics, therapeutics, and therapeutic drug monitoring for patients with renal disorders. The learning activities emphasized during this course include gathering and processing information, identifying and prioritizing problems, planning and effecting therapeutic interventions, patient communication and counseling, and communicating with health care providers.

This post-baccalaureate working professional course is designed to introduce the practicing pharmacist to the concepts of patient care by requiring the student to provide services to actual patients as they learn. All the biomedical, pharmaceutical, social, and clinical sciences are fully integrated in the reading assignments and patient case presentations for the purpose of providing the student the opportunity to function as he/she would after graduation, but under faculty supervision.

Course Faculty and Office Hours

Coordinator:
Lori Wazny, Pharm.D.
Email: Lwazny@cop.ufl.edu
Office Hours: Email to request phone appointment.

Co-coordinator:
Sue Markowsky, Pharm.D.
Clinical Associate Professor
UF College of Pharmacy
Email: smarkowsky@cop.ufl.edu
Office Hours: Email to request phone appointment

Academic Staff
Jackie Lavinder, Academic Coordinator
Program Assistant
Working Professional PharmD Program
Office Phone: Weekdays 352-273-6279
Email: lavinder@cop.ufl.edu

Please see Appendix A for contact information of faculty and staff involved in this course and the WPPD program. Biosketches of the expert speakers for this course are also included in Appendix A. Each student is assigned to a facilitator and will receive an email from the facilitator at the beginning of the course. This email will provide the facilitator’s email address and phone number.
Place and Time of Class Sessions
Lectures are prerecorded and posted on the course website and are available on Canvas Learning system. Lectures may be viewed at the student’s individualized timeline prior to completing assignments and active learning sessions. Regional students will attend three 7-8 hour live sessions. The sessions will occur on designated Saturdays listed on WPPD calendar. Remote students will attend one weekend session (12-15 contact hours) and weekly Adobe Connect sessions. The time of the sessions will vary based on group assignment.

Relation of Course to WPPD Program Outcomes:
This course prepares the Pharm.D. student to accomplish the following abilities and the related Student Learning Outcomes (SLOs) upon graduation:

Domain 1 – Foundational Knowledge
1.1. Learner (Learner) - Develop, integrate, and apply knowledge from the foundational disciplines (i.e., pharmaceutical, social/behavioral/administrative, and clinical sciences) to evaluate the scientific literature, explain drug action, assess and solve therapeutic problems, and advance population health and patient-centered care.

Domain 2 – Essentials for Practice and Care
2.1. Patient-centered care (Caregiver) - Provide patient-centered care as the medication expert (collect and interpret evidence, prioritize patient needs, formulate assessments and recommendations, implement, monitor and adjust plans, and document activities).

2.2. Medication use systems management (Manager) - Manage patient healthcare needs using human, financial, technological, and physical resources to optimize the safety and efficacy of medication use systems.

2.3. Health and wellness (Promoter) - Design prevention, intervention, and educational strategies for individuals and communities to manage chronic disease and improve health and wellness.

2.4. Population-based care (Provider) - Discuss how population-based care influences patient-centered care and influences the development of practice guidelines and evidence-based best practices.

Domain 3 - Approach to Practice and Care
3.1. Problem Solving (Problem Solver) – Identify and assess problems; explore and prioritize potential strategies; and design, implement, and evaluate the most viable solution.

3.2. Educator (Educator) – Educate all audiences by determining the most effective and enduring ways to impart information and assess understanding.

3.3. Patient Advocacy (Advocate) - Assure that patients’ best interests are represented.
3.4. *Interprofessional collaboration (Collaborator)* – Actively participate and engage as a healthcare team member by demonstrating mutual respect, understanding, and values to meet patient care needs.

3.5. *Social & Cultural Sensitivity (Includer)* - Recognize social determinants of health in order to diminish disparities and inequities in access to quality care.

3.6. *Communication (Communicator)* – Effectively communicate verbally and nonverbally when interacting with an individual, group, or organization.

**Domain 4 – Personal and Professional Development**

4.1. *Self-awareness (Self-aware)* – Examine and reflect on personal knowledge, skills, abilities, attitudes, beliefs, biases, motivation, and emotions that could enhance or limit personal and professional growth.

4.2. *Leadership (Leader)* - Demonstrate responsibility for creating and achieving shared goals, regardless of position.

4.3. *Innovation and Entrepreneurship (Innovator)* - Engage in innovative activities by using creative thinking to envision better ways of accomplishing professional goals.

4.4. *Professionalism (Professional)* - Exhibit behaviors and values (e.g., UF PHARMD CORES) that are consistent with the trust given to the profession by patients, other healthcare providers, and society.
   
   a. Interpret subjective and objective data.
   b. Identify medication-related problems (identify and/or prevent drug-related problems such as inappropriate indication, therapeutic duplication, drug-disease, drug-drug interactions, incorrect drug dosage or duration of treatment, drug-allergy interactions, and clinical abuse or misuse of drugs).
   c. Develop a specific and complete care plan. This plan includes a comprehensive list of the patient’s medication-related problems and for each problem, a specific plan for resolving the problem. This plan includes detailed information about what medications need to be added or discontinued and if a medication is to be added, the product that should be dispensed, the dosage, route, times of administration, duration of therapy, parameters to monitor for efficacy and toxicity, and patient counseling plans.
   d. Outline a monitoring plan for monitoring drug efficacy and toxicity.
   e. Support the care plan and decisions with evidence-based literature.

**Course Objectives**

Upon completion of this course, the student will be able to:

1. Given a patient with a Renal disorder, demonstrate the ability to:
   
   a. Interpret subjective and objective data
   b. Identify medication-related problems (identify and/or prevent drug-related problems such as inappropriate indication, therapeutic duplication, drug-disease,
drug-drug interactions, incorrect drug dosage or duration of treatment, drug-allergy interactions, and clinical abuse or misuse of drugs.)

c. Develop a specific and complete care plan. This plan includes a comprehensive list of the patient’s medication-related problems and for each problem, a specific plan for resolving the problem. This plan includes detailed information about what medications need to be added or discontinued and if a medication is to be added, the product that should be dispensed, the dosage, route, times of administration, duration of therapy, parameters to monitor for efficacy and toxicity, and patient counseling plans.

d. Outline a monitoring plan for monitoring drug efficacy and toxicity.

e. Support the care plan and decisions with evidence-based literature.

2. Implement, monitor, evaluate, and adjust pharmaceutical care plans with accuracy and timeliness.

   a. Prepare a written SOAP note.
   b. Demonstrate the ability to establish for a patient the “therapeutic goals” or endpoints that indicate the patient’s medication problem is either resolved, cured, or managed.
   c. The student must then demonstrate the ability to monitor the patient over time and assess when the endpoints are achieved. If the patient is not achieving the desired endpoints, the student must demonstrate the ability to modify the therapeutic plan or endpoints so that the patient’s quality of life is optimized.

3. Prepare and deliver educational programs to pharmacists/peers that promote appropriate use of medications by applying pharmacy knowledge and using effective communication skills.

   a. Present a patient summary with confidence and in an organized format that includes only pertinent information. (Example: brief patient summary during rounds or when proposing recommendations to a care provider.)
   b. Give a formal case presentation that includes presentation of patient data, development of a comprehensive care plan, a summary of literature pertinent to the medication-related problems, and an oral defense of recommendations.
   c. Demonstrate effective verbal communications to staff, patients and healthcare team members.

      i. Prepare an accurate, concise, and organized written patient care plan.

4. Identify, report and analyze drug induced diseases that are encountered in renal patients.

5. Recommend how to manage a patient who has health literacy issues. Practice patient counseling using the teach-back method.

6. Communicate with another health care professional about the appropriateness of a patient's pharmacotherapy with clarity and accuracy (drug, dosing, dosage forms, routes of administration, delivery systems).

7. Work with individuals of other professions to maintain a climate of mutual respect and shared values.

8. For the Renal disorders emphasized during this course:

   a. Explain anatomical, physiological, and pathophysiological conditions ameliorated by pharmacotherapy.
   b. Describe the epidemiology of the following disorders:
   c. Describe the clinical presentation and clinical manifestations.
   d. Discuss the pharmacologic and non-pharmacological interventions that are recommended.
e. Critically evaluate new advances in biotechnology, pharmacotherapy, or systems of care and effectively utilize this new knowledge for patient care improvement.
f. Review common drug-drug interactions and their etiology.
g. Outline the major elements of currently accepted standard of care guidelines.

9. Implement rational pharmacotherapy based on a mastery of sciences:
   a. BIOMEDICAL (anatomy, physiology, pathophysiology, infectious disease, oncology, and immunology),
   b. PHARMACEUTICAL (medicinal chemistry, biopharmaceutics, pharmacodynamics, and pharmacokinetics),
   c. CLINICAL (therapeutics, therapeutic drug monitoring, toxicology, nutrition, and drug information),
   d. PHARMACEUTICAL CARE (patient interviewing techniques, chart review and data gathering, identifying interventions, establishing interventions and monitoring strategies, and communication skills with health care providers).

10. Given a patient/practice problem or case related to a renal disorder, solve the medication-related problems using clinical reasoning skills.

11. Demonstrate the ability to use the learning tools in the eLearning system to accomplish learning objectives and prepare for class session.

12. Use informatics tools when determining drug dosing for patients with decreased renal function.

13. Critically evaluate scientific and professional literature to assure that appropriate statistical tests and experimental design have been used in studies relating to drug safety and efficacy.

14. Give a care presentation that requires evaluation of literature to support recommendations.

15. Demonstrate professional behaviors expected of a pharmacist.

Pre-Requisite Knowledge and Skills
The student must be in good academic standing with the Working Professional Doctor of Pharmacy Program, having successfully completed the Foundations course. Students should have a baccalaureate degree from an ACPE-accredited college of pharmacy that included therapeutics and pharmacokinetics. The student must also be licensed and in good standing with their respective Board of Pharmacy.

Course Structure & Outline
This course is offered in a blended learning format that utilizes a combination of face-to-face classroom instruction, on-line learning, and hands-on experiential activities. To meet the standards for course credit assignment this six-credit course requires a minimum of 96 hours of classroom instruction or the equivalent. Since the face-to-face classroom instruction is less than 96 hours, a number of alternative instructional activities comprise the remainder of the equivalent content and serve to fulfill the curricular equivalency standard. Using a combination of live classroom instruction and alternative methods of instruction ensures that the requirements for course credit assignment are fulfilled. Please see Appendix B for the breakdown of instructional hours. Here are the course structures used in the Pharm.D. program:
a) Multiple self-directed learning activities are required (e.g., videos, readings, web-based learning) and at selected intervals students come to class for a face-to-face learning session (e.g., case discussion, problem set discussion),
b) Class sessions are face-to-face or ‘live’ sessions via online classrooms,
c) Self-directed pre-requisite learning activities must be completed prior to and after ‘live’ class sessions, and
d) Learning activities completed in the actual practice setting

Acquisition of knowledge and skills are assessed using a combination of exams, presentations, and assignments. Course participation in Adobe Connect sessions (remote), discussion board activities, and attendance at a live session are also assessed. The course is divided into three units and there are learning modules within each unit. An outline of the course module topic are listed in Table 1. The corresponding module activities are posted in the Canvas E-learning website (see Quick scan).

Table 1. PHA5593 Unit and Module topics.

<table>
<thead>
<tr>
<th>Unit</th>
<th>Module</th>
<th>Faculty</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Start</td>
<td>Course Introduction (Orientation)</td>
<td>Dr. Lori Wazny</td>
<td></td>
</tr>
<tr>
<td>A1</td>
<td>Chronic Kidney Disease (Part 1 &amp; 2), and Mock Case 1</td>
<td>Dr. Lori Dupree, Dr. Wazny (Case)</td>
<td>Exam A, Mock Case 1</td>
</tr>
<tr>
<td>A2</td>
<td>Acute Kidney Injury (Part 1 &amp; 2)</td>
<td>Dr. Lori Dupree</td>
<td>Exam A</td>
</tr>
<tr>
<td>A3</td>
<td>Kaplan-Meier Curves, Hazard Ratios, Composite Endpoints, and Journal Club (JC) Assignment</td>
<td>Dr. Clarissa Borst, Dr. Markowsky (JC)</td>
<td>Exam A, JC Assignment</td>
</tr>
<tr>
<td>B1</td>
<td>Fluids &amp; Electrolyte Disorders</td>
<td>Dr. Stacy Voils</td>
<td>Exam B</td>
</tr>
<tr>
<td>B2</td>
<td>Acid Base Disorders</td>
<td>Dr. Steve Lemon</td>
<td>Exam B</td>
</tr>
<tr>
<td>B3</td>
<td>Transplant</td>
<td>Dr. Christina Doligalski</td>
<td>Exam B</td>
</tr>
<tr>
<td>B4</td>
<td>Drug-Induced Kidney Disease</td>
<td>Dr. Lori Wazny</td>
<td>Exam B</td>
</tr>
<tr>
<td>B5</td>
<td>Informatics and Hemodialysis Drug Dosing (Mock Case 2)</td>
<td>Dr. Wazny (Case)</td>
<td>Mock Case 2 Assignment and Workshop</td>
</tr>
<tr>
<td>C1</td>
<td>Urinary Tract Infections</td>
<td>Dr. Kathryn Hernando</td>
<td>Exam C</td>
</tr>
<tr>
<td>C2</td>
<td>BPH &amp; Overactive Bladder</td>
<td>Dr. Katie Vogel Anderson</td>
<td>Exam C</td>
</tr>
<tr>
<td>C3</td>
<td>Erectile Dysfunction</td>
<td>Dr. Katie Vogel Anderson</td>
<td>Exam C</td>
</tr>
<tr>
<td>C4</td>
<td>Prostate Cancer</td>
<td>Dr. Paul Furler</td>
<td>Exam C</td>
</tr>
<tr>
<td>C5</td>
<td>Interprofessional Teams Assignment / Workshop</td>
<td>Dr. Wazny (Case)</td>
<td>Assignment and Workshop</td>
</tr>
</tbody>
</table>

**Textbooks**
The following textbooks will be used throughout your course of study in the WPPD program. No other textbooks will be required. Textbooks can be purchased via various internet sites; however, make sure you buy the latest editions.
   a. This text is available via the UF library/AccessPharmacy database. Although you can use the online version for study, most students find it essential to purchase a hardcopy of the Pharmacotherapy Text. Online access to the Pharmacotherapy text may not be available during exams.
   b. (Caution: Old editions are sold on the internet and should not be purchased. Watch carefully what edition you purchase. A Pharmacotherapy Handbook is also available with the current edition. This handbook is a useful reference in daily practice but should not be purchased in lieu of the text listed above.)

Instructors may require additional readings such as clinical guidelines, review articles, book chapters, or websites. They may also provide additional resources to supplement the lecture material. Required or recommended readings will be listed under assignments and responsibilities on the course schedule. Required readings not available via the textbooks above or AccessPharmacy will be posted on the course website.

**Active Learning Requirements**

Active learning requires students to actively participate in synchronous learning activities and complete assignments that require either application of what is learned from lectures or independent study. During this course, active learning will occur with the activities listed below. See the Course quick scan detailed in Appendix C for specific expectations required to accomplish this active learning:

1. Active participation in small group classes including “live” sessions (regional and remote students) and Adobe Connect sessions (remote students).
2. Completion of self-directed learning modules which include: a) videos, b) readings, c) assignments that require application of module knowledge, and d) online self-assessment questions.
3. Asynchronous communications and discussions with course coordinators, small group members, and/or guest lecturers via discussion boards and email.
4. Completion of the following assignments: a) patient case presentation, b) longitudinal patient case presentation, and c) substance abuse presentation, and e) ethical dilemma.
5. Completion of the following self-assessments required for workshop preparation: a) technology and b) ethical dilemma. Completion of online self-assessments will be assessed for participation.
points (homework and class preparation). See the weekly planner for Units A, B, and C homework assignments and timelines posted on the course website (remote or regional model).

**Feedback to Students**
Facilitators will provide written feedback on all assignments via the eLearning system. In general, written feedback can be expected within one week of assignment submission. Facilitators will also provide students with timely verbal feedback on in-class presentations and performance. In addition, students may schedule an appointment with the facilitator and/or course coordinator if they wish to obtain more detailed feedback.

**Student Evaluation & Grading**

**Evaluation Methods**

<table>
<thead>
<tr>
<th>Activity</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual case presentation/SOAP note *</td>
<td>12.5%</td>
</tr>
<tr>
<td>Mock Patient Case #1</td>
<td>2%</td>
</tr>
<tr>
<td>Mock Patient Case #2</td>
<td>2%</td>
</tr>
<tr>
<td>Journal Club</td>
<td>12.5%</td>
</tr>
<tr>
<td>Interprofessional Teams Workshop</td>
<td>2%</td>
</tr>
<tr>
<td>CPI / Capstone Progress Reports</td>
<td>3%</td>
</tr>
<tr>
<td>Class participation (see Participation Rubric)</td>
<td>6%</td>
</tr>
<tr>
<td>2% per unit (Units A, B, C) : Includes attendance, participation, homework, communication (e.g., email), professionalism</td>
<td></td>
</tr>
<tr>
<td>Exam A (Unit A)</td>
<td>20%</td>
</tr>
<tr>
<td>Exam B (Unit B)</td>
<td>20%</td>
</tr>
<tr>
<td>Exam C (Unit C)</td>
<td>20%</td>
</tr>
</tbody>
</table>

• *Note: Students must pass the Case Presentation in order to pass the course. Remediation for a failed case(s) (less than 70%) will include re-submitting the case to the facilitator and may also include presenting the revised case to the group. The final score for the remediated case presentation grade will be limited to the original score. To successfully pass the course, the student must achieve a grade > 70% on the remediation assignment. Points will be deducted for SOAP notes that do not meet the minimum criteria (passing scores are required). See the evaluation forms for Case Presentations and SOAP notes (Canvas Student Presentations page).

• Note. Students must obtain at least a 70% (combined) average on the EXAMS and a 70% overall in course work in order to pass the course. Students do not have to score a 70% on each exam; only the average of the three exams needs to be at least 70%. See E learning in CANVAS System for the full policy. The requirement to achieve a score of at least 70% has been established to assure all students have achieved the course learning objectives with minimum competency.

• **Please visit the following URL so you clearly understand the UF grading policies:**
  [https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx](https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx)
Grading Scale

A  97 – 100  A-  94 - 96
B+ 91 – 93  B 87 - 90
B-  84 – 86  C+ 81 - 83
C  79 – 80  C- 77 - 78
D+  75 – 76  D 72 - 74
D-  70 – 71  E  <70

Class Attendance Policy

CLASS ATTENDANCE IS MANDATORY AT THE “LIVE” EXPERIENTIAL SESSIONS (including regional and remote sessions). A form (“Request to miss part or all of a session”) must be completed by the student if they cannot attend part or all of a session. The form is posted on E learning in CANVAS System. This form must be approved by the student’s facilitator and the course coordinator. Email completed form to facilitator and course coordinator. Students are responsible for taking any exams missed via ProctorU.

NOTE: Attendance for the remote weekend is MANDATORY. If missed, students will be required to travel to makeup a ‘live’ session during one of the three regional on-site sessions.

Exam Policy

There are two components to the Working Professional Pharm.D. courses; the experiential component and the didactic component. Competence in both areas is critical to being a successful Doctor of Pharmacy. Because these components are integrated within each course, a mechanism to document an acceptable level of understanding in each area is vital. As such, students must not only demonstrate competence in the course overall, but also in each component of the course in order to the pass the course.

Examination Schedule

This course has three examinations.* Students must obtain at least a 70% (combined) average on the EXAMS and, AND a 70% overall in coursework in order to pass the course. The student DOES NOT have to score a 70% on each exam, only the average of the three exams needs to be at least 70%.

Exam A (Unit A)
Regional Sites  June 6th, 2015  8:30 AM-10:30 AM
Remote Sites  June 6th, 2015  via ProctorU (9 am-12 noon EST start times)

Exam B (Unit B)
Regional Sites  July 11th, 2015  8:30 AM-10:30 AM
Remote Sites  July 11th, 2015  via ProctorU (9 am-12 noon EST start times)

Exam C (Unit C)
Regional Sites  Aug 1st, 2015  8:30-10:30AM
Remote Sites  Aug 1st, 2015  via ProctorU (9 am-12 noon EST start times)

*All exams are open book.
Proctored Exam Details
For detailed exam instructions, please see Canvas page titled “Proctored Exams”. Students should print out the documents within this section prior to each online proctored exam. The documents include important contact information, online exam instructions, and exam rules. All exams will be proctored.

You must NOT obtain the exam at any other time than instructed unless prearranged with the course coordinator and your facilitator. The Academic Honesty Policy will apply to this exam process and students not complying with the instructions with regards to time and location are subject to disciplinary action.

In the rare event that the online exam malfunctions and the exam is administered by an alternate method, the deadlines will be enforced. The following point deductions are made for late exams:

- 5-15 minutes  5% deduction
- 16-30 minutes  7% deduction
- 31-60 minutes  10% deduction
- 61-120 minutes  20% deduction
- >121 minutes  30% deduction

Exam Format
All examinations will be mostly in case study format so that an evaluation of the student is made not just on his/her ability to recall facts, but more importantly, the ability to apply information to improve, monitor, and evaluate pharmaceutical patient care outcomes.

Exam Posting
Exam Grades will be posted to E learning in CANVAS by the facilitator as soon as permissible. Students will be notified of grade posting by the facilitator. Exams will be returned in the next session for regional model students. Final exams for regional model students will be returned at the next class session.

Exam Review
Students have 1 week from the date of posting the exam grade on E learning in CANVAS to request a copy of the graded exam. The student has 1 week from the time of receipt of the exam to request clarifications. Facilitators will review and provide judgment on the requested clarifications.

Exam Challenges
In the event that the student is not satisfied with the facilitator’s judgment, a written appeal can be made. The student has 1 week from the time of receipt of judgment to appeal. Appeals are sent to the facilitator who will forward to the course coordinator. Written appeals must include the following: The question number, an evidence-based rationale for why the student feels their response is accurate, literature citations. The exam will be regraded, in full, by a third party. The grader will assess the supporting data when grading the appealed portions of the exam. Note: the score of a fully regraded exam may increase, decrease, or stay the same. The regraded score will be considered final.

Exam Rescheduling
Examinations may be changed from the scheduled dates provided that the change does not conflict with any University of Florida or College of Pharmacy policies. Examination date changes proposed by the students as a group require the unanimous approval of the students and faculty involved.
Make-up Exam Policy
Make-up examinations will only be administered under the most EXTREME circumstances and only if the student has an excused absence. Contact your facilitator for more information.

Policy on Old Quizzes and Assignments
Course coordinators are not required to provide copies of old exams or assignments.

Assignment Deadlines
Assignment deadlines and the course schedule are outlined in Appendix C (Quick Scan). The weekly planners for Units A, B, and C are posted in eLearning for regional and remote models. Use the weekly planner to keep on track during the course.

***Assignments Require “Independent Work”
During the semester you will have homework and presentation assignments. These assignments must be your independent work, meaning that you did not share your answers with another student or collaborate in answering the questions. The faculty monitor closely for similarities among student answers to these assignments. If there is evidence suggesting that your assignment is not “independent work,” your facilitator and course coordinators will forward your case to the University and request an academic dishonesty investigation.

You are strongly encouraged to schedule your time in advance of deadlines so that you have extra time in case of illness or emergency.

Students who encounter difficulties meeting any deadline should to immediately email/call their facilitator and discuss options available for success. Please remember, as noted above with most assignments there are no options for extending an assignment deadline. If the facilitator cannot be reached, the student may contact the course coordinators by email for assistance in communicating with the facilitator.

Important Assignment Rules:

1. “Homework” this semester will include questions posted online to prepare for the experiential sessions (see regional or remote weekly planners). Students are required to complete the assignments prior to each session. The student’s work will be checked by the facilitator prior to beginning the session. Students who do not complete the material prior to the session will receive a score of zero (unacceptable) on the Participation Evaluation Form for #3 Well-prepared, and #5 Actively participates in all class workshops.

2. All students (Remote and Regional) must submit case presentations 72 hours prior to their scheduled presentation. Do not use the UF webmail to submit cases, as it is not a secure method of sending patient information. To submit cases, go to Assignments and submit the case presentation materials (including the faculty supporting data handout merged within the same attachment). See Foundations Module titled “Case Presentations” for more information regarding case presentation format. Documents for case presentation format can also be located within E Learning for “WPPD Resources and Practice Experiences Site Resources” (see Resources folder - “Case Presentation Information”).
3. In order to pass the course it is mandatory that the student pass the case presentation(s). Remediation for a failed case(s) (less than 70%) will include re-submitting the case to the facilitator and may also include presenting the revised case to the group. The final score for the remediated case presentation grade will be limited to the original score.

4. Graded assignments must be submitted to “Turn-It-In” prior to submitting to the facilitator. More specific instructions can be found on the E Learning website. A printed copy of the assignment should also be turned in during “live” class sessions.

General College of Pharmacy Course Policies
The College of Pharmacy has a website that lists course policies that are common to all courses. This website covers the following:

1. University Grading Policies
2. Academic Integrity Policy
3. How to request learning accommodations
4. Faculty and course evaluations
5. Student expectations in class
6. Discussion board policy
7. Email communications
8. Religious holidays
9. Counseling & student health
10. How to access services for student success

Please see the following URL for this information:

Complaints
Should you have any complaints with your experience in this course please contact your course coordinator. If unresolved, contact the COP Senior Associate Dean-Professional Affairs. For unresolved issues, see: http://www.distancelearning.ufl.edu/student-complaints to submit a complaint.

University of Florida College of Pharmacy is accredited by the Accreditation Council for Pharmacy Education as a provider of continuing pharmacy education. This course is accredited for 20 hours (2.0 CEUs). ACPE Accreditation number is posted on the course website. To receive credit for this course, you must receive a passing grade and complete the evaluation form. Consultant Pharmacist credit (12 hours) is available for Consultant Pharmacists practicing in Florida.

PHA5593: Renal Disorders, has been accredited for 20 hours of live Pharmacy Continuing Education as an Application-Based Activity. The release date is 05/01/2015 and the expiration date is 12/30/2015. The UAN is 0012-0000-15-234-L01-P.
Appendix A: Directions for Contacting Faculty & Course Faculty List

PHA5593  Co-coordinator: Lori Wazny, Pharm.D.; Email: lwazny@cop.ufl.edu  
Co-coordinator: Sue Markowsky, Pharm.D.;  E-mail: smarkowsky@cop.ufl.edu  
Academic Coordinator: Jackie Lavinder;  E-mail: lavinder@cop.ufl.edu

Dean, College of Pharmacy  
Julie Johnson, Pharm.D.  
Dean, UF College of Pharmacy, Gainesville, Florida

Director, WPPD  
Sven Normann, Pharm.D., DBAT  
Assistant Dean, Clinical Associate Professor Pharmacotherapy & Translational Research  
UF College of Pharmacy, Gainesville, Florida  
E-mail: normann@cop.ufl.edu

Regional Director - Regional Sites, WPPD  
Douglas F. Covey, Pharm.D., FCCP, CDE, MHA  
Clinical Associate Professor, Pharmacotherapy & Translational Research  
UF College of Pharmacy, Gainesville, Florida  
Clinical Pharmacy Specialist – Ambulatory Care James A. Haley Veterans Hospital, Tampa, Florida  
E-mail: dcovey@cop.ufl.edu

Regional Director - Clinical Practice Assessments, WPPD  
Beatriz Mitrzyk, Pharm.D.  
Clinical Assistant Professor, Pharmacotherapy & Translational Research  
UF College of Pharmacy, Gainesville, Florida  
Free-lance Medical Writer  
E-mail: bmitrzyk@cop.ufl.edu

Regional Director – Remote Sites, Capstone Programs, WPPD  
Susan J. Markowsky, Pharm.D.  
Clinical Associate Professor, Pharmacotherapy & Translational Research  
UF College of Pharmacy, Gainesville, Florida  
E-mail: smarkowsky@cop.ufl.edu

Director – Student and Academic Affairs, WPPD  
Gregory Zuest, PhD, MESS, ATC/L, CSCS  
WPPD Program / UF College of Pharmacy, Gainesville, Florida  
E-mail: zuest@cop.ufl.edu

Associate Dean for Curriculum and Assessment  
Diane E. Beck, Pharm.D.  
Professor, Pharmacotherapy and Translational Research  
UF College of Pharmacy, Gainesville, Florida  
E-mail: beck@cop.ufl.edu
Off Site Admissions Center - Program Manager
Rayshawn E. Engram, Off Site Admissions Center, Orlando, Florida
E-mail: R.Engram@distancelearning.cop.ufl.edu
1-866-226-7228 (x5032)

Program Assistant, WPPD
Tracie Cooper
UF College of Pharmacy, Gainesville, Florida
E-mail: tracie@cop.ufl.edu

Whom Do You Contact?
Course Coordinator will address: smarkowsky@cop.ufl.edu

- Course specific issues (e.g., course content, assignments, grades, and exams)
- Any exceptions made for student emergencies affecting course participation or completion

Facilitators will address:

- Regional/remote group meetings or calls
- Initial student questions
- Homework, Assignments
- Clinical Practice Assessments (CPAs)
- Clinical Practice Improvement (CPI)
- Capstone Paper Requirement

WPPD Office will address: wppdsupport@ahc.ufl.edu

- Faculty and program evaluation
- Course and transfer credit
- Facilitators and student/facilitator assignments and relationships
- Student Records
- Tuition
- Affiliation Agreements

Off Site Admissions Center - Program Manager will address:

- Registration
- Course manual and material
  Please contact Off Site Admissions Center at: R.Engram@distancelearning.cop.ufl.edu

Technical Support will address:

- Multimedia (streaming videos, MP3 or MP4 download) issues, contact mediahelp@cop.ufl.edu or 352-273-6281
- Technical Issues – UF Computing Help Desk
  - Web: http://www.helpdesk.ufl.edu
Expert Presenters

Clarissa Borst, Pharm.D., BCPS
Dr. Borst earned her PharmD from Purdue University in 1997; she then completed an ASHP accredited Pharmacy Practice residency at Rush-Presbyterian-St. Luke's Medical Center in Chicago, Illinois. She is currently the Managing Editor of Clinical Pharmacology (Gold Standard, Tampa, FL), an on-line drug information reference. She has held various other positions including Assistant Clinical Professor at Midwestern University (Downers Grove, IL) where she focused on precepting students in the areas of outpatient anticoagulation, diabetes, hypertension, and hyperlipidemia management, Manager of the Anticoagulation Unit at Evanston-Northwestern Hospital (Glenview, IL), and Drug Information Specialist at Rush University Medical Center (Chicago, IL) and Ingalls Hospital (Harvey, IL). Dr. Borst has been a facilitator with the WPPD program since 2000; she also co-coordinates the Foundations course in the WPPD program. Her interest and experience in statistics stems from her current role at Gold Standard where frequent interpretation of the literature is required. She is a recipient of the Outstanding Faculty Award for the WPPD program.

Christina Doligalski, PharmD, BCPS
Dr. Doligalski is the Cardiac Transplant and Mechanical Circulatory Support Pharmacotherapy Specialist as well as PGY2 Solid Organ Transplant Program Director at Tampa General Hospital. Additionally, she holds Assistant Professor appointments with the University of Florida College of Pharmacy and University of South Florida School of Pharmacy. Prior to her current position, Dr. Doligalski completed her PGY1 and PGY2 Solid Organ Transplant residencies at Duke University Hospital. Her academic activities have focused around transplant mentorship, serving as faculty advisor for the solid organ transplant student interest group at the USF School of Pharmacy and Faculty Mentor at the UF College of Pharmacy. Recent areas of research have included early post-operative complications following heart transplantation, hemostatic complications in MCS recipients, and infectious complications following treatment of AMR in cardiothoracic transplant recipients. Dr. Doligalski has published several papers and serves as an active peer reviewer.

Lori H. Dupree, Pharm.D., BCPS
Dr. Dupree received her Pharm.D. from the McWhorter School of Pharmacy at Samford University. Her postdoctoral training includes Pharmacy Practice and Internal Medicine residencies. Since completing her training, Dr. Dupree has worked as a Clinical Inpatient Practitioner of Family Medicine and Internal Medicine. She has served as Assistant Clinical Professor at Auburn University, the University of Georgia and Mercer University. Dr. Dupree began her affiliation with the University of Florida in 2004 as a Courtesy Clinical Assistant Professor and rotation preceptor. She accepted a full time faculty appointment in July 2013.

Paul Furler, Pharm.D.
Paul Furler, Pharm.D. is a PGY-2 Oncology Pharmacy Resident at the University of Florida Shands Hospital for the 2014-2015 residency year. He received his Pharm.D. from Temple University School of Pharmacy. He then completed a PGY-1 Pharmacy Practice residency at Lancaster General Health in Lancaster, Pennsylvania. Dr. Furler's clinical interests include outpatient oncology, oral chemotherapy, and the affordability of cancer care.
**Steve Lemon, Pharm.D., BCPS**

Steve Lemon, Pharm.D., BCPS is a clinical specialist in the trauma intensive care unit and clinical assistant professor of the University of Florida College of Pharmacy. Dr. Lemon received his Pharm.D. from the St. Louis College of Pharmacy. He completed his Pharmacy Practice Residency and Critical Care Specialty Residency at the University of Kentucky HealthCare. His areas of interest are hemostasis, immunonutrition and sepsis.

**Susan J. Markowsky, Pharm.D. (Co-course Coordinator)**

Dr. Markowsky is a Regional Director for the Working Professional PharmD program (WPPD) at University of Florida. She coordinates the Remote sites and the Pharmaceutical Care Writing programs for WPPD. Sue Markowsky received the Doctor of Pharmacy degree from the University of Kentucky, after first obtaining the B.S. Pharmacy degree from the State University of New York at Buffalo. She completed an ASHP Residency at Erie County Medical Center in Buffalo, New York. Dr. Markowsky also completed an ASHP Critical Care Fellowship at Truman Medical Center in Kansas City, Missouri.

**Katherine Vogel Anderson, Pharm.D., BCACP**

After completing a primary care pharmacy residency, Dr. Vogel Anderson accepted a clinical pharmacy specialist position at Malcom Randall Veterans Affairs Medical Center in the pharmacotherapy clinic, where she specialized in anticoagulation management. She held this position for five years, before transferring to the VA geriatric primary care clinic, where she managed anticoagulation, hypertension, and diabetes, among other disease states, as part of a multidisciplinary health-care team. Since her graduation from UF, Dr. Vogel Anderson maintained a relationship with the college through precepting clerkship students and lecturing in the Pharmacotherapy and Pharmaceutical Skills Lab course series. She was named Outstanding Young Alumnus for the UF College of Pharmacy in 2009. In 2010, she accepted a position as Clinical Assistant Professor with the Department of Pharmacotherapy and Translational Research. An active member of the Florida Society of Health System Pharmacists, Vogel Anderson has served two terms as president of the North Central FSHP chapter, was recognized as FSHP Regional Society President of the year in 2007, and currently serves on the FSHP Education Council. In 2009, Vogel Anderson and her husband, Shawn Anderson, established the Vogel Anderson Exceptional Leader Scholarship for third-year pharmacy students.

**Stacy Voils, Pharm.D., M.S., BCPS**

Stacy Voils, PharmD, M.S., BCPS is a Clinical Assistant Professor at the University of Florida College of Pharmacy, and surgery/critical care specialist and is serving as the PGY2 Critical Care Pharmacy Director. He received his PharmD from the University of Kentucky College of Pharmacy. He then completed a PGY-1 Pharmacy Practice residency at the VA Medical Center in Lexington, Kentucky followed by a PGY-2 residency specializing in critical care at the Virginia Commonwealth University Health System (VCUHS) in Richmond, Virginia. Before joining the University of Florida, Dr. Voils worked as a Clinical Pharmacy Specialist in Neurosurgery and Cardiothoracic Surgery at VCUHS, Medical College of Virginia campus. He also held an appointment as Clinical Assistant Professor at the Virginia Commonwealth University School of Pharmacy. Dr. Voils’ research interests include neuroscience, hemostasis, and epidemiology.

**Lori Wazny, Pharm.D., Renal Course Coordinator**

Dr. Wazny completed her B.Sc(Pharm) from the University of Manitoba, Canada; Pharm.D. from the University of Minnesota; and Fellowship in Internal Medicine (Nephrology) from Virginia Commonwealth University. She is currently a Clinical Pharmacist with the Manitoba Renal Program in Winnipeg, Canada. She has published over 45 research and review articles, abstracts, and book chapters in the field of nephrology including the CKD chapter in Dipiro’s Pharmacotherapy. Dr. Wazny has been involved in the WPPD program since 2001 in various roles such as Detroit site facilitator; Foundations Course facilitator; expert presenter on renal and anemia topics; Renal Course Coordinator.
Appendix B.

<table>
<thead>
<tr>
<th>Instructional Method</th>
<th>Curricular Equivalency (hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td>In-class instruction (3 live sessions – 7.5 hours each)</td>
<td>22.5</td>
</tr>
<tr>
<td>Instructional videos (14 one-hour videos)</td>
<td>14</td>
</tr>
<tr>
<td>Discussion board (minimum 3X/week, ½ hr. each)</td>
<td>24</td>
</tr>
<tr>
<td>CPI or capstone project (one hour per week)</td>
<td>16</td>
</tr>
<tr>
<td>Mock Patient Cases (3 this semester)</td>
<td>12 (minimum) 24 (max)</td>
</tr>
<tr>
<td>Journal club (one this semester)</td>
<td>5 (minimum) 8 (max)</td>
</tr>
<tr>
<td>Individual Case presentation (one per semester)</td>
<td>2 (minimum) 6 (max)</td>
</tr>
<tr>
<td>Self-assessments (two this semester)</td>
<td>2 (minimum) 10 (max)</td>
</tr>
<tr>
<td>Other assignments (see quick scan)</td>
<td>5</td>
</tr>
<tr>
<td>Total (96 hours needed to meet threshold for 6 credits)</td>
<td>102.5 (min) 132.5 (max)</td>
</tr>
</tbody>
</table>

Again, to comply with the standards, students should expect to spend a minimum of 7.5 hours per live session. The length of the sessions must not be shortened.

Appendix C. Course Quickscan
See attached.
APPENDIX C: Quick Scan 5593 Renal Disorders (Summer 2015)

<table>
<thead>
<tr>
<th>Unit A</th>
<th>Module</th>
<th>SPEAKER</th>
<th>Unit B</th>
<th>Module</th>
<th>SPEAKER</th>
<th>Unit C</th>
<th>Module</th>
<th>SPEAKER</th>
</tr>
</thead>
<tbody>
<tr>
<td>A0</td>
<td>Course Introduction</td>
<td>Course Coordinator</td>
<td>B1</td>
<td>Fluids &amp; Electrolyte Disorders</td>
<td>Voils</td>
<td>C1</td>
<td>Urinary Tract Infections</td>
<td>Hernando</td>
</tr>
<tr>
<td>A1</td>
<td>Chronic Kidney Disease Part 1</td>
<td>Dupree</td>
<td>B2</td>
<td>Acid Base Disorders</td>
<td>Lemon</td>
<td>C2</td>
<td>BPH &amp; Overactive Bladder</td>
<td>Vogel Anderson</td>
</tr>
<tr>
<td>A1</td>
<td>Chronic Kidney Disease Part 2, and Mock Case #1 (Health Literacy and Patient Counseling)</td>
<td>Dupree</td>
<td>B3</td>
<td>Transplant</td>
<td>Doligalski</td>
<td>C3</td>
<td>Erectile Dysfunction</td>
<td>Vogel Anderson</td>
</tr>
<tr>
<td>A2</td>
<td>Acute Kidney Injury Part 1</td>
<td>Dupree</td>
<td>B4</td>
<td>Drug-Induced Kidney Disease</td>
<td>Wazny</td>
<td>C4</td>
<td>Prostate Cancer</td>
<td>Furler</td>
</tr>
<tr>
<td>A2</td>
<td>Acute Kidney Injury Part 2 + Renal Anatomy/Physiology video</td>
<td>Dupree</td>
<td>B5</td>
<td>Mock Patient Case #2 (Informatics &amp; Hemodialysis Drug Dosing)</td>
<td></td>
<td>C5</td>
<td>Interprofessional Teams Workshop</td>
<td>No Lecture</td>
</tr>
<tr>
<td>A3</td>
<td>Kaplan-Meier Curves, Hazard Ratios &amp; Composite Endpoints</td>
<td>Borst</td>
<td></td>
<td></td>
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<td></td>
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<td></td>
</tr>
</tbody>
</table>

Course Dates: May 11-Aug 1, 2015  Remote Groups: Remote weekend is June 13-14, 2015

Experiential Sessions

<table>
<thead>
<tr>
<th>Session 1 – June 6, 2015</th>
<th>Discussion Board questions: May 11-June 5</th>
<th>Session 2 – July 11, 2015</th>
<th>Discussion Board questions: June 7-July 10</th>
<th>Session 3 – Aug 1, 2015</th>
<th>Discussion Board questions: July 12-July 31</th>
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<tbody>
<tr>
<td>- Exam A (Unit A Topics) (2 hrs)</td>
<td></td>
<td>- Exam B (Unit B Topics) (2 hrs)</td>
<td></td>
<td>- Exam C (Unit C Topics) (2 hrs)</td>
<td></td>
</tr>
<tr>
<td>- Site / Group Orientation (0.5 hr)</td>
<td></td>
<td>- Mock Patient Case #2 (Informatics &amp; Hemodialysis Drug Dosing) (2 hrs)</td>
<td></td>
<td>- Individual Case Presentations – ½ class Unit B or C topics (2.5 hrs)</td>
<td></td>
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<tr>
<td>- Mock Patient Case #1 (Medication Histories, Health Literacy, &amp; Patient Counseling using the Teach Back Method) – located under A1 in Canvas (2 hrs)</td>
<td></td>
<td>- Individual Case Presentations as scheduled (1 hr)</td>
<td></td>
<td>- Interprofessional Teams Workshop (1 hr)</td>
<td></td>
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<tr>
<td>- Individual Case Presentations ½ class (Unit A or B topics) (2.5 hrs)</td>
<td></td>
<td>- Journal Club: VA Nephron D study. N Engl J Med 2013 Nov;369(20):1892-1903. PMID: 24206457 (1.5 hrs) – located under A3 in Canvas</td>
<td></td>
<td>- CPA Updates and Discussion (1 hr)</td>
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<tr>
<td>- CPI / Capstone Reports (Year 2-3 Students) (1 hr)</td>
<td></td>
<td>- CPI Reports - Year 1 Students (1 hr)</td>
<td></td>
<td>- SWOT / SLO meetings with facilitator after class or by phone appointment to guide experiential planning activities (Year 1 students) * (1 hr)</td>
<td></td>
</tr>
<tr>
<td>- Completed CPA’s turned in</td>
<td></td>
<td>- SWOT / SLO meetings with facilitator after class or by phone appointment to guide experiential planning activities (Year 1 students) 0.5 h*</td>
<td></td>
<td>- Completed CPA’s turned in (0.5 hr)</td>
<td></td>
</tr>
</tbody>
</table>

*Recommend appointments outside of class to meet with 2nd and 3rd semester students for CPA / experiential activity planning (or meet in class as time permits).