Cover Sheet: Request 12237

PHA5XXX Advanced Topics in Anticoagulation Pharmacotherapy

Info

Process	Course|New|Ugrad/Pro
Status	Pending at PV - University Curriculum Committee (UCC)
Submitter	Diane Beck beck@cop.ufl.edu
Created	1/18/2018 11:10:48 PM
Updated	1/23/2018 12:07:30 PM
Description of request	This is a new elective course that will be offered in Fall of the third year of the 4 year Pharm.D. curriculum.

Actions

Step	Status	Group	User	Comment	Updated
Department	Approved	COP - Interdisciplinary Studies	Karen Whalen		1/22/2018
No document changes					
College	Approved	COP - College of Pharmacy	Diane Beck		1/23/2018
No document changes					
University Curriculum Committee	Pending	PV - University Curriculum Committee (UCC)			1/23/2018
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 12237

Info

Request: PHA5XXX Advanced Topics in Anticoagulation Pharmacotherapy
Description of request: This is a new elective course that will be offered in Fall of the third year of the 4 year Pharm.D. curriculum.
Submitter: Diane Beck beck@cop.ufl.edu
Created: 1/18/2018 10:47:41 PM
Form version: 1

Responses

Recommended Prefix PHA
Course Level 5
Number XXX
Category of Instruction Advanced
Lab Code None
Course Title Advanced Topics in Anticoagulation Pharmacotherapy
Transcript Title Adv Topics Anticoag
Degree Type Professional

Delivery Method(s) On-Campus, Off-Campus, Online
Co-Listing No
Co-Listing Explanation Not Applicable
Effective Term Fall
Effective Year 2018
Rotating Topic? No
Repeatable Credit? No

Amount of Credit 2

S/U Only? No
Contact Type Regularly Scheduled
Weekly Contact Hours 15
Course Description The purpose of this course is to allow student pharmacists to further develop the knowledge and skills necessary to make optimal decisions regarding anticoagulation pharmacotherapy across the continuum of care.
Prerequisites Successful completion of Blocks 1-14 of the Doctor of Pharmacy curriculum including milestones
Co-requisites None
Rationale and Placement in Curriculum This course is offered to students who have completed Fall of the third year of the Pharm.D. program. At this point in the curriculum, the students have acquired basic knowledge and skills about anticoagulation.
This course will prepare students for managing anticoagulation patients during their 4th year Advanced Pharmacy Practice Experiences.
Course Objectives Upon completion of this course, the student will:
1. List risk factors, indications, anticoagulation resources, and validated risk stratification tools available for patient assessment
2. Develop a pharmacists' patient care plan to address thromboembolic indications noting considerations for how to initiate, transition, interrupt, or modify anticoagulation therapy in various patient care settings.
3. Interpret pertinent labs values for various indications.
4. Predict disease, drug, and/or food interactions requiring anticoagulation therapy modifications.
5. Develop knowledge and clinical decision-making skills related to risk assessment for indication, anticoagulation drug selection, dosing, monitoring, and appropriate durations or transitions of therapy across the continuum of anticoagulation care.
6. Illustrate communication techniques for thorough patient and care giver comprehension of care plan.
7. Describe strategies for selecting specific agents based on clinical evidenced.

8.	Present patient care recommendations/interventions concisely and effectively in a professional setting with focus on communication skills targeting key providers including physicians and patients.
9.	Evaluate available direct oral anticoagulants for various indications with consideration to special
populations.
10.	Review medical literature to identify controversial and important questions related to clinical anticoagulation and present care plans despite controversy.

Course Textbook(s) and/or Other Assigned Reading •	There are no required textbooks for this course.
•	Required readings will be posted on Canvas.

Weekly Schedule of Topics Week 1:
Monday: Module 1: Introduction to types of clots, locations, implications, and risk stratification tools used in warfarin management.
Tuesday: Active Learning Sessions
Wednesday: Module 2: Management of anticoagulation for inpatient setting.
Thursday: Active Learning Session
Friday: Module 3: Direct oral anticoagulants and assignment (debate) and active learning sessions
Weed 2:
Monday: Module 4: Introduction into transitions of care for patients anticoagulated.
Tuesday: Module 5: Considerations for reversal of anticoagulation
Wednesday: Module 6: time in therapeutic range
Thursday: Module 7: Special Populations requiring anticoagulation management and active learning session
Friday: Exam

Links and Policies Pharm.D. Course Policies
The Policies in the following link apply to this course. Review the Pharm.D. Course Policies carefully, at this URL: http://curriculum.pharmacy.ufl.edu/current-students/course-policies/

Grading Scheme A-E Grading

iRATS (5) 8%
tRATs (5) 12%
Recording activity 15%
Time in Therapeutic Range Submission 15%
Participation in Active Learning Sessions (See Appendix B) 20%
Final Exam 30%
Total = 100%
Instructor(s) Christina E. DeRemer, PharmD, BCPS, FASHP

[PHA 5XXX] Advanced Topics in Anticoagulation Pharmacotherapy

Fall 2018
2 Semester Credit Hours   Block 7   A-E Grading

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The purpose of this course is to allow student pharmacists to further develop the knowledge and skills necessary to make optimal decisions regarding anticoagulation pharmacotherapy across the continuum of care. This course will provide opportunities for advanced discussion of topics in anticoagulation involving: hospital and ambulatory management, drug selection, monitoring, reversal approaches for anticoagulation therapy and anticoagulation management in special populations. Student pharmacists will build upon their current knowledge of medical conditions requiring anticoagulation treatment versus prophylaxis and pharmacologic agent selection through a variety of interactive activities including in-depth discussion of complex patient cases, mock patient care rounds, a debate related to controversial clinical practice and student presentations.

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Teaching Partnership Leader

Christina E. DeRemer, PharmD, BCPS, FASHP
- Email: cderemer@ufl.edu
- Office: HPNP 3306/GNV
- Phone: 352-273-6224
- Office Hours: By appointment ONLY.

See Appendix A. for Course Directory of Faculty and Staff Contact Information.

Entrustable Professional Activities

1. Collect information to identify a patient's medication-related problems and health-related needs.
2. Analyze information to determine the effects of medication therapy, identify medication-related problems, and prioritize health-related needs.
3. Establish patient-centered goals and create a care plan for a patient in collaboration with the patient, caregiver(s), and other health professionals that is evidence-based and cost-effective
4. Implement a care plan in collaboration with the patient, caregivers, and other health professionals.
5. Follow-up and monitor a care plan.
6. Collaborate as a member of an interprofessional team.
7. Identify patients at risk for prevalent diseases in a population.

8. Minimize adverse drug events and medication errors.
9. Maximize the appropriate use of medications in a population.
10. Educate patients and professional colleagues regarding the appropriate use of medications.
11. Use evidence-based information to advance patient care.

Course-Level Objectives

Upon completion of this course, the student will:

1. List risk factors, indications, anticoagulation resources, and validated risk stratification tools available for patient assessment
2. Develop a pharmacists' patient care plan to address thromboembolic indications noting considerations for how to initiate, transition, interrupt, or modify anticoagulation therapy in various patient care settings.
3. Interpret pertinent labs values for various indications.
4. Predict disease, drug, and/or food interactions requiring anticoagulation therapy modifications.
5. Develop knowledge and clinical decision-making skills related to risk assessment for indication, anticoagulation drug selection, dosing, monitoring, and appropriate durations or transitions of therapy across the continuum of anticoagulation care.
6. Illustrate communication techniques for thorough patient and care giver comprehension of care plan.
7. Describe strategies for selecting specific agents based on clinical evidenced.
8. Present patient care recommendations/interventions concisely and effectively in a professional setting with focus on communication skills targeting key providers including physicians and patients.
9. Evaluate available direct oral anticoagulants for various indications with consideration to special populations.
10. Review medical literature to identify controversial and important questions related to clinical anticoagulation and present care plans despite controversy.

Course Pre-requisites

Successful completion of Blocks 1-7 of the Doctor of Pharmacy curriculum including milestones

Course Co-requisites

None required

Course Outline

Please routinely check your campus calendar and the Canvas course site for any messages about changes in the schedule including meeting dates/times, deadlines, and room changes

Date Recommended Dates for Independent Study	Mod#	Unit Topic	Contact Hours [hr.]a	Faculty Author	Learning Objectives Covered
Monday	1	Module 1: Introduction to types of clots, locations implications, and risk stratification tools used with warfarin management		Taylor, J Vogel Anderson, K	*1, 2, 3, 4*
	1a	Watch: Defining Risk factors and conditions precluding clot development, implications for location and types of imaging for diagnosis	1.0hr		
	1b	READ: Witt DM et al. Guidance for the practical management of warfarin therapy in the treatment of venous thromboembolism. J Thromb Thrombolysis (2016) 41:187–205	0.5hr		
	1c	Watch: Application of risk stratification tools (CHADS$_2$VASC, HASBLED, HIT risk and probability)	0.5hr		
	1d	Watch: Warfarin Therapy Overview	1.0hr		
	1a-d	Active Learning Session 1 via ZOOM in PM of day - case application - warfarin with risk assessment	2.0hr	Taylor, J Vogel Anderson, K	
Tuesday	1a-c	Active Learning Session 2 - Case Application of complicated warfarin scenarios - Readiness Assessment Quiz 1(iRAT/tRAT)	2.0hr	Dietrich, E DeRemer, C	2, 5, 4, 6, 10
	3d	TEAM Assignment: post 5 minute team recording debating assigned DOAC for clinical scenario			
Wednesday	2	Module 2: Management of anticoagulation for inpatient setting		Voils, S Dupree, L	1, 2, 3
	2a	READ: Inpatient assess for VTE risk and prophylaxis	1.0hr	Voils, S	
	2b	Watch: Inpatient management of HITT	1.0hr	Voils, S	

	2c	Watch: Peri-Procedural anticoagulation management	1.0hr	Dupree, L	
Thursday	2a-c	Active Learning Session 3: - Mock patient care rounds - Readiness Assessment Quiz 1(iRAT/tRAT)	2.0hr	Voils, S Dupree, L	7, 8, 9
	3a	Watch: Overview of DOAC therapy	0.5hr	C. DeRemer	
	3b	Watch: DOAC literature for atrial fibrillation	0.5hr	C. DeRemer	
	3c	Watch: DOAC use in VTE treatment and extended time	0.5hr	E. Dietrich	
Friday	3	Module 3: Direct oral anticoagulants		C. DeRemer Dietrich, E	5, 7, 9, 10
	3a-d	Active Learning Session 4 - review recordings (3d group assignment), hear rebuttal arguments and vote (kahoot) - Readiness Assessment Quiz 1(iRAT/tRAT)	2.0hr	C. DeRemer Dietrich, E	
	4a	Watch: Intro for transitions of care anticoagulated of patients	1.0hr	C. DeRemer	5
Monday	4	Module 4: Transitions of care for patients anticoagulated	1.0hr	C. DeRemer	5
	4a	Active Learning Session 5 - Transition patient through care continuum on anticoagulation therapy for indication: Verbal Gallery	2.0hr		2, 6, 10
Tuesday	5	Module 5: Considerations for reversal of anticoagulation		C. DeRemer S. Voils	1, 2, 10
	5a	Watch: Defining types of bleed and options for reversal agent	1.0hr	DeRemer	
	5b	Watch/READ: Shands reversal protocol and hear of ICH approaches in critical care setting	0.5hr	Voils	

	5c	READ: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4899056/pdf/wjem-17-264.pdf Christos S. Naples R. Anticoagulation Reversal and Treatment strategies in Major bleeding: Update 2016. West J Emerg Med. 2016;17(3):264–270.	1.0hr		
	6a	Watch: Time in therapeutic range (TTR) – discussion of methods	0.5hr	C. DeRemer	6a
Wednesday	6	Module 6: Time in therapeutic range		C. DeRemer	2, 3, 8, 10
	6b	Assignment: Calculate TTR for example cases and submit through canvas	0.5 hr		
	4-6	Active Learning Session 6: - clinical scenario decisions for reversal or agent change: kahoot - Readiness Assessment Quiz 1(iRAT/tRAT)	2.0hr	C. DeRemer S. Voils	
	7a	Watch: Anticoagulation use in Pediatrics	0.5hr	Manasco, K	
	7b	Watch: Anticoagulation use in Pregnancy	0.5hr	Manasco, K	
	7c	Watch: Anticoagulation use in Oncology- cancer	0.5hr	DeRemer, D	
	7d	Watch: Anticoagulation use in renal population	0.5hr	Dupree, L	
	7e	Watch: Anticoagulation use in obesity	0.5hr	DeRemer, C	
	7f	Watch: Anticoagulation use in elderly	0.5hr	DeRemer, C	
Thursday	7	Module 7: Special Populations requiring anticoagulation management		Manasco, K DeRemer, D Dupree, L DeRemer, C	2, 5, 9, 10
	7a-f	Active Learning Session 7 - Q&A for anticoagulation decisions in special populations - Readiness Assessment Quiz 1(iRAT/tRAT)	2.0hr	Manasco, K DeRemer, D Dupree, L DeRemer, C	

Friday	1-6	Reading day: big blue button question availability	2.0hr		
Monday		Final exam			
		Total	*30.0 hr*		

Required Textbooks/Readings

- There are no required textbooks for this course.
- Required readings will be posted on Canvas.

Student Evaluation & Grading

Evaluation Methods and how grades are determined

Assessment Item	Grade Percentage
iRATs (5)	8%
tRATs (5)	12%
Recording activity	15%
Time in Therapeutic Range submission	15%
Participation in active learning sessions (See Appendix B)	20%
Final exam	30%
Total	**100%**

Grading Scale

92.50-100%	A
89.50-92.49%	A-
86.50-89.49%	B+
82.50-86.49%	B
79.50-82.49%	B-
76.50-79.49%	C+
72.50-76.49%	C
69.50-72.49%	C-
66.50-69.49%	D+
62.50-66.49%	D
59.50-62.49%	D-
< 59.50%	E

Rounding of grades: Final grades in Canvas will be rounded to the 2nd decimal place. If the decimal is X.495 or higher, Canvas will round the grade to X.50. The above scale depicts this policy and grades are determined accordingly. 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.

1. ExamSoft™ Testing Platform
2. Canvas™ Learning Management System

For technical support, navigate to Educational Technology and IT Support Contact Information at this URL: http://curriculum.pharmacy.ufl.edu/current-students/technical-help/

Pharm.D. Course Policies

The Policies in the following link apply to this course. Review the Pharm.D. Course Policies carefully, at this URL: http://curriculum.pharmacy.ufl.edu/current-students/course-policies/

Appendix A. Course Directory

Teaching Partnership Leader/Course Director:

Christina E. DeRemer, PharmD, BCPS, FASHP
Email: cderemer@ufl.edu
Office: HPNP 3306/GNV
Phone: 352-273-6224

Office Hours: By appointment ONLY **Questions to Ask:**

- Concerns about performance
- Guidance when there are performance problems (failing grades)
- General questions about content

Academic/Education Coordinators:

Sarah A. Burgess, M.Ed.
Academic Coordinator
Email: sburgess@cop.ufl.edu
Office: HPNP 4312/GNV
Phone: 352-273-5617

Absent/Tardy Email: absent2pd@cop.ufl.edu   or absent3pd@cop.ufl.edu

name
Education Coordinator
Email: xx@cop.ufl.edu
Office: Jacksonville Campus

name
Education Coordinator
Email: xx@cop.ufl.edu
Office: Orlando Campus

Questions to Ask:

- Issues related to course policies (absences, make up exams, missed attendance)
- Absence requests (Only the Academic Coordinator handles absence requests)
- Questions about dates, deadlines, meeting place
- Availability of handouts and other course materials
- Assignment directions
- Questions about grade entries gradebook (missing grades, wrong grade)
- 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.)

Other Teaching Partnership Faculty Members:

Course Faculty and Office Hours

Teaching Partnership Leader:
Katie Vogel Anderson, PharmD, BCACP   Phone: 352-273-6240
Email: kvanderson@cop.ufl.edu

David DeRemer, PharmD, BCOP, FCCP   Phone: 352-273-6225
Email: dderemer@cop.ufl.edu

Eric Dietrich, PharmD, BCPS, CPC-A   Phone: 352-294-5648
Email: ead1129@cop.ufl.edu

Lori Dupree, PharmD, BCPS   Phone: (904) 244-9590
Email: LDupree@cop.ufl.edu

Kalen Manasco, PharmD, BCPS, FPPAG, FCCP   Phone: 352-294-8749
Email: KManasco@cop.ufl.edu

James R. Taylor, PharmD, CDE, BCACP   Phone: 352- 273-6239
Email: JTaylor@cop.ufl.edu

Stacy Voils, PharmD, MS, BCPS, FCCM, FCCP   Phone: 352-294-5276
Email: SVoils@cop.ufl.edu

Appendix B: Rubric for Assessing Student Participation in Class

This document will be used to provide an assessment of the student's overall participation at the end of the course. Instructors will keep track of student participation during each session.

	Exemplary (Score = 5)	Proficient (Score = 4)	Developing (Score = 3)	Unacceptable (Score = 0)
Frequency of participation in class	Student initiates contributions more than once in each recitation.	Student initiates contribution once in each recitation.	Student initiates contribution at least in half of the recitations	Student does not initiate contribution and needs instructor to solicit input.
Quality of comments	Comments always insightful and constructive; uses appropriate terminology. Comments balanced between general impressions, opinions and specific, thoughtful criticisms or contributions.	Comments mostly insightful and constructive; mostly uses appropriate terminology. Occasionally comments are too general or not relevant to the discussion.	Comments are sometimes constructive, with occasional signs of insight. Student does not use appropriate terminology; comments not always relevant to the discussion.	Comments are uninformative, lacking in appropriate terminology. Heavy reliance on opinion and personal taste, e.g., "I love it", "I hate it", "It's bad" etc.
Listening Skills	Student listens attentively when others present materials, perspectives, as indicated by comments that build on others' remarks, i.e., student hears what others say and contributes to the dialogue.	Student is mostly attentive when others present ideas, materials, as indicated by comments that reflect and build on others' remarks. Occasionally needs encouragement or reminder from T.A of focus of comment.	Student is often inattentive and needs reminder of focus of class. Occasionally makes disruptive comments while others are speaking.	Does not listen to others; regularly talks while others speak or does not pay attention while others speak; detracts from discussion; sleeps, etc.

Total Score = _____   Conversion to a percentage grade:

15 = 100%   14 = 93%   13 = 83%   12 = 77%   11 = 70%   10= 66%   9 = 60%   8 = 50%   7 = 45%   6 = 40%
5 = 33%   4 = 26%   3 = 20%   2 = 13%   1 = 6%   0 = 0%