Neurological and Psychiatric Disorders
Fall 2016   6 Credits

Course Purpose:

PHA 5598 is one in a series of eight courses which are organized by body system. PHA5598 introduces the student to patient care concepts, patient assessment, pharmacokinetics, pharmacodynamics, therapeutics, and therapeutic drug monitoring for patients with neurological and psychiatric 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
Course Coordinator:
Sue Markowsky, Pharm.D.
Regional Director, WPPD
Clinical Associate Professor
UF College of Pharmacy
Email: smarkowsky@cop.ufl.edu
Office Hours: Email to request phone appointment

Academic Coordinator:
Jackie Lavinder
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. These sessions will occur on the designated Saturdays as listed on the WPPD calendar:
 https://cop-main.sites.medinfo.ufl.edu/files/2010/12/WPPD-Academic-Calendar-2016-6-27-16.pdf

Remote students will attend one weekend session (12-15 contact hours) and weekly virtual sessions. The day of week and time of the virtual 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:

2. Given a patient with a neurological or psychiatric 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. Demonstrate the ability to establish for a patient the "therapeutic goals" or endpoints that indicate the patient's medication problem is resolved, cured, or managed.
   a. Monitor a patient over time and assess when the endpoints are achieved.
   b. Modify a therapeutic plan or endpoints so that the patient's quality of life is optimized.
3. Recognize medications that are on the ISMP's list of high-alert medications and identify strategies for pharmacists to reduce the risk of medication errors with these medications.
4. Identify health disparities in patients with neurological and psychiatric disorders, and conceptualize strategies to address those disparities
5. Conduct a patient/caregiver interview to gather information about the patient's medication therapy and health status, with consideration of the patient's culture, level of education, socioeconomic status, and emotional state of mind.
6. Demonstrate in a simulated setting, the ability to counsel a patient about medications related to neurological and psychiatric disorders.
7. Educate a patient about how to take a medication and self-monitor for efficacy and toxicity.
8. Counsel patients who have problems such as medication adherence and psychosocial problems that may impact successful administration of medication.
9. Present a patient summary with confidence and in an organized format that includes only pertinent information.
10. 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.
11. For the disorders emphasized during this course:
    a. Explain the pathophysiology of the disorders
    b. Outline risk factors for development of the disorders
    c. Describe the epidemiology of the disorders
    d. Describe the clinical presentation and clinical manifestations of the disorders
    e. Discuss pharmacologic and non-pharmacological interventions that are recommended for the disorders
    f. Recall the currently accepted standard of care guidelines for the disorders

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11. Given a patient/practice problem or case related to a neurological or psychiatric disorder, solve the medication-related problems using clinical reasoning skills.
13. Demonstrate the ability to critically evaluate research or research papers to solve practice problems
14. Given a patient/practice problem or case related to neurological or psychiatric disorders, appropriately apply evidence-based clinical practice guidelines and/or systematic reviews.
15. Demonstrate professional demeanor in carrying out learning activities and adhere to ethical principles.

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 'virtual' 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 virtual 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. PHA5598 Unit and module topics.

Unit	Module	Faculty Member	Assessment
Homepage	Course Introduction (Orientation)	Dr. Susan Markowsky	N/A
A1	Ischemic Stroke	Dr. Stacy Voils	Quiz 1 (online)
A2	Hemorrhagic Stroke	Dr. Stacy Voils	Quiz 1 (online)
A3	Pain Assessment and Management (3 lectures)	Dr. Robin Moorman Li	Exam A
A4	Palliative Care Primer	Dr. Shelley Spradley	Exam A
A5	Pain, Agitation and Delirium in the ICU	Dr. Carinda Field	Exam A
A6	Substance Abuse (2 lectures)	Dr. Carol Motycka	Exam A
A7	Alcohol Abuse	Dr. Carol Motycka	Exam A
B1	Meningitis	Dr. Kenneth Klinker	Exam B
B2	Multiple Sclerosis (2 lectures)	Dr. Clayton English	Exam B
B3	Epilepsy (2 lectures)	Dr. Stacy Voils	Exam B
B4	Dementia / Alzheimer's	Dr. Naomi House	Exam B
B5	Sleep Disorders	Dr. Naomi House	Exam B
B6	Transitions in Care	Dr. Kara Krzan and Dr. Erin Wright	Quiz 2 (online)
B7	Clinical Toxicology	Dr. Sven Normann	Quiz 2 (online)
C1	Depression (2 lectures)	Dr. John Markowitz	Exam C
C2	Bipolar (2 lectures)	Dr. John Markowitz	Exam C
C3	Schizophrenia (2 lectures)	Dr. John Markowitz	Exam C
C4	Parkinson's Disease	Dr. John Markowitz	Exam C
C5	ADHD: Pharmacist Perspective	Dr. Michele Weizer	Quiz 3 (online)
C6	Acute Pain Management	Dr. Shelley Spradley	Quiz 3 (online)

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.

1. **DiPiro et al.** Pharmacotherapy: A Pathophysiological Approach, 2014, 9th ed. (ISBN: 0071800530)
    a. This text is available via the UF library/ Access Pharmacy 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.)
2. **Schwinghammer et al.** Pharmacotherapy Casebook: A Patient Focused Approach, 2014, 9th ed. (ISBN-13: 9780071830133). Currently, only 8th edition cases are available via the UF library/AccessPharmacy database.
3. **Abate MA, Blommel ML.** Remington Education: Drug Information and Literature Evaluation, 2013, 1st Ed, Pharmaceutical Press. ISBN-10: 0857110667 ISBN-13: 978-0857110667.

4. **Lee, Mary.** Basic Skills in Interpreting Laboratory Data, American Society of Health Systems Pharmacists, 2013, 5th ed.
5. **Murphy J.** Clinical Pharmacokinetics Pocket Reference, American Society of Health Systems Pharmacists, 2011, 5th ed., (ISBN-10: 1585282545 / ISBN-13 978-1585282548)

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 and/or recommended readings will be listed within each topic module within the E-learning system.

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 virtual class 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) 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 class presentations: Individual case presentation, Substance abuse presentation, and the Clinical Practice Improvement (CPI) (or Capstone Progress Report).
5. Completion of online homework assignments as listed within the weekly planner (remote or regional). Completion of assignments will be assessed for participation points (homework and class preparation). See the weekly planner for Units A, B, and C homework assignments and required due dates. The weekly planners are posted on the Canvas Home Page (see the upper section titled "Start Here").
6. Completion of self-directed activities to prepare for class workshops.

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

Individual Case Presentation	15%
Substance Abuse Presentation	4%
Phenytoin Workshop Assessments	3%
Homework Assignments	3%
Quizzes (three online quizzes, 2% per unit)	6%
CPI / Capstone Progress Reports	3%
Class participation	12%

- 4% per unit (Units A, B, C) : Includes attendance, participation, homework, communication (e.g., email), professionalism

Exam A (Unit A)	18%
Exam B (Unit B)	18%
Exam C (Unit C)	18%

- *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**

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 at least 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	Sept 24, 2016	8:30 AM-10:30 AM
Remote Sites	Sept 24, 2016	via ProctorU (9 am-12 noon EST start times)

Exam B (Unit B)
Regional Sites	Oct 22, 2016	8:30 AM-10:30 AM
Remote Sites	Oct 22, 2016	via ProctorU (9 am-12 noon EST start times)

Exam C (Unit C)
Regional Sites	Nov 19, 2016	8:30-10:30AM
Remote Sites	Nov 19, 2016	via ProctorU (9 am-12 noon EST start times)

*All exams are open book, open notes.

Proctored Exam Details

For detailed exam instructions, please see Canvas page titled "Proctored Exams". Students should printout 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 one 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, and literature citations. The exam will be re-graded, 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 re-graded exam may increase, decrease, or stay the same. The re-graded 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 exceptional 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 Canvas for regional and remote models on the Home Page (top section). Use the weekly planner to keep on track during the course. NOTE: Please do not go by the due date listed in Canvas as it may not reflect the actual due date for the student's group within the remote or regional model.

***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. Facilitators will 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 coordinator(s) will forward your case to the University and request an academic dishonesty investigation.

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

Students who encounter difficulties meeting any deadline should immediately email or call their facilitator and discuss the potential options and guidance toward successful course completion. Please remember, as noted above with most assignments, there are ***very limited options*** for extending an assignment deadline. Once the key is released for an assignment, late submissions can not be accepted. 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). See syllabus grading evaluation section for percentage points for completion of graded assignments. Students are required to complete the assignments prior to each session by the due date designated in the remote or regional weekly planner relevant to the student's group. 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 two of the assessment elements (#3 Well-prepared, and #5 Actively participates in all class workshops).
2. All students (Remote and Regional) must submit case presentations at least 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 the "Individual Case" Assignments section 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 Canvas for "WPPD Resources and Practice Experiences Site".
3. In order to pass the course, it is mandatory that the student pass the case presentation. Remediation for a failed case (score 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. However, the student may be able to pass the course if their overall course grade meets the criteria for a passing score.

4. Graded assignments are submitted to the Assignments link within Canvas. Generally, most graded assignments are setup to go through "Turn-It-In" to generate a similarity report. There are some exceptions such as assignments expected to have high similarity (e.g., multiple choice questions, pharmacokinetic assignments, journal article assignment). More specific instructions can be found on the course Canvas website. A printed copy of the assignment should also be turned in during the "live" onsite 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:
http://www.cop.ufl.edu/wp-content/uploads/dept/studaff/policies/General%20COP%20Course%20Policies.pdf

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.

Appendix A: Directions for Contacting Faculty & Course Faculty List

PHA 5598 Course Coordinator: Susan J. 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, College of Pharmacy
        University of 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: Rxcovey@ufl.edu

Clinical Practice Assessments, WPPD
        See Canvas WPPD Resources Course for CPA, preceptor and coordinator contact information.

Regional Director – WPPD Course Coordinator, Remote Program, PE Courses (CPI / Capstone)
        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 Coordinator
        Rayshawn E. Engram
        Off Site Admissions Center, Orlando, Florida

Schedule An Appointment By Pasting this URL into your Internet Browser:
https://www.vcita.com/v/rengram/online_scheduling?staff_id=d7a2e4006d76da8f#/schedule
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: _____@ufl.edu.

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

WPPD Office will address:

- 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
  1-866-226-7228 (x5032)

College of Pharmacy Educational Technologies Office will address:

Technical support related to e-Learning sites, myCOP, Adobe Connect, Big Blue Button (BBB), educational videos, mobile learning technologies and other course-related items supported by the COP Educational Technologies Office.

- Telephone: (352) 273-6290
- Office Hours: Monday through Friday - 8:00 am to 5:00 pm
- E-mail: edu-help@ahc.ufl.edu
- Website: http://it.cop.ufl.edu
- Related website: http://my.cop.ufl.edu

Note: When contacting the College of Pharmacy Educational Technologies Support Office staff, we suggest e-mailing your request to our edu-help@ahc.ufl.edu address. This address is monitored by multiple staff and will likely result in the fastest support response. When reporting technical issues, please include the course name and location within the course where you are experiencing a problem. For example: "*PHA1234, Resources, Module 1, video title.*

UF Computing Help Desk will address:

Technical difficulties related to the e-Learning System, Gatorlink accounts, UF e-mail, ISIS, myUFL and other centralized UF systems.

- Website: http://www.helpdesk.ufl.edu/
- E-mail: helpdesk@ufl.edu
- Help Wiki: https://wiki.helpdesk.ufl.edu/
- Telephone: (352) 392-4357

Note: If one of your e-Learning course links does not appear for you on the first day of class, please contact your program of study for assistance.

Greg Zuest - Working Professional PharmD (WPPD) Program
zuest@cop.ufl.edu

Expert Presenters

Clayton English, Pharm.D., BCPS, BCPP is a Clinical Associate Professor at Albany College of Pharmacy. Dr. English received his Pharm.D. degree from the University of Connecticut. He completed a Specialty Residency in Clinical Psychopharmacology at Nova Southeastern University/South Florida State Hospital. Dr. English currently practices at an Inpatient Psychiatry Unit affiliated with the University of Vermont Medical Center.

Carinda Feild, Pharm.D earned her Pharm.D. degree from the University of Florida in 1989. She then completed an ASHP accredited two-year residency with emphasis in critical care at the University of Kentucky and a two-year critical care fellowship at the University of Kentucky's Drug Product Evaluation Unit. She joined UF College of Pharmacy faculty in 2010 as a Clinical Associate Professor and Assistant Campus Director for the St Pete Campus. Prior to taking this position, she worked at the R Adams Cowley Shock Trauma Center / University of Maryland Medical Center for seven years. For the last four of those years she served as the critical care research section manager and a clinical research pharmacist. For the 10 years prior she worked as a clinical pharmacy specialist in critical care caring for surgical, cardiothoracic, and trauma patients and teaching pharmacy students at Boston University Medical Center, Orlando Regional Healthcare System where she also served as the Clinical Coordinator,

and Keesler Air Force Base Medical Center where she was also involved in research. She has been an Assistant Professor with the University of Florida's Working Professional Pharm.D Program since 1997. She started as an Orlando site facilitator and has also served as the regional director, a course coordinator and advisor, a pharmaceutical care project reviewer, and currently works on special projects. She was awarded the Air Force Clinical Research Award for work done at Keesler in 2001 and she was the Spring 2007 recipient of the Faculty Service Award for the WPPD program.

Naomi House, Pharm.D., BCPP is the psychiatric pharmacist for Wolfson Children's Hospital and Baptist Medical Center-Jacksonville in Jacksonville, Florida. She is also holds the position of pharmacy residency coordinator for Baptist Health in Jacksonville, Florida, and is the PGY1 preceptor for psychiatry. Dr. House earned her Pharm.D. degree from Idaho State University in Boise, Idaho. She completed an internal medicine residency with Idaho State University and a psychiatric pharmacy residency at Western Missouri Mental Health Center in Kansas City, Missouri (UMKC). She went on to complete a fellowship in psychiatric pharmacy at UMKC. Since 2006, she has established the clinical services for Baptist Behavioral Health for both the adult and pediatric population. In addition, she is a clinical adjunct faculty member and preceptor for the University of Florida, Florida A&M University, South University, and Palm Beach P4 students for the psychiatric advanced practice experience.

Kenneth Klinker, Pharm.D., joined the UF College of Pharmacy as Clinical Associate Professor in August 2015. A graduate of the University of Maryland, Dr. Klinker completed his residency training at UF Health Shands Hospital in internal medicine. Following completion of his residency training, he spent five years providing care to critically ill patients in the Medical Intensive Care Unit at UF Health Shands and in 2003 transitioned to infectious diseases in order to participate in the development of an Antimicrobial Management Program. Currently, he is a clinical associate professor at the UF College of Pharmacy, and a pharmacy specialist in infectious diseases at UF Health Shands Hospital. He is a co-director of the Antimicrobial Management Program and program director for the Infectious Diseases Residency Program. Klinker is active in the Society of Infectious Diseases and serves on the Antimicrobial Stewardship Committee. Additionally, he is a past president of the North Central Florida Society of Health Systems Pharmacists, or NCFSHP, and served as a board of director for the Florida Society of Health Systems Pharmacists.

Kara D. Krzan, Pharm.D., M.S. is the Chief of Pediatric Clinical Pharmacy Services and the Residency Coordinator for the PGY-2 pediatric residency program at UF Health Shands Hospital. She received her Pharm.D. from the University of Toledo College of Pharmacy. Dr. Krzan completed a PGY-1/PGY-2 in Health System Pharmacy Administration at Nationwide Children's Hospital in Columbus, OH, during which she earned her Masters in Pharmacy Health System Administration at the Ohio State University. Her primary areas of interest include pediatrics, leadership, medication safety and quality, and teaching.

John Markowitz, Pharm.D., BCPP is a Professor at UF College of Pharmacy. Dr. Markowitz has been credentialed by the Board of Pharmaceutical Specialties in Psychiatric Pharmacy since 1997. Following his training, Dr. Markowitz served for a number of years as a hospital-based Clinical Specialist in Psychiatry within the Institute of Psychiatry at the Medical University of South Carolina (MUSC) in Charleston, South Carolina. He eventually entered into a primary faculty research position in the MUSC College of Pharmacy's Department of Pharmaceutical & Biomedical Sciences with a dual appointment in the Department of Psychiatry and Behavioral Sciences where he had remained prior to joining UF in 2009.

Susan Markowsky, Pharm.D. is a Clinical Associate Professor at UF College of Pharmacy and Regional Director for the Working Professional PharmD program (WPPD). She coordinates the Remote sites and the Pharmaceutical Care Writing programs for WPPD. Dr. 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.

Carol Motycka, Pharm.D., BCACP is a Clinical Associate Professor, became the Director of the Jacksonville Campus in July 2002 to help build the University of Florida College of Pharmacy program in Jacksonville. She was later appointed Assistant Dean of the Campus where she spends her time teaching, caring for patients, counseling, and administrating. Motycka graduated from the University of Florida with her Pharm.D. in 1998. She then completed a residency in Ambulatory Care at Florida Hospital in Orlando. Following the residency, Motycka was hired as the Pharmaceutical Care Coordinator for Florida Hospital DeLand. At Florida Hospital, she developed an asthma and anticoagulation clinic and an Ambulatory Care Rotation. Motycka also served as a faculty member for NOVA Southeastern University College of Pharmacy and Seminole Community College in the College of Allied Health from 1999-2002.

Sven Normann, Pharm.D., DABAT is an Associate Clinical Professor of Pharmacotherapy and Translational Research. He completed and received his residency in hospital pharmacy at the Mayo Medical Center in Rochester, MN. He also completed a postdoctoral fellowship in Clinical Toxicology at the University of California (UC Medical Center, San Diego and UC San Francisco). Prior to joining the full-time UF faculty in 1998, Dr. Normann was the director of the Florida Poison Information Center in Tampa. In addition, he served as the Director of the Louisiana Poison Center and faculty in the Department of **Pharmacology and Therapeutics at the LSU Medical School in Shreveport, Louisiana.**

Shelley Spradley, Pharm.D., BCPS is a Clinical Pharmacy Specialist in Pain Management and Palliative Care at the North Florida/South Georgia Veterans Health System in Gainesville Florida.

Katherine Vogel Anderson, Pharm.D., BCACP is a Clinical Assistant Professor at UF College of Pharmacy. 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 multi-disciplinary 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; she has a joint appointment in the UF College of Medicine. Dr. Vogel Anderson practices at UF Health Internal Medicine at the Medical Plaza. Her research interests include anticoagulation therapy, pharmacist/physician collaboration, and improving medication management at each patient care transition. In 2012, she established an ASHP accredited PGY-1 pharmacy residency program, for which she serves as program director. Vogel Anderson is faculty advisor for the UF student ACCP chapter, is co-advisor for KE, and serves as a UF faculty senator. In 2009, Vogel Anderson and her husband, Shawn Anderson, established the endowed Vogel Anderson Exceptional Leader Scholarship for third-year pharmacy students.

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Stacy Voils, Pharm.D., M.S., BCPS, FCCM is a Clinical Associate Professor at UF College of Pharmacy. After his graduation from the University of Kentucky College of Pharmacy, Dr. Voils worked briefly as a clinical pharmacist. 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 the VCUHS, Medical College of Virginia campus. He held an appointment as Clinical Assistant Professor at the Virginia Commonwealth University School of Pharmacy.

Michele Weizer, PharmD, BCPS received her Doctor of Pharmacy degree from the University of Florida College of Pharmacy in 1990 and completed an ASHP accredited residency in Clinical Pharmacy at Shands Hospital at the University of Florida in 1991. Michele spent 10 years as a clinical practitioner at JFK Medical Center in Atlantis, Florida before becoming the Director of Pharmacy Services at University Hospital and Medical Center in May 2001. She then returned to JFK Medical Center in March 2004 as the Pharmacy Automation Manager where her main responsibilities focused on implementation of the eMAR (Electronic Medication Record) project and bar coding. Michele is now the Automation and Clinical Coordinator at JFK Medical Center. Michele serves on the HCA eMAR Advisory Workgroup and the HCA Clinical Pharmacy Advisory Board. Additionally, Michele enjoys teaching and holds an appointment as an associate professor with the University of Florida College of Pharmacy Working Professional PharmD Program since 1996, and has served as an adjunct clinical associate professor for the University of Florida and adjunct clinical assistant professor for the undergraduate pharmacy programs for Nova Southeastern, FAMU, Mercer University, and Palm Beach Atlantic colleges of pharmacy since 1992.   Michele became specialty board certified in Pharmacotherapy originally in 1994 and re-certified in 2001 and again in 2008. Michele has held numerous leadership positions in pharmacy organizations and currently serves as Chair of the Florida Board of Pharmacy. She is a Past- President of the Florida Society of Health-System Pharmacists (2001-2002). She served as Chair of the Educational Affairs and Workforce Development Council for the American Society of Health-System Pharmacists 2006-07 and served as Chair of the ASHP Foundation Development committee 2005-06. Additionally, Michele has served on the University of Florida College of Pharmacy National Development Advisory Board for over 10 years and currently serves as Chair. Michele also serves as a member-at-large on the Florida Pharmacy Council and completed her term in February as Chair of the Tripartite Continuing Education Committee for the Florida Board of Pharmacy. In August 2007, Michele was presented with the Outstanding Faculty Award for the UF College of Pharmacy WPPD program. In August 2003, Michele was awarded the Pharmacist of the Year for the Florida Society of Health-System Pharmacists. In 2004, she was recognized as a Heavy Hitter in health Care by the South Florida Business Journal and most recently she was recognized as a Who's Who Among Executive and Professional Women. Other awards include University Hospital and Medical Center Director of the Year 2003, Merck Pharmacist Achievement Award 2002, Drug Topics: Pharmacist of the Year 2002, Bristol Myers Squibb President's Award 2002, and the University of Florida College of Pharmacy Distinguished Pharmacy Service Alumna Award 2000.

Erin Wright, Pharm.D. is Chief of Adult Medicine/Surgery Pharmacy Services and Clinical Assistant Professor for the College of Pharmacy at the University of Florida. She graduated from Purdue University's College of Pharmacy in 2003. Dr. Wright has previously served as a staff pharmacist as well as Operations Coordinator at UF Health Shands. Her interests include medication safety and quality improvement in the adult medicine population.

Appendix B.

Instructional Method	Curricular Equivalency (hours)
In-class instruction (3 live sessions – 7.5-8 hours each)	22.5 (minimum) 24 (max)
Instructional videos (28 one-hour videos)	28
Discussion board (minimum 2X/week, ½ hr. each)	12
CPI or capstone project (one hour per week)	12
Homework cases, quizzes and assignments	6 (minimum) 8 (max)
Individual Case Presentation (one per semester)	14 (min) 20 (max)
Total (96 hours needed to meet threshold for 6 credits)	96.5 (min) 104 (max)

In order to comply with the standards, students should expect to spend a minimum of 7.5 hours per live regional session. A comparable number of class session hours are scheduled for the remote model over the course of the semester. The remote model includes weekly virtual sessions and one 'live" onsite weekend class session. The length of the planned class sessions must not be shortened.

Appendix C. Course Quickscan