Cover Sheet: Request 11568

PHA5XXX Year 2 Competency Assessment

Info

Process	Course|New|Ugrad/Pro
Status	Pending
Submitter	Beck,Diane Elizabeth beck@cop.ufl.edu
Created	3/23/2017 6:44:30 AM
Updated	3/24/2017 4:01:27 PM
Description of request	This course provides pharmacy students with opportunity to demonstrate competency in a content area that is a component of the year 2 curriculum. This course provides opportunity for successful mastery through focused independent study and evaluation. **This course provides the mechanism for Summer remediation as outlined in the recently approved Academic Performance Standards for the Doctor of Pharmacy Program**

Actions

Step	Status	Group	User	Comment	Updated
Department	Approved	COP - Interdisciplinary Studies	Whalen, Karen		3/24/2017
Added PHA 5XXX Year 2 Competency Assessment.docx					3/23/2017
College	Approved	COP - College of Pharmacy	Beck, Diane Elizabeth		3/24/2017
No document changes					
University Curriculum Committee	Pending	PV - University Curriculum Committee (UCC)			3/24/2017
No document changes					
Statewide Course Numbering System					
No document changes					
Office of the Registrar					
No document changes					
Student Academic Support System					
No document changes					
Catalog					
No document changes					
College Notified					
No document changes					

Course|New for request 11568

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This course provides the mechanism for Summer remediation as outlined in the recently approved Academic Performance Standards for the Doctor of Pharmacy Program

Submitter: Beck,Diane Elizabeth beck@cop.ufl.edu
Created: 3/23/2017 6:51:31 AM
Form version: 4

Responses

Recommended PrefixPHA
Course Level 5
Number XXX
Category of Instruction Intermediate
Lab Code None
Course Title Year 2 Competency Assessment
Transcript Title Yr2 Competency Assess
Degree Type Professional

Delivery Method(s) On-Campus
Off-Campus
Online

Co-Listing No

Effective Term Earliest Available
Effective Year2017
Rotating Topic?No
Repeatable Credit?Yes
If repeatable, # total repeatable credit allowed2
Amount of Credit1

S/U Only?Yes
Contact Type Regularly Scheduled
Weekly Contact Hours 4-7
Course Description This course provides pharmacy students with opportunity to demonstrate competency in a content area that is a component of the year 2 curriculum. This course provides opportunity for successful mastery through focused independent study and evaluation.
Prerequisites Second year standing in the Doctor of Pharmacy curriculum with a grade of D+,D or D- in a course that focused on a given content area.
Co-requisites None
Rationale and Placement in Curriculum This course provides pharmacy students with opportunity to demonstrate competency in a content area that is a component of the year 2 curriculum. This course provides opportunity for successful mastery through focused independent study and evaluation.
**This course provides the mechanism for Summer remediation as outlined in the recently approved Academic Performance Standards for the Doctor of Pharmacy

Program**

Course Objectives Upon completion of this course, the student will accomplish the following:
1. Identify a content area that was covered during the first year curriculum and where more focused study is needed to demonstrate competency.
2. Apply self-directed learning skills (including time management) to accomplish independent study in one or two competency areas.
3. Demonstrate the knowledge/skills that have been established for the content area that is the focus of this course. (Specific knowledge/skills by content area are listed in Appendix A)

Course Textbook(s) and/or Other Assigned Reading The textbooks appropriate for each content area are listed in Appendix C.
Appendix C. Required Textbooks by Content Area
Content Area: Medical Microbiology, Immunology & Virology
Required readings will be assigned from the following textbook available in AccessPharmacy:

Karen C. Carroll, Stephen A. Morse, Timothy Mietzner, Steve Miller. Jawetz, Melnick, & Adelberg's Medical Microbiology, McGraw-Hill, 27th edition, 2015, ISBN 978-0-07-182498-9.

Other supplemental readings may be posted in the Canvas course site.

Content Area: Sterile Compounding
Ochoa PS and Vega JA. Concepts in Sterile Preparations and Aseptic Technique. Jones & Bartlett Learning. Burlington, MA, 2015. ISBN-13: 9781284035728

Other supplemental readings may be posted in the Canvas course site.

Content Area: Patient Care 3 – Cardiology & Pulmonology
1. Foye WO, Lemke T, Williams DA. Foye's Principles of Medicinal Chemistry, Wolters Kluwer Health/Lippincott Williams & Wilkins, Philadelphia, PA, 7th Edition, 2013. ISBN-13:978-1609133450; ISBN-10:1609133455
2. AccessPharmacy, McGraw-Hill Professional, New York, NY (This resource is available through the UF Health Science Center Library.) The following resources will be frequently used:
o Brunton L. Goodman and Gilman's The Pharmacological Basis of Therapeutics, McGraw-Hill Professional, New York, NY, 12th Edition, 2011. ISBN-13:978-0071624428; ISBN-10:0071624422 (Available in Access Pharmacy)
o Dipiro, J, Talbert R, Yee G, Matzke G, Wells B, Posey L. Pharmacotherapy – A pathophysiologic approach. McGraw-Hill Professional, New York, NY, 9th Edition, 2014. ISBN-13:978-0071800532; ISBN-10:0071800530 (Available in Access Pharmacy)
o Other available resources include: Multiple textbooks, Calculators, Pharmacotherapy Casebook and Care Plans, Cases, Self-Assessments and Multimedia Videos
3. Krinsky DL, Ferreri SP, Hemstreet B, et al. Handbook of nonprescription drugs: An interactive approach to self-care. 18th ed. Washington, D.C.: American Pharmacists Association; 2015. ISBN-13: 978-1582122250
4. Other readings may be assigned.

Weekly Schedule of Topics Since this is an individualized study course, the schedule will depend on the content areas the student has to remediate. See the outline/schedule

of exams in Appendix B.

Course Outline (See Appendix B for Content Area Outlines)
Types of Remediation. The type of remediation and assessment will be determined based on whether competency must be demonstrated for knowledge, skills, and/or attitudes.
Development of the Assessment/Exam. The faculty member will develop a remediation assessment/exam that is of the same difficulty (breadth and depth) as the assessment/exam in the regular course. If an examination is administered, the faculty member may use a different format for questions compared to the original examination. For example, the original examination may have had multiple choice questions and the makeup may use short answer questions. If a simulation or OSCE is used to assess skills, the scenario or case difficulty and complexity should be similar to the original simulation or OSCE. The checklists used to assess the skill should be equivalent to the original checklist.
Course Learning Resources. Students my access resources relevant to the content area/course by accessing the original course site in Canvas. The learning resources include: video lectures by faculty, handouts, articles, etc.
Student Responsibility: Independent Study
The student is responsible for developing a personal self-study plan that will provide for a focused study of the course materials. The student should meet with the course leader for assistance in preparing this self-study plan. If the student desires assistance from the course leader, it is the student's responsibility to initiate the contact and request assistance. If the student feels the requested assistance is not being provided, the student must first discuss the request with the course leader. If the assistance still does not meet the student's need, the student may appeal to the Associate Dean for Curricular Affairs.
Faculty Responsibility: Guidance & Assessment
The course leader is responsible for assisting the student if a personal plan of study is requested. If the student seeks assistance in clarifying content or explaining materials, the course leader may refer the student to the faculty member who taught the content, a graduate student, or another individual with expertise in the material. If the student is referred to another individual, the course leader is responsible for making sure the individual is available to assist the student. The course leader and other instructors will determine the level of assistance that is deemed appropriate. If the course leader is unable to provide what a student requests, the faculty member should seek assistance from the Associate Dean for Curricular Affairs and Accreditation.

Links and Policies Make-up Exam Policy
Policy across All 1PD-3PD courses:
Makeup exams are given only under special circumstances and only for excused absences. Student attendance may be excused in the following situations: serious illness (3 or more consecutive days requires a health care provider note/documentation), serious family emergencies, military obligation, severe weather conditions, religious holidays, and other reasons of that are of serious nature or unexpected. Absences from class for court-imposed legal obligations (e.g., jury duty or subpoena) will be excused. The Pharm.D. calendar allows for participation in special curricular requirements (e.g., professional meetings). For unusual situations (e.g., wedding that was planned before admission), the student is expected to have already informed the Office of Student Affairs.
If the student is unable to take a scheduled exam, the Teaching Partnership Leader/Course Director and Academic Coordinator must be notified before the exam or if it is an emergency situation, as soon as possible. The instructor will arrange an alternate deadline for the exam consistent with the University examination policies.
The questions on the makeup assessment may be in the form of essay, short answer, or multiple-choice and will be the same level of difficulty as the assessment administered during the scheduled time. With the exception of highly extenuating circumstances, failure to follow the prescribed procedures or failure to be present for the make-up

assessment will result in a grade of zero for that exam. No precedence can be drawn from any courses in the College of Pharmacy or any other college within University of Florida.

General College of Pharmacy Course Policies

The following policies apply to all courses in the College of Pharmacy and are available on the COP website:

University Grading Policies

Please visit the following URL to understand how the University uses the course grade to compute your overall GPA:
https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx

Concerns, Appeals, and Complaints

Students who have concerns about their evaluation of performance and/or student-faculty relations should review the Student-Faculty Handbook for guidance. The Student-Faculty Handbook also outlines the chain of command for any appeals and/or complaints.

Academic Integrity Policy

Students are expected to act in accordance with the University of Florida policy on academic integrity
(http://www.dso.ufl.edu/sccr/honorcodes/honorcode.php). This Honor Code specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obliged to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult the course's Teaching Partnership Leader/Course Director.

Students are also expected to abide by the UF Honor Code.

The following is the UF Honor Pledge: We, the members of the University of Florida community, pledge
to hold ourselves and our peers to the highest standards of honesty and integrity by abiding by the Honor
Code.

On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment."

Psychomotor and Learning Expectations

Psychomotor expectations relate to the ability to meet the physical demands of the pharmacy curriculum. Physically impaired students and students with learning disabilities such as hearing impairment, visual impairment, dyslexia or other specific learning disabilities such as sensory deficit or sensory-motor coordination problems should cooperate with the faculty and staff in addressing these circumstances in order to meet academic standards.

How to Request Learning Accommodations

Students with disabilities requesting accommodations should first register with the Disability Resource Center (352-392-8565, www.dso.ufl.edu/drc/) by providing appropriate documentation. Once registered with the Disability Resource Center, students will receive an accommodation letter which must be presented to both the

instructor and academic coordinator to utilize classroom accommodations. Students registered with the Disability Resource Center who are requesting clinical accommodations for rotations or clinical experiences should contact their Learning Specialist in the Disability Resource Center. Students with disabilities should follow this procedure as early as possible in the semester.
Additionally, students at all College of Pharmacy campuses are expected to provide a copy of the accommodation letter of the Office of Student Affairs by email (carswell@cop.ufl.edu), fax (352-273-6219) or in person at G235 (Student Services Suite) of the Health Professions, Nursing and Pharmacy Building since some learning activities, exams, and assessments require additional assistance. The College of Pharmacy highly encourages that this procedure be completed before each course begins. Being proactive in this process will ensure that accommodations are in place for each student's learning activities, exams, and assessments because grades cannot be retroactively changed.

Faculty and Course Evaluations
Students are expected to provide feedback on the quality of instruction in every course based on 10 criteria. These evaluations are conducted online at https://evaluations.ufl.edu . Evaluations are typically open around mid-semester and need to be completed by the established deadline. Summary results of these assessments are available to students at https://evaluations.ufl.edu .

Computer and Other Technology Requirements
Students are required to meet the following computer and technology requirements: http://pharmacy.ufl.edu/education/student-affairs/admissions/student-computer-requirements/

ExamSoft® is used for administration of exams and students are required to follow the procedures that are established for exam administration. Students must bring a laptop to class to complete exams and this laptop must meet the computer and technology requirements established by the College. Students must also complete mock exams prior to the actual exam to assure that all computer features are supported by ExamSoft®.

Communications
Course-related Communications
Students with questions about course content should post questions on the discussion board. As noted in the attendance policy, communications about class attendance/absence should be emailed to absent2PD@cop.ufl.edu . The student may email the course leader for any other needs that are personal in nature (e.g., request for accommodations, personal issues such as illness, emergencies).

Faculty member Response Time:
1. The course faculty will work to respond to discussion board postings and email communications within 24 hours of the posting between Monday and Friday 12N. Responses on weekends and holidays will be sporadic. (On weekends when assignments are due, students are advised to post questions before 12 Noon on Friday.)

Email Communications:
1. When communicating with faculty via email, the subject line needs to include the course number & title.
2. At the end of the email, in addition to listing your name, list your academic year and campus/site.

Discussion Board Policy
The purpose of the discussion board is to provide a venue for you to enhance your learning. This is accomplished by having a thread for each module where you can post questions to the
course faculty. (A thread is a single link that is devoted to a topic.) The discussion board

is also a place where your instructors may post virtual cases for you to work up.

Such interaction on the discussion boards with the instructors will allow you to clarify your questions and apply what you are learning in other parts of the course. The goal of these discussions is to help you learn.

Students Netiquette on the Discussion Board:
1. Post your comment on the correct discussion thread. If you have a question about A1 (Unit A - Module 1), post it in the discussion thread for A1 and not the B1 thread.
2. The discussion board is not a place to complain. Complaints should instead be directed directly to the Teaching Partnership Leader/Course Director via a professional email. This allows the Teaching Partnership Leader/Course Director to quickly address your concern without causing distraction to other students who have limited time and want to focus on learning.
3. Use "netiquette." If you have never learned "netiquette" - please visit the following URL: http://www.albion.com/netiquette/corerules.html If you follow the rules of netiquette described in this URL, you will avoid posting an embarrassing or inappropriate comment.
4. The discussion board has been designed to allow you a place to ask further questions on the material to clarify any confusion, gain a deeper understanding of the material, or ask general course questions. A question you might see on a discussion board is "What do I need to study for the exam?" Please reflect on how this question can be perceived by your lecturing faculty as well as your fellow classmates. Rewording the question to address a specific topic would be more appropriate. For example, "Dr. XX, you listed numerous side effects for drug XX on slide XX. Of those, what are the most relevant that we could expect to occur and monitor for in clinical practice." The type of material that is covered in these classes is material that is important for patient care. All of this material is important. There are variations in courses, but please make use of your syllabus since there might be guidance on how to prepare for various exams in your classes.
5. In most situations, lectures are released as planned by the Teaching Partnership Leader/Course Director. Clarifying at the beginning of a semester on the planned release date/time, if not posted in the syllabus, is appropriate. Continual posts on the discussion board on weekly basis can become overwhelming for the course coordinator as well as your fellow students.

Student Complaint Process
Concerns about the course (e.g., course requirements, quizzes, exams) should first be discussed with the appropriate course instructor and the Teaching Partnership Leader/Course Director. If a satisfactory resolution is not achieved, the student may appeal to the Associate Dean for Curricular Affairs and Accreditation who will also engage other individuals depending on the request (e.g., campus dean, department chair, Associate Dean for Student Affairs). If the student finds the decision unsatisfactory, the student may appeal to the Dean of the College of Pharmacy. If this decision is unsatisfactory, the student may appeal to the Ombuds office (https://www.dso.ufl.edu/documents/UF_Complaints_policy.pdf).

Religious Holidays
Please see the University policy on attendance and religious holidays: http://www.registrar.ufl.edu/catalog/policies/regulationattendance.html#religious.

Counseling and Wellness Center
Students who are experiencing issues and events that could adversely affect academic performance and personal health should be encouraged to meet with the Teaching Partnership Leader/Course Director or Associate Dean for Student Affairs for guidance. Students in the Gainesville area may contact the UF Counseling and Wellness Center for Gainesville students (352-392-1575; http://www.counseling.ufl.edu). Students outside the Gainesville area may obtain similar contact information from the campus/program administrator.

Emergencies
Call the University Police Department for emergencies: 392-1111 or 9-1-1

Student Crisis
Your well-being is important to the University of Flo¬¬rida. The U Matter, We Care initiative is committed to creating a culture of care on our campus by encouraging members of our community to look out for one another and to reach out for help if a member of our community is in need. If you or a friend is in distress, please contact umatter@ufl.edu so that the U Matter, We Care Team can reach out to the student in distress. A nighttime and weekend crisis counselor is available by phone at 352-392-1575. The U Matter, We Care Team can help connect students to the many other helping resources available including, but not limited to, Victim Advocates, Housing staff, and the Counseling and Wellness Center. Please remember that asking for help is a sign of strength. In case of emergency, call 9-1-1.
Students who are experiencing issues and events are also encouraged to contact their local
crisis center. For Alachua County the Crisis Center number is 352-264-6789; for Jacksonville and
Duval County 904-632-0600 and toll free for Northeast Florida at 1-800-346-6185; and for Orlando
407-425-2624.

The following national call numbers are also available for students who reside outside of the main COP campuses: a) 1-800-273-8255, and b) 1-800-784-2433.

How to Access Services for Student Success
Students who need guidance for course success or who are having academic difficulty should contact the Teaching Partnership Leader/Course Director. In addition, students are encouraged to contact their advisor or Campus Director/Associate Dean for Student Affairs for assistance.
Faculty Lectures/Presentations/Course Materials Download Policy
Photography, audio-visual recording, and transmission/distribution of classroom lectures, course materials, and discussions is prohibited unless there is expressed written permission.

Recorded lectures and class sessions are authorized solely for the purpose of individual or group study with other UF College of Pharmacy students enrolled in the same class. Such recordings may not be reproduced, shared, or uploaded to publicly accessible web environments. Students who do not adhere to this policy will be considered to be breeching COP copyrights and/or FERPA law.

Faculty and Staff: Who to Contact

Academic Coordinator/Education Coordinator:
1. Issues related to course policies (absences, make up exams, missed attendance)
2. Absence requests (Only the Academic Coordinator handles absence requests)
3. Questions about dates, deadlines, meeting place
4. Availability of handouts and other course materials
5. Assignment directions
6. Questions about grade entries gradebook (missing grades, wrong grade)
7. Assistance with ExamSoft® (Distant campus students may contact Education Coordinator for use of SofTest and assistance during exams. The Academic Coordinator is the contact person for issues related to grading and posting of ExamSoft grades.)

Course Faculty
1. Questions about grades
2. Concerns about performance

3. Guidance when there are performance problems (failing grades)
4. General questions about content

Technical Support:
For technical support related to eLearning, educational videos, mobile learning tools and other course-related issues, contact College of Pharmacy Educational Technology Support at:

- Gainesville Office Hours: HPNP Rm. 4312 or 4309, Monday – Friday, 8:30 am to 4:30 pm
- E-mail: edu-help@ahc.ufl.edu
- Phone: 352-273-9492

Contact the University of Florida Computing Help Desk for issues related to Gatorlink accounts, UF e-mail, ONE.UF, myUFL and other centralized UF systems, contact UF Computing Help Desk at:

- Website: https://my.it.ufl.edu/CherwellPortal/UFITServicePortal
- E-mail: helpdesk@ufl.edu
- Help Wiki: https://wiki.helpdesk.ufl.edu/
- Phone: (352) 392-4357

Grading Scheme The grading scheme depends on the content area needing remediation. The syllabus contains a table with this information. Below is pasted from the table.

Minimum Passing Score. In order to pass the remediation assessment/exam, the student must achieve a mean percentage score of at least 69.5% on the exams that required for the designated content area.
The exams for each content area are listed below.
Content Area Remediation Exam Dates Requirement to Pass the Course
Medical Microbiology (PHA 5755) Exam 1a – May 19 (F) @ 10am
Exam 1b – May 25 (Th) @ 10am Mean percentage grade of 69.5% or higher on the 2 required exams
Pt Care 3 (PHA 5878) Exam 1 – May 25 (Th) @ 10am
Exam 2 – June 2 (F) @ 10am
Exam 3 - June 12 (M) @ 10:00am Mean percentage grade of 69.5% or higher on the 3 required exams
Sterile Compounding (PHA 5933) Exam 1 – June 21 (W) @ 10am Mean percentage grade of 69.5% or higher on the 1 required exams

Instructor(s) William Cary Mobley, R.Ph.,Ph.D.,
Jacqueline Jourjy, Pharm.D., BCPS,
Priti N. Patel, PharmD, BCPS,

PHA 5XXXX Year 2 Competency Assessment
Summer 2017
1 Credit Hour

Course Purpose:

This course provides pharmacy students with opportunity to demonstrate competency in a content area that is a component of the year 2 curriculum. This course provides opportunity for successful mastery through focused independent study and evaluation.

How Course Relates to PharmD Program Requirements

The Pharm.D. program academic standards require that students achieve the minimum academic standard (grade of C- or higher) in each required course. For students who achieved a passing grade below this competency standard (eg., D+ to D-), this course provides opportunity to demonstrate competency (grade of C- or higher) through remediation. A premise related to remediation is that since the student has already experienced all instruction in the course, successful mastery of the material can be accomplished with a period of focused study and review followed by passing an examination with a grade of C- or higher.

Course Faculty and Office Hours

Office hours arranged upon request

William Cary Mobley, R.Ph.,Ph.D., Email: **mobley@cop.ufl.edu,** Office: HPNP 1315, Phone: 352-273-6282
Jacqueline Jourjy, Pharm.D., BCPS, Email: jjourjy@cop.ufl.edu, Office: 6550 Sanger Road, Orlando (UF Lake Nona Campus), Phone: 407-313-7031
Priti N. Patel, PharmD, BCPS, Email: ppatel@cop.ufl.edu, Office: St. Petersburg Campus, Phone: 727-394-6213

Academic Coordinator

See Course Outline

Course-Level Objectives

Upon completion of this course, the student will accomplish the following:

1. Identify a content area that was covered during the first year curriculum and where more focused study is needed to demonstrate competency.
2. Apply self-directed learning skills (including time management) to accomplish independent study in one or two competency areas.

3. Demonstrate the knowledge/skills that have been established for the content area that is the focus of this course. (Specific knowledge/skills by content area are listed in ***Appendix A***)

Pre-Requisite

Second year standing in the Doctor of Pharmacy curriculum with a grade of D+,D or D- in a course that focused on a given content area.

Co-Requisite

None

Course Outline (See Appendix B for Content Area Outlines)

Types of Remediation. The type of remediation and assessment will be determined based on whether competency must be demonstrated for knowledge, skills, and/or attitudes.

Development of the Assessment/Exam. The faculty member will develop a remediation assessment/exam that is of the same difficulty (breadth and depth) as the assessment/exam in the regular course. If an examination is administered, the faculty member may use a different format for questions compared to the original examination. For example, the original examination may have had multiple choice questions and the makeup may use short answer questions. If a simulation or OSCE is used to assess skills, the scenario or case difficulty and complexity should be similar to the original simulation or OSCE. The checklists used to assess the skill should be equivalent to the original checklist.

Course Learning Resources. Students my access resources relevant to the content area/course by accessing the original course site in Canvas. The learning resources include: video lectures by faculty, handouts, articles, etc.

Student Responsibility: Independent Study

The student is responsible for developing a personal self-study plan that will provide for a focused study of the course materials. The student should meet with the course leader for assistance in preparing this self-study plan. If the student desires assistance from the course leader, it is the student's responsibility to initiate the contact and request assistance. If the student feels the requested assistance is not being provided, the student must first discuss the request with the course leader. If the assistance still does not meet the student's need, the student may appeal to the Associate Dean for Curricular Affairs.

Faculty Responsibility: Guidance & Assessment

The course leader is responsible for assisting the student if a personal plan of study is requested. If the student seeks assistance in clarifying content or explaining materials, the course leader may refer the student to the faculty member who taught the content, a graduate student, or another individual with expertise in the material. If the student is referred to another individual, the course leader is responsible for making sure the individual is available to assist the student. The course leader and other instructors will determine the level of assistance that is deemed appropriate. If the course leader is unable to provide what a student requests, the faculty member should seek assistance from the

Associate Dean for Curricular Affairs and Accreditation.

Content Areas and Exam Dates.

Year 2 Course	Remediation Exam Dates	Faculty/Staff Support
PHA 5755 Medical Microbiology	Exam 1a – May 19 (F) @ 10am Exam 1b – May 25 (Th) @ 10am	Dr. Jackie Jourjy Ms. Sarah Burgess Mr. Shane Ryan
Pt 5878 Care 3	Exam 1 – May 25 (Th) @ 10am Exam 2 – June 2 (F) @ 10am Exam 3 - June 12 (M) @ 10:00am	Dr. Priti Patel Ms. Sarah Burgess Mr. Shane Ryan
PHA 5933 Sterile Compounding	Exam 1 – June 21 (W) @ 10am	Dr. Cary Mobley Ms. Sarah Burgess Mr. Shane Ryan

Weekly Schedule

Since this is an individualized study course, the schedule will depend on the content areas the student has to remediate. See the outline/schedule of exams in Appendix B.

Textbooks

The following textbooks are required:

1. The textbooks appropriate for each content area are listed in ***Appendix C***.

Materials and Supplies Fees:

None

Student Evaluation & Grading

Evaluation Methods and how grades are determined

Minimum Passing Score. In order to pass the remediation assessment/exam, the student must achieve a mean percentage score of at least 69.5% on the exams that required for the designated content area.

The exams for each content area are listed below.

Content Area	Remediation Exam Dates	Requirement to Pass the Course

Medical Microbiology (PHA 5755)	Exam 1a – May 19 (F) @ 10am Exam 1b – May 25 (Th) @ 10am	Mean percentage grade of 69.5% or higher on the 2 required exams
Pt Care 3 (PHA 5878)	Exam 1 – May 25 (Th) @ 10am Exam 2 – June 2 (F) @ 10am Exam 3 - June 12 (M) @ 10:00am	Mean percentage grade of 69.5% or higher on the 3 required exams
Sterile Compounding (PHA 5933)	Exam 1 – June 21 (W) @ 10am	Mean percentage grade of 69.5% or higher on the 1 required exams

Rounding of grades: Final grades in Canvas will be rounded to the 2nd decimal place. If the decimal is 69.495 or higher, Canvas will round the grade to 69.50. Grade assignment is made using this policy and ***no exceptions*** will be made in situations where a student's grade is "close."

Educational Technology Use

The following technology below will be used during the course and the student must have the appropriate technology and software. **Appendix A** outlines who to contact if you have questions about technology.

1. ExamSoft®
2. Canvas® Learning Management System

Course Policies

Please refer to the University Attendance Policy concerning exams at https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx

Exam Policy

During any Exam:

1. Students must wait outside the testing room until the proctor enters
2. The following items are not allowed to be accessed during the exam: cell phones, other electronic or digital devices including smart watches, pagers, photographic devices, and recording devices. Any watches must be placed on the top of the desk for proctor review.
3. All backpacks, purses or other bags should be kept away from the student's designated testing space and must not be accessed during the exam. Nonessential materials are NOT allowed at the student's desk during examination periods. Please leave all nonessential materials outside of or in the front of the examination room.
4. Students must arrive and be seated promptly to be eligible to take the exam. To maintain exam security, students who arrive late for the exam will not be allowed to start the exam if they are more than 30 minutes late or if another student has left the room after seeing the exam. Students who have valid reasons for arriving late at the exam may request a makeup exam as outlined below.
5. There must be no talking or other disruptive behavior during the distribution or taking of the exam.
6. Calculators must meet the following requirements: Only nonprogrammable calculators are allowed unless the course has a specific policy.

1. If you encounter calculator problems (e.g., dead battery), contact the Proctor.

2. Other exam rules may be instituted during the progression of the course.
3. Once the exam commences, students may not leave the room without first turning in the exam. Once the exam is turned in, the examination period for the student is considered complete and the student must leave the examination room.
4. If there is urgent need to use the restroom, the Proctor will provide guidance.

Failure to follow exam rules may be considered as evidence of academic dishonesty.

After an Exam

Policy across All 1PD-3PD courses where ExamSoft is used:

1. Students are required to upload the encrypted exam file within 24 hours of completing the exam to the SofTest website.
    a. If the encrypted file is not uploaded within 24 hours, the student's exam score will be reduced by 10%.
2. Graded exam appeals
    a. There are no exam appeals except in instances where the student deems there is a possible grading/grade calculation error. Following release of the exam grades, the student has 3 business days to contact the Teaching Partner and Academic Coordinator to clarify questions and appeal any possible grading errors.

Make-up Exam Policy

Policy across All 1PD-3PD courses:

Makeup exams are given only under special circumstances and only for excused absences. Student attendance may be excused in the following situations: serious illness (3 or more consecutive days requires a health care provider note/documentation), serious family emergencies, military obligation, severe weather conditions, religious holidays, and other reasons of that are of serious nature or unexpected. Absences from class for court-imposed legal obligations (e.g., jury duty or subpoena) **will be** excused. The Pharm.D. calendar allows for participation in special curricular requirements (e.g., professional meetings). For unusual situations (e.g., wedding that was planned before admission), the student is expected to have already informed the Office of Student Affairs.

If the student is unable to take a scheduled exam, the Teaching Partnership Leader/Course Director and Academic Coordinator must be notified before the exam or if it is an emergency situation, as soon as possible. The instructor will arrange an alternate deadline for the exam consistent with the University examination policies.

The questions on the makeup assessment may be in the form of essay, short answer, or multiple-choice and will be the same level of difficulty as the assessment administered during the scheduled time. With the exception of highly extenuating circumstances, failure to follow the prescribed procedures or failure to be present for the make-up assessment will result in a grade of zero for that exam. No precedence can be drawn from any courses in the College of Pharmacy or any other college within University of Florida.

General College of Pharmacy Course Policies

The following policies apply to all courses in the College of Pharmacy and are available on the COP website:

University Grading Policies

Please visit the following URL to understand how the University uses the course grade to compute your overall GPA: https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx

Concerns, Appeals, and Complaints

Students who have concerns about their evaluation of performance and/or student-faculty relations should review the Student-Faculty Handbook for guidance. The Student-Faculty Handbook also outlines the chain of command for any appeals and/or complaints.

Academic Integrity Policy

Students are expected to act in accordance with the University of Florida policy on academic integrity (http://www.dso.ufl.edu/sccr/honorcodes/honorcode.php). This Honor Code specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obliged to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult the course's Teaching Partnership Leader/Course Director.

Students are also expected to abide by the UF Honor Code.

The following is the UF Honor Pledge: *We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity by abiding by the Honor Code.*

On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: *"On my honor, I have neither given nor received unauthorized aid in doing this assignment."*

Psychomotor and Learning Expectations

Psychomotor expectations relate to the ability to meet the physical demands of the pharmacy curriculum. Physically impaired students and students with learning disabilities such as hearing impairment, visual impairment, dyslexia or other specific learning disabilities such as sensory deficit or sensory-motor coordination problems should cooperate with the faculty and staff in addressing these circumstances in order to meet academic standards.

How to Request Learning Accommodations

Students with disabilities requesting accommodations should first register with the Disability Resource Center (352-392-8565, www.dso.ufl.edu/drc/) by providing appropriate documentation. Once registered with the Disability Resource Center, students will receive an accommodation letter which must be presented to both the instructor and academic coordinator to utilize classroom accommodations. Students registered with the Disability Resource Center who are requesting clinical accommodations for rotations or clinical experiences should contact their Learning Specialist in the Disability Resource Center. Students with disabilities should follow this procedure as early as possible in the semester.

Additionally, students at all College of Pharmacy campuses are expected to provide a copy of the accommodation letter of the Office of Student Affairs by email (carswell@cop.ufl.edu), fax (352-273-6219) or in person at G235 (Student Services Suite) of the Health Professions, Nursing and Pharmacy Building since some learning activities, exams, and assessments require additional assistance. The College of Pharmacy highly encourages that this procedure be completed before each course begins. Being proactive in this process will ensure that accommodations are in place for each student's learning activities, exams, and assessments because grades cannot be retroactively changed.

Faculty and Course Evaluations

Students are expected to provide feedback on the quality of instruction in every course based on 10 criteria. These evaluations are conducted online at https://evaluations.ufl.edu . Evaluations are typically open around mid-semester and need to be completed by the established deadline. Summary results of these assessments are available to students at https://evaluations.ufl.edu .

Computer and Other Technology Requirements

Students are required to meet the following computer and technology requirements:
http://pharmacy.ufl.edu/education/student-affairs/admissions/student-computer-requirements/

ExamSoft® is used for administration of exams and students are required to follow the procedures that are established for exam administration. Students must bring a laptop to class to complete exams and this laptop must meet the computer and technology requirements established by the College. Students must also complete mock exams prior to the actual exam to assure that all computer features are supported by ExamSoft®.

Communications

Course-related Communications

Students with questions about course content should post questions on the discussion board. As noted in the attendance policy, communications about class attendance/absence should be emailed to absent2PD@cop.ufl.edu . The student may email the course leader for any other needs that are personal in nature (e.g., request for accommodations, personal issues such as illness, emergencies).

Faculty member Response Time:

1. The course faculty will work to respond to discussion board postings and email communications within 24 hours of the posting between Monday and Friday 12N. Responses on weekends and holidays will be sporadic. (On weekends when assignments are due, students are advised to post questions before 12 Noon on Friday.)

Email Communications:

1. When communicating with faculty via email, the subject line needs to include the course number & title.
2. At the end of the email, in addition to listing your name, list your academic year and campus/site.

Discussion Board Policy

The purpose of the discussion board is to provide a venue for you to enhance your learning. This is accomplished by having a thread for each module where you can post questions to the course faculty. (A thread is a single link that is devoted to a topic.) The discussion board is also a place where your instructors may post virtual cases for you to work up.

Such interaction on the discussion boards with the instructors will allow you to clarify your questions and apply what you are learning in other parts of the course. The goal of these discussions is to help you learn.

Students Netiquette on the Discussion Board:

1. Post your comment on the correct discussion thread. If you have a question about A1 (Unit A - Module 1), post it in the discussion thread for A1 and not the B1 thread.
2. The discussion board is not a place to complain. Complaints should instead be directed directly to the Teaching Partnership Leader/Course Director via a professional email. This allows the Teaching Partnership Leader/Course Director to quickly address your concern without causing distraction to other students who have limited time and want to focus on learning.
3. Use "netiquette." If you have never learned "netiquette" - please visit the following URL: http://www.albion.com/netiquette/corerules.html If you follow the rules of netiquette described in this URL, you will avoid posting an embarrassing or inappropriate comment.
4. The discussion board has been designed to allow you a place to ask further questions on the material to clarify any confusion, gain a deeper understanding of the material, or ask general course questions. A question you might see on a discussion board is “What do I need to study for the exam?” Please reflect on how this question can be perceived by your lecturing faculty as well as your fellow classmates. Rewording the question to address a specific topic would be more appropriate. For example, “Dr. XX, you listed numerous side effects for drug XX on slide XX. Of those, what are the most relevant that we could expect to occur and monitor for in clinical practice.” The type of material that is covered in these classes is material that is important for patient care. All of this material is important. There are variations in courses, but please make use of your syllabus since there might be guidance on how to prepare for various exams in your classes.
5. In most situations, lectures are released as planned by the Teaching Partnership Leader/Course Director. Clarifying at the beginning of a semester on the planned release date/time, if not posted in the syllabus, is appropriate. Continual posts on the discussion board on weekly basis can become overwhelming for the course coordinator as well as your fellow students.

Student Complaint Process

Concerns about the course (e.g., course requirements, quizzes, exams) should first be discussed with the appropriate course instructor and the Teaching Partnership Leader/Course Director. If a satisfactory resolution is not achieved, the student may appeal to the Associate Dean for Curricular

Affairs and Accreditation who will also engage other individuals depending on the request (e.g., campus dean, department chair, Associate Dean for Student Affairs). If the student finds the decision unsatisfactory, the student may appeal to the Dean of the College of Pharmacy. If this decision is unsatisfactory, the student may appeal to the Ombuds office (https://www.dso.ufl.edu/documents/UF_Complaints_policy.pdf).

Religious Holidays

Please see the University policy on attendance and religious holidays: http://www.registrar.ufl.edu/catalog/policies/regulationattendance.html#religious.

Counseling and Wellness Center

Students who are experiencing issues and events that could adversely affect academic performance and personal health should be encouraged to meet with the Teaching Partnership Leader/Course Director or Associate Dean for Student Affairs for guidance. Students in the Gainesville area may contact the UF Counseling and Wellness Center for Gainesville students (352-392-1575; http://www.counseling.ufl.edu). Students outside the Gainesville area may obtain similar contact information from the campus/program administrator.

Emergencies

Call the University Police Department for emergencies: 392-1111 or 9-1-1

Student Crisis

Your well-being is important to the University of Florida. The U Matter, We Care initiative is committed to creating a culture of care on our campus by encouraging members of our community to look out for one another and to reach out for help if a member of our community is in need. If you or a friend is in distress, please contact umatter@ufl.edu so that the U Matter, We Care Team can reach out to the student in distress. A nighttime and weekend crisis counselor is available by phone at 352-392-1575. The U Matter, We Care Team can help connect students to the many other helping resources available including, but not limited to, Victim Advocates, Housing staff, and the Counseling and Wellness Center. Please remember that asking for help is a sign of strength. In case of emergency, call 9-1-1.

Students who are experiencing issues and events are also encouraged to contact their local crisis center. For Alachua County the Crisis Center number is 352-264-6789; for Jacksonville and Duval County 904-632-0600 and toll free for Northeast Florida at 1-800-346-6185; and for Orlando 407-425-2624.

The following national call numbers are also available for students who reside outside of the main COP campuses: a) 1-800-273-8255, and b) 1-800-784-2433.

How to Access Services for Student Success

Students who need guidance for course success or who are having academic difficulty should contact the Teaching Partnership Leader/Course Director. In addition, students are encouraged to contact their advisor or Campus Director/Associate Dean for Student Affairs for assistance.

Faculty Lectures/Presentations/Course Materials Download Policy

Photography, audio-visual recording, and transmission/distribution of classroom lectures, course materials, and discussions is prohibited unless there is expressed written permission.

Recorded lectures and class sessions are authorized solely for the purpose of individual or group study with other UF College of Pharmacy students enrolled in the same class. Such recordings may not be reproduced, shared, or uploaded to publicly accessible web environments. Students who do not adhere to this policy will be considered to be breeching COP copyrights and/or FERPA law.

Faculty and Staff: Who to Contact

Academic Coordinator/Education Coordinator:

1. Issues related to course policies (absences, make up exams, missed attendance)
2. Absence requests (Only the Academic Coordinator handles absence requests)
3. Questions about dates, deadlines, meeting place
4. Availability of handouts and other course materials
5. Assignment directions
6. Questions about grade entries gradebook (missing grades, wrong grade)
7. Assistance with ExamSoft® (Distant campus students may contact Education Coordinator for use of SofTest and assistance during exams. The Academic Coordinator is the contact person for issues related to grading and posting of ExamSoft grades.)

Course Faculty

1. Questions about grades
2. Concerns about performance
3. Guidance when there are performance problems (failing grades)
4. General questions about content

Technical Support:

For technical support related to eLearning, educational videos, mobile learning tools and other course-related issues, contact **College of Pharmacy Educational Technology Support** at:

- Gainesville Office Hours: HPNP Rm. 4312 or 4309, Monday – Friday, 8:30 am to 4:30 pm
- E-mail: edu-help@ahc.ufl.edu
- Phone: 352-273-9492

Contact the **University of Florida Computing Help Desk** for issues related to Gatorlink accounts, UF e-mail, ONE.UF, myUFL and other centralized UF systems, contact UF Computing Help Desk at:

- Website: https://my.it.ufl.edu/CherwellPortal/UFITServicePortal
- E-mail: helpdesk@ufl.edu
- Help Wiki: https://wiki.helpdesk.ufl.edu/
- Phone: (352) 392-4357

Appendix A. Learning Objectives by Content Area

Content Area: Medical Microbiology, Immunology & Virology

1. Identify how the body's immune system interacts with invading microbes including bacteria and viruses and the physiological and pathological consequences.
2. Associate the role of the normal human microbiota in the prevention of disease.
3. Describe the pathogenesis of bacterial and viral infections.
4. Apply knowledge of clinical laboratory techniques in the diagnosis of infectious diseases.
5. Interpret microbiological, immunological and virological laboratory data in the context of a patient's clinical presentation and findings.
6. Correlate the major types of pathogenic microorganisms and the diseases they produce in humans.
7. Recognize infectious diseases for which an antimicrobial agent or vaccine would be indicated and select an appropriate agent based on spectrum of activity.
8. List the major classes of antimicrobial agents and their general spectrum of activity.
9. Identify mechanisms of microbial resistance and their potential impact on treatment.
10. Collaborate effectively with other team members to evaluate patient cases that require application of the principles of medical microbiology, immunology and virology.
11. Solve case-based problems that require application of the following principles:
    a. Interaction between the immune system and invading microbes
    b. Clinical bacteriology and laboratory diagnostics
    c. Pathogenesis, diseases, and antimicrobial agents of choice for gram positive microorganisms.
    d. Pathogenesis, diseases, and antimicrobial agents of choice for gram negative microorganisms.
    e. Clinical virology (laboratory diagnostics and common viral pathogens)

Content Area: Sterile Compounding

1. Identify parenteral routes of administration and understand advantages and disadvantages of the parenteral route.
2. Describe the concepts, principles, and techniques for compounding sterile preparations.
3. Distinguish pharmacy sterile compounding from pharmaceutical manufacturing.
4. Describe the regulation of sterile compounding by a pharmacy.
5. Outline USP 797 and other standards important for the practice of sterile compounding.
6. Describe the purposes, selection criteria, and proper usage of sterile compounding ingredients, supplies, and equipment.
7. Describe smart infusion pumps and their use in the patient care setting.
8. Perform the following calculations:
    a. Drug concentrations, ratio strengths, and extent of ionization for sterile compounded preparations.
    b. Quantities of ingredients needed to compound a sterile preparation.
    c. Quantities of medication to be compounded, dispensed, and administered for a compounded sterile preparation.
    d. Rates of administration for a compounded sterile preparation.

9. Outline microbiological considerations in parenteral compounding.
10. Describe the general guidelines for preparing, packaging, storage, labeling and disposal of compounded sterile preparations.
11. Describe essential concepts of engineering controls for sterile compounding.
12. Outline steps of aseptic technique and specific compounding manipulations.
13. Describe essential concepts and methods of evaluating the stability and compatibility of compounded sterile preparations.
14. Evaluate a journal article that addresses the stability and/or compatibility of a sterile preparation.
15. Determine beyond-use dates for sterile compounded preparations.
16. Describe proper handling of hazardous products used in sterile compounding.
17. Describe essential concepts and techniques for the preparation of parenteral nutrition preparations.
18. Describe special considerations for parenteral drug therapy in infants and children.
19. Describe methods of quality assurance and quality control of compounded sterile preparations.
20. Identify the physicochemical properties of active and inactive ingredients.
21. Identify physiochemical properties of drugs and solutions that affect solubility and stability.
22. Describe methods of final product verification of compounded sterile preparations.

Content Area: Patient Care 3 - Cardiology & Pulmonary

Upon completion of this course, the student will be able to provide patient-centered care for patients with one or more of the following disorders or pharmacotherapy needs:

- Dyslipidemia
- Hypertension
- Anticoagulation
- Ischemic Heart Disease—Stable Angina Pectoris
- Acute Coronary Syndrome
- Chronic Heart Failure
- Arrhythmias—Atrial Fibrillation
- Asthma
- COPD
- Complicated Pneumonias

Specifically, given a patient with one or more of the above disorders/pharmacotherapy needs:

a. **Integrate knowledge and use clinical reasoning skills in accomplishing the following steps when managing a patient with the disease state:**
    i. **Collect:** Gather subjective and objective information about the patient in order to understand the relevant medical and medication history and clinical status of the patient.
    ii. **Assess:** Assess the information collected and analyze the clinical effects of the patient's therapy in the context of the patient's overall health goals in order to identify and prioritize problems and achieve optimal care.
    iii. **Plan:** Develop an individualized patient-centered care plan in collaboration with other health care professionals and the patient/caregiver.

iv. **Implement:** Implement the care plan in collaboration with other health care professionals and the patient/caregiver.
v. **Follow-up (Monitor and Evaluate):** Monitor and evaluate the effectiveness of the care plan and modify the plan in collaboration with other health care professionals and the patient/care giver.
vi. **Patient-Centered Care:** Foster a patient-centered care approach by accomplishing the following:
    1. **Communicate:** Succinctly communicate with other health care team members and the patient/caregiver throughout the patient care process.
    2. **Collaborate:** Discuss with team members the specific therapeutic approaches for individual patients based on scientifically and logically validated assessment of the patient's health care needs and an ethical consideration of the patient's health care goals and desires.
    3. **Document:** Prepare a written communication that is well-organized, logical, complete, appropriate, and evidence-based.

b. Apply and integrate foundational knowledge (i.e., pharmaceutical, social/behavioral/administrative, and **clinical sciences) throughout the patient care process.**

Appendix B. Content Area Outlines

Content Area: Medical Microbiology, Immunology & Virology

Mod. and Unit	Unit Topic Learning Resources will include Lecture Videos and readings.	Learning Obj.	Faculty
1	**Module 1: Interaction Between Immune System and Invading Microbes**	**1-5**	**Liu**
	Watch: Immune defense – Part A		Liu
	Watch: Immune defense – Part B		Liu
	Watch: Immune defense – Part C		Liu
	Watch: Immune defense – Part D		Liu
	*Supplemental Readings Available – not required		
2	**Module 2: Clinical Bacteriology and Laboratory Diagnostics**	**2-5**	**Venugopalan and Klinker**
	Watch: Introduction to Microbiology		Venugopalan
	Watch: Diagnosing bacterial infections – blood cultures		Klinker
	Watch: Diagnosing bacterial infections – urine cultures		Klinker
	Watch: Diagnosing bacterial infections – respiratory		Klinker
	Watch: Diagnosing bacterial infections – wound		Klinker
	Watch: Bacterial susceptibility testing		Venugopalan
	Watch: Rapid Diagnostics		Klinker

May 19	Exam 1-B		
3	**Module 3: Gram Positives**	**3-10**	**Jourjy and Venugopalan**
	Read: Medical Microbiology Chapter 11: subsections on B. cereus, C. botulinum, C. tetani, and C. difficile		
	Read: Medical Microbiology Chapter 12: subsection on "Lipophilic Corynebacteria"		
	Read: Medical Microbiology Chapter 21: subsections on "physiology and growth conditions for anaerobes", "the polymicrobial nature of anaerobic infections", and "diagnosis of anaerobic infections"		
	*Supplemental Readings Available – not required		
	Watch: Staphylococci		Venugopalan
	Watch: Streptococci		Jourjy
	Watch: Enterococci		Jourjy
	Watch: Bacillus		Jourjy
	Watch: Listeria & Corynebacterium		Jourjy
	Watch: Actinomycetes		Venugopalan
	Watch: Clostridium		Venugopalan
4	**Module 4: Gram-Negatives**	**3-10**	**Klinker, Childs-Kean, Jourfy, and Bulitta**
	*Supplemental Readings Available – not required		
	Watch: Enterobacteriaceae: E. coli, Klebsiella spp, Enterobacter spp, Citrobacter spp, Serratia spp, Salmonella, Shigella, and the Tribe Proteae		Childs-Kean
	Watch: Non-fermenters: Pseudomonas aeruginosa; Acinetobacter baumannii		Bulitta
	Watch: Non-fermenters: Stenotrophomonas maltophilia; Burkholderia cepacia		Jourjy
	Watch: Gram-negative anaerobes		Jourjy
	Watch: Pleomorphic bacteria requiring enriched media		Klinker
	Watch: Bordetella Pertussis		Klinker
	Watch: Francisella Teularensis		Klinker
	Watch: Helicobacter pylori		Klinker
	Watch: Neisseria		Klinker
	Watch: Chlamydia		Klinker
	Watch: Legionella and Mycoplasma		Klinker
	Watch: Yersinia, Pasteurella		Klinker
	Watch: Mycobacterium		Klinker
5	**Module 5: Clinical Virology, Laboratory Diagnostics, and Common Viral Pathogens**	**3-10**	**Childs-Kean and Brown**
	Read: Medical Microbiology Chapter 38 Sections on Arthrophod-borne and Rodent-borne viral diseases)		
	Read: Medical Micobiology Chapter 37: Rotaviruses section		
	Read: Medical Micobiology Chapter 36: Polioviruses and Rhinoviruses		
	Read: Medical Micobiology Chapter 40: Respiratory Syncytial Virus section, Mumps section		

	Read: http://www.cdc.gov/zika/hc-providers/diagnostic.html		
	Read: http://www.cdc.gov/zika/hc-providers/clinicalevaluation.html		
	*Supplemental Readings Available-not required		
	Watch: Viral Properties		Brown
	Watch: Influenza		Brown
	Watch: HIV		Childs-Kean
	Watch: Hepatitis A, B, and C		Childs-Kean
	Watch: Varicella/Zoster, HSV, CMV, Epsein-Barr		Childs-Kean
May 25	**Exam 1-B**		

Content Area: Sterile Compounding

Mod. and Unit	Unit Topic Learning Resources will include Lecture Videos and readings.	Learning Obj.	Faculty
1	**Module 1: Introduction Sterile Compounding**	**8, 10**	**Voils, Schentrup**
	Watch: Introduction to Parenteral Preparations, Supplies and Equipment		Voils
	Introduction to Parenterals (Ch 1)		
	Supplies and Equipment (Ch 2)		
	Calculations for Parenterals (Ch 3)		
2	**Module 2: Fundamental Concepts - Microbiological Considerations**	**9, 11**	**Hoggard**
	Watch: Microbiological Considerations in Parenteral Compounding		Hoggard
	Watch: Primary and Secondary Engineering Controls		Hoggard
	Microbiological Considerations in Parenteral Compounding (Ch 4)		
	Primary and Secondary Engineering Controls (Ch 5)		
3	**Module 3: Compounding Sterile Preparations**	**12, 16**	**Voils, Eperson**
	Watch: Aseptic Technique and Compounding Manipulations		Voils
	Watch: Preparation of Hazardous Drugs for Parenteral Use		Eperson
	Aseptic Technique and Compounding Manipulations (Ch 6)		
	Hazardous Drug Preparation and Handling (Ch 8)		
4	**Module 4: Quality Assurance and Quality Control**	**22**	**Klinker**
	Quality Assurance and Quality Control for Sterile Compounding (Ch 11)		
	Final Product Verification		
5	**Module 5: Stability and Compatibility of Sterile Preparations**	**13**	**Giaquinta, Hatton**
	Watch: Principles of Compatibility and Stability		Giaquinta
	Watch: How to Evaluate Literature: Principles of Compatibility and Stability		Hatton
	Principles of Compatibility and Stability (Ch 7)		

	How to Evaluate the Literature on Stability and Compatibility		
6	**Module 6: Specialties within Sterile Compounding**	**17-18**	**Kamel, Hernandez**
	Watch: Multiple Product Preparations for Parenteral Nutrition		Kamel
	Watch: Considerations for Intravenous Drug Therapy in Infants and Children		Hernandez
	Parenteral Nutrition Considerations & Preparation (Ch 9)		
	Considerations for IV Drug Therapy in Infants and Children (Ch 10)		
June 21	**Exam**		

Content Area: Patient Care 3 – Cardiology & Pulmonology

Mod. and Unit	**Unit Topic** Learning Resources will include Lecture Videos and readings.	Faculty
	Introduction to CV Modules (modules 1-6)	
Intro 1	Introduction to CV Disease and overview of module	Cooper-DeHoff
Intro 2	General Cardiovascular Pathophysiology (Highlight of relevant material from 1PD year)	Keller-Wood
1	**Module 1: Dyslipidemia**	**Pharmacology: Miller** **MedChem: Huigens** **PTR: Cooper-DeHoff** **(module leader)**
1.1	Dyslipidemia – Lipid Metabolism	Miller
1.2	Pharmacology of Antihyperlipidemics	Miller
1.3	Medicinal Chemistry of Antihyperlipidemics	Huigens
1.4	Management of Dyslipidemia	Cooper-DeHoff
1.5	Transcending Concept: Health Information and Informatics—HIT Supporting Outpatient Drug Use	Denise Klinker
2	**Module 2: Hypertension**	**Pharmacology: Miller** **MedChem: Aldrich** **PTR: Cooper-DeHoff** **(module leader)**
2.1	Pathophysiology of Hypertension	Keller-Wood

2.2	Pathophysiology and Pharmacology: Autonomic Function, Sympathetic System Drug Classes: Beta Blockers and Calcium Channel Blockers	Frazier
2.3	Pathophysiology and Pharmacology: Renin Angiotensin System and volume Drug Classes: ACE inhibitors, ARBs, thiazide diuretics	Krause
2.4	Medicinal Chemistry Drug Classes: beta blockers, calcium channel blockers, ACE inhibitors, ARBS, thiazide diuretics	Aldrich
2.5	Pharmacotherapy and Management of Hypertension	Cooper-DeHoff
2.6	Transcending Concept: Social—Fighting Obesity; Health Disparities; Hypertension	Motycka
2.7	Transcending Concept: Behavioral—Adherence	Roane
2.8	Transcending Concept: Health-Wellness—Hypertension	Vogel-Anderson
3	**Module 3: Ischemic Heart Disease**	**Pharmacology: Keller-Wood** **MedChem: Y. Ding** **PTR: Cavallari (module leader)**
3.1	Pharmacology and Medicinal Chemistry of Nitrodilators	Ding
3.2	Management of Ischemic Heart Disease	Cavallari
3.3	Transcending Concept: Communication—Interview Skills and Accurate Medication Lists	Roane
3.4	Transcending Concept: Personalized Medicine—Cardiovascular Diseases	Cavallari
May 25	**Exam #1** **(Covers Modules 1-3)**	
4	**Module 4: Anticoagulation and Acute Coronary Syndrome**	**Pharmacology: Voils** **(module leader)** **MedChem: Ding** **PTR: Vogel-Anderson**
4.1	Pathophysiology of Blood Clotting	Vogel-Anderson
4.2	Pharmacology of Anticoagulants, Fibrinolytic Agents, and Antiplatelet Therapy	Voils
4.3	Medicinal Chemistry of Anticoagulants, Fibrinolytic Agents, and Antiplatelet Therapy	Ding
4.4	Management of Acute Coronary Syndrome	Vogel-Anderson
5	**Module 5: Heart Failure**	**Pharmacology: Keller-Wood** **MedChem: Ding** **PTR: Cavallari (module leader)**
5.1	Pathophysiology of Heart Failure	Keller-Wood
5.2	Pharmacology of Inotropic Agents, Glycosides, Neprilysin Inhibitors, Aldosterone Antagonists	Keller-Wood
5.3	Medicinal Chemistry of Inotropic Agents, Glycosides, Aldosterone Antagonists	Ding
5.4	Management of Chronic Heart Failure (HFrEF & HFpEF)	Cavallari

5.5	Transcending Concept: Medication Safety—Medication Reconciliation	Vogel-Anderson & Segal
6	**Module 6 Anticoagulation & Arrhythmias**	**Pharmacology: Keller-Wood** **MedChem: Ding** **PTR: Vogel-Anderson** **(module leader)**
6.1	Individualized Heparin and Warfarin Dosing	Vogel-Anderson
6.2	Pathophysiology of Arrhythmias	Keller-Wood
6.3	Introduction to Electrocardiology	Vogel-Anderson
6.4	Pharmacology of Antiarrhythmics	Vogel-Anderson
6.5	Medicinal Chemistry of Antiarrhythmics	Ding
6.6	Management of Arrhythmias	Vogel-Anderson
6.7	Pharmacokinetics of Digoxin and Antiarrhythmics	Bihorel
June 2	**Exam #2** **(Covers Modules 4-6)**	
7	**Module 7: Asthma**	**Pharmacology: Hochhaus** **Pharmaceutics: Hochhaus** **MedChem: Aldrich** **PTR: Farland** **(module leader)/ J. Powell**
7.1	Pathophysiology of Asthma	Farland
7.2	Pharmacology of Oral and Inhaled Corticosteroids, Short-acting Beta-agonists, Long-acting Beta-agonists, Muscarinic Agents	Hochhaus
7.3	Medicinal Chemistry of Oral and Inhaled Corticosteroids, Short-acting Beta-agonists, Long-acting Beta-agonists, Muscarinic Agents	Aldrich
7.4	Management of Chronic Asthma	Farland
7.5	Transcending Concept: Personalized Medicine—Asthma	McDonough
8	**Module 8: COPD**	**Pharmacology: Farland** **PTR: Farland** **(module leader)** **K. Sando**
8.1	Pathophysiology of COPD	Farland
8.2	Management of COPD	Farland
8.3	Transcending Concepts: Health-Wellness—Smoking Cessation	Sando
8.4	Transcending Concept: Population-based Care & Pharmacoeconomics CEA and PROs in asthma product evaluation; value-based drug formularies (Regence example)	Navarro
9	**Module 9: Respiratory Conditions**	**PTR: Jourjy (module leader), Miller, Curtis, Peloquin**
9.1	Hospital-Acquired & Ventilator-Associated Pneumonias	Jourjy
9.2	Transcending Concepts: Self-Care—Cough & Cold (re-enforce from Patient Care 1)	Curtis

9.3	Tuberculosis	Peloquin
9.4	Lung Cancer	TBD
9.5	Transcending Concept: Interprofessional Communication - Listen actively, and encourage ideas and opinions of other interprofessional team members.	Schentrup
9.6	Transcending Concepts: Special Populations—Geriatric Drug Dosing	Miller
9.7	Transcending Concept: Evidence-Based Practice—Cohort Studies and Confounding and Bias	Wei
10	**Module 10: Capstone**	**Pharmacology: Keller-Wood** **MedChem: Ding** **PTR: Dupree**
10.1	Transcending Concept: Professionalism—Ethics and Law	Allen
June 12	**Comprehensive Final Exam** **(Items Cover All Modules and All Prior Coursework)**	

Appendix C. Required Textbooks by Content Area

Content Area: Medical Microbiology, Immunology & Virology

Required readings will be assigned from the following textbook available in AccessPharmacy:

Karen C. Carroll, Stephen A. Morse, Timothy Mietzner, Steve Miller. Jawetz, Melnick, & Adelberg's Medical Microbiology, McGraw-Hill, 27th edition, 2015, ISBN 978-0-07-182498-9.

Other supplemental readings may be posted in the Canvas course site.

Content Area: Sterile Compounding

Ochoa PS and Vega JA. *Concepts in Sterile Preparations and Aseptic Technique*. Jones & Bartlett Learning. Burlington, MA, 2015. ISBN-13: 9781284035728

Other supplemental readings may be posted in the Canvas course site.

Content Area: Patient Care 3 – Cardiology & Pulmonology

1. Foye WO, Lemke T, Williams DA. Foye's Principles of Medicinal Chemistry, Wolters Kluwer Health/Lippincott Williams & Wilkins, Philadelphia, PA, 7th Edition, 2013. ISBN-13:978-1609133450; ISBN-10:1609133455
2. AccessPharmacy, McGraw-Hill Professional, New York, NY (This resource is available through the UF Health Science Center Library.) The following resources will be frequently used:
    - Brunton L. Goodman and Gilman's The Pharmacological Basis of Therapeutics, McGraw-Hill Professional, New York, NY, 12th Edition, 2011. ISBN-13:978-0071624428; ISBN-10:0071624422 (Available in Access Pharmacy)

- Dipiro, J, Talbert R, Yee G, Matzke G, Wells B, Posey L. Pharmacotherapy – A pathophysiologic approach. McGraw-Hill Professional, New York, NY, 9th Edition, 2014. ISBN-13:978-0071800532; ISBN-10:0071800530 (Available in Access Pharmacy)
- Other available resources include: Multiple textbooks, Calculators, Pharmacotherapy Casebook and Care Plans, Cases, Self-Assessments and Multimedia Videos

3. Krinsky DL, Ferreri SP, Hemstreet B, et al. Handbook of nonprescription drugs: An interactive approach to self-care. 18th ed. Washington, D.C.: American Pharmacists Association; 2015. ISBN-13: 978-1582122250
4. Other readings may be assigned.