

## Cover Sheet: Request 12352

### PHA5XXX Pharmacogenomic Literature Assessment

#### Info

Process	Course New Ugrad/Pro
Status	Pending at PV - University Curriculum Committee (UCC)
Submitter	Diane Beck beck@cop.ufl.edu
Created	2/23/2018 12:57:36 AM
Updated	2/23/2018 11:13:45 AM
Description of request	This is a new elective that is take by 3rd year Pharm.D. students. This course is also a component of the Personalized Medicine Certificate that has also been submitted for approval.

#### Actions

Step	Status	Group	User	Comment	Updated
Department	Approved	COP - Interdisciplinary Studies	Karen Whalen		2/23/2018
PHA5XXX Pharmacogenomic Literature Assessment - 2018-02-14.docx					2/23/2018
College	Approved	COP - College of Pharmacy	Diane Beck		2/23/2018
No document changes					
University Curriculum Committee	Pending	PV - University Curriculum Committee (UCC)			2/23/2018
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 12352

### Info

**Request:** PHA5XXX Pharmacogenomic Literature Assessment

**Description of request:** This is a new elective that is take by 3rd year Pharm.D. students.

This course is also a component of the Personalized Medicine Certificate that has also been submitted for approval.

**Submitter:** Diane Beck beck@cop.ufl.edu

**Created:** 2/23/2018 12:44:16 AM

**Form version:** 1

### Responses

**Recommended Prefix** PHA

**Course Level** 5

**Number** XXX

**Category of Instruction** Advanced

**Lab Code** None

**Course Title** Pharmacogenomic Literature Assessment

**Transcript Title** Pharmacogenomic Lit

**Degree Type** Professional

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

**Co-Listing** No

**Co-Listing Explanation** Not applicable

**Effective Term** Fall

**Effective Year** 2018

**Rotating Topic?** No

**Repeatable Credit?** No

**Amount of Credit** 1

**S/U Only?** Yes

**Contact Type** Regularly Scheduled

**Weekly Contact Hours** 1

**Course Description** Further develops the knowledge and skills necessary to appraise peer-reviewed pharmacogenomic literature. This course will provide opportunities to critically evaluate literature focused on both discovery and implementation of gene-drug pairs, become informed about research developments in pharmacogenomics, and further develop presentation skills in a seminar format.

**Prerequisites** Successful completion of Blocks 1-12 of the Doctor of Pharmacy curriculum including milestones

**Co-requisites** None

**Rationale and Placement in Curriculum** This is an elective course for Pharm.D. students.

It is available to 3rd year students who have completed foundational coursework related to pharmacogenomics.

This course is a component of a Pharmacogenomics Certificate that is currently requesting approval.

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

1. Retrieve published medical literature for use in research, design/planning of a clinical implementation, and clinical decision-making related to pharmacogenomics.
2. Present a critique of a pharmacogenomic journal article by analyzing the purpose, methods, results, and clinical significance of the primary literature article.
3. Ask analytical questions during a peer review of a pharmacogenomic article.
4. Use appropriate presentation skills when presenting a journal article to peers.

**Course Textbook(s) and/or Other Assigned Reading** • There are no required textbooks for this course.

- The journal articles selected and discussed during the sessions will be from the primary literature and may be accessed through the UF Health Sciences Center Library. Students may select articles from but not limited to the following journals to present during journal club sessions:

- o Clinical Pharmacology and Therapeutics
- o Clinical and Translational Science
- o Pharmacogenomics Journal
- o Pharmacogenomics (Future Medicine)
- o Pharmacogenetics and Genomics
- o Other journals may be used upon approval of the course instructor

Use the UF VPN to access UF Libraries Resources when off-campus. The UF HSC library staff can assist you with questions or issues related to accessing online library materials. For assistance contact your College of Pharmacy librarian or visit the HSC Library Website at this URL:  
<http://www.library.health.ufl.edu/>

**Weekly Schedule of Topics** Week 2: Pharmacogenomic Journal Club 1.5 hr

Week 4: Pharmacogenomic Journal Club 1.5 hr

Week 6: Pharmacogenomic Journal Club 1.5 hr

Week 8: Pharmacogenomic Journal Club 1.5 hr

Week 10: Pharmacogenomic Journal Club 1.5 hr

Week 12: Pharmacogenomic Journal Club 1.5 hr

Week 14: Pharmacogenomic Journal Club 1.5 hr

Week 15: Exam - Written Appraisal of an Article

During the odd-numbered weeks, the student is required to attend at least 2 1- hour department of pharmacotherapy and translational research seminars. During these weeks the student will also be preparing for their individual journal presentation and reading the articles that will be discussed during the seminars.

total contact hours = 16.5 hrs

Outside study involves preparation for presentation, reading of journal articles, and preparation for the 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** Presentation of a journal article (Appendix B) Satisfactory (At least 17 of 24 possible points)

Participation during journal presentations (Appendix C) Satisfactory (At least 7 of 9 possible points.)

Attendance of at least 2 seminars within the Department of Pharmacotherapy and Translational Research Satisfactory (Must attend at least 2 seminars)

Exam: Written critical appraisal of article (short answer) Satisfactory (Must achieve a score of at least 69.5% on the exam)

All items must be satisfactorily achieved in order to achieve a grade of satisfactory

**Instructor(s)** Meghan J. Arwood, Pharm.D., BCPS

- Email: [arwood@cop.ufl.edu](mailto:arwood@cop.ufl.edu)
- Office: HPNP 3309A/GNV
- Phone: 352-294-5464
- Office Hours: By appointment ONLY.

# PHA 5XXX Pharmacogenomic Literature Assessment

Fall 2018

1 Semester Credit Hours Block 13-15 Satisfactory-Unsatisfactory Grading

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*Further develops the knowledge and skills necessary to appraise peer-reviewed pharmacogenomic literature. This course will provide opportunities to critically evaluate literature focused on both discovery and implementation of gene-drug pairs, become informed about research developments in pharmacogenomics, and further develop presentation skills in a seminar format.*

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## Teaching Partnership Leader

Meghan J. Arwood, Pharm.D., BCPS

- Email: arwood@cop.ufl.edu
- Office: HPNP 3309A/GNV
- Phone: 352-294-5464
- Office Hours: By appointment ONLY.

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

## Entrustable Professional Activities

1. Educate patients and professional colleagues regarding the appropriate use of medications. (ST11.1 Lead a discussion regarding a recently published research manuscript and its application to patient care)
2. Use evidence-based information to advance patient care. (ST12.1 Retrieve and analyze scientific literature to make a patient-specific recommendation.)

## Course-Level Objectives

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

1. Retrieve published medical literature for use in research, design/planning of a clinical implementation, and clinical decision-making related to pharmacogenomics.
2. Present a critique of a pharmacogenomic journal article by analyzing the purpose, methods, results, and clinical significance of the primary literature article.
3. Ask analytical questions during a peer review of a pharmacogenomic article.
4. Use appropriate presentation skills when presenting a journal article to peers.

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5. Use appropriate communication skills and professional affective skills when discussing pharmacogenomic journal articles with peer students and faculty.
6. Evaluate pharmacogenomic literature to identify gene-drug pairs that may have sufficient evidence for implementation into clinical practice.

### **Course Pre-requisites**

Successful completion of Blocks 1-12 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

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<i>Date Recommended Dates for Independent Study</i>	<i>Mod#</i>	<i>Unit Topic</i>	<i>Contact Hours [hr.]a</i>	<i>Faculty Author</i>	<i>Learning Objectives Covered</i>
Week 1					
Week 2		Pharmacogenomic Journal Club	1.5		1-6
Week 3					
Week 4		Pharmacogenomic Journal Club	1.5		1-6
Week 5					
Week 6		Pharmacogenomic Journal Club	1.5		1-6
Week 7					
Week 8		Pharmacogenomic Journal Club	1.5		1-6
Week 9					
Week 10		Pharmacogenomic Journal Club	1.5		1-6
Week 11					
Week 12		Pharmacogenomic Journal Club	1.5		1-6
Week 13					
Week 14		Pharmacogenomic Journal Club	1.5		1-6
Week 15		Exam: Written Appraisal of an Article	4		1-6
		Attend 2 1-hr Department of Pharmacotherapy and Translational Research seminars during the semester	2		5
		<i>Total</i>	<i>16.5 hr</i>		

## Required Textbooks/Readings

- There are no required textbooks for this course.

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- The journal articles selected and discussed during the sessions will be from the primary literature and may be accessed through the UF Health Sciences Center Library. Students may select articles from but not limited to the following journals to present during journal club sessions:
  - *Clinical Pharmacology and Therapeutics*
  - *Clinical and Translational Science*
  - *Pharmacogenomics Journal*
  - *Pharmacogenomics (Future Medicine)*
  - *Pharmacogenetics and Genomics*
  - Other journals may be used upon approval of the course instructor

**Commented [FM1]:** Are these being assigned by the course director or do students self-select the articles? If students self-select, please create a process where students receive approval of the article prior to presentation.

Use the [UF VPN to access UF Libraries Resources](#) when off-campus. The UF HSC library staff can assist you with questions or issues related to accessing online library materials. For assistance contact your College of Pharmacy librarian or visit the [HSC Library Website](http://www.library.health.ufl.edu/) at this URL: <http://www.library.health.ufl.edu/>

## Student Evaluation & Grading

### Evaluation Methods and how grades are determined

This is a satisfactory-unsatisfactory graded course. To receive a grade of satisfactory, the student must achieve a grade of satisfactory in each of the components below.

Assessment Item	Grade Percentage
Presentation of a journal article (Appendix B)	Satisfactory (At least 17 of 24 possible points)
Participation during journal presentations (Appendix C)	Satisfactory (At least 7 of 9 possible points.)
Attendance of at least 2 seminars within the Department of Pharmacotherapy and Translational Research	Satisfactory (Must attend at least 2 seminars)
Exam: Written critical appraisal of article (short answer)	Satisfactory (Must achieve a score of at least 69.5% on the exam)
<b>Total</b>	<b>All items must be satisfactorily achieved in order to achieve a grade of satisfactory</b>

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### **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](http://curriculum.pharmacy.ufl.edu/current-students/technical-help/) 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](http://curriculum.pharmacy.ufl.edu/current-students/course-policies/) carefully, at this URL:  
<http://curriculum.pharmacy.ufl.edu/current-students/course-policies/>



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## Appendix A. Course Directory

### Teaching Partnership Leader/Course Director:

Meghan J. Arwood, Pharm.D., BCPS

- Email: [arwood@cop.ufl.edu](mailto:arwood@cop.ufl.edu)
- Office: HPNP 3309A/GNV
- Phone: 352-294-5464
- Office Hours: By appointment ONLY.

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](mailto:sburgess@cop.ufl.edu)

Office: HPNP 4312/GNV

Phone: 352-273-5617

Absent/Tardy Email: [absent3pd@cop.ufl.edu](mailto:absent3pd@cop.ufl.edu)

name

Education Coordinator

Email: [xx@cop.ufl.edu](mailto:xx@cop.ufl.edu)

Office: Jacksonville Campus

name

Education Coordinator

Email: [xx@cop.ufl.edu](mailto: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**

## Appendix B: Rubric for Assessing Student Presentation of Journal Articles in Class

**Commented [FM2]:** Please make sure this is the most up to date version of the UF COP JC rubric.

Journal Club Rubric				
Criteria	Ratings			Pts
<b>Introduction</b> • <i>Authors' affiliation/study support</i> • <i>Study objective(s) and rationale</i> • <i>Quality of journal</i>	2.0 pts Accurately and completely reported ALL of the relevant intro components	1.0 pts Accurately and completely reported MOST of the relevant intro components	0.0 pts Did not accurately and completely report MOST of the relevant intro components	2.0 pts
<b>Methods- Design and Patients/Subjects</b> <i>Methods- Design</i> • <i>Case-control, cohort, controlled exp, etc.</i> • <i>Type of Design (cross-over, parallel, etc.)</i> • <i>Type of assignment use</i> • <i>Blinding Methods-Patients/Subjects</i> • <i>How enrolled/from where?</i> • <i>Inclusion/exclusion criteria</i> • <i># enrolled per group</i>	2.0 pts Accurately and completely reported ALL of the relevant study design and patient/subject components	1.0 pts Accurately and completely reported MOST of the relevant study design and patient/subject component	0.0 pts Did not accurately and completely report MOST of the relevant study design and patient/subject components	2.0 pts
<b>Methods- Treatment Regimens and Outcome Measures and Data Handling and Statistics</b> <i>Methods- Treatment Regimens</i> • <i>Treatments used</i> • <i>Dosages/administration</i> • <i>Therapy duration</i> <i>Methods- Outcome Measures</i> • <i>Primary Measure</i> • <i>Secondary Measures</i> <i>Methods- Data Handling</i> • <i>Intention to Treat, per protocol, etc.</i> • <i># lost to follow up</i> • <i>Reasons for dropouts</i> <i>Methods- Statistics</i> • <i>Tests Used</i> • <i>Power of study</i>	4.0 pts Accurately and completely reported ALL of the relevant treatment regimens, outcome measures, data handling and statistics components	3.0 pts Accurately and completely reported MOST of the relevant treatment regimens, outcome measures, data handling and statistics components	1.0 pts Did not accurately and completely report MOST of the relevant treatment regimens, outcome, data handling and statistics components	4.0 pts

## Journal Club Rubric

Criteria	Ratings			Pts	
<b>Results and Conclusion</b> <i>Results • Results for each outcome measure • Confidence intervals • P-values • Compliance • Adverse events Conclusion • Authors' conclusion(s)</i>	2.0 pts Accurately and completely reported ALL of the relevant results and conclusion components	1.0 pts Accurately and completely reported MOST of the relevant results and conclusion components	0.0 pts Did not accurately and completely report MOST of the results and conclusion components	2.0 pts	
Clear, Concise Conclusion Stated	3.0 pts Conclusion summarized accurately and completely all of the following key points to be taken from study (which reflected study limitations); drug's role in therapy or clinical practice implications; AND need for any further research in area	2.0 pts Conclusion did not summarize accurately and completely ONE of the following key points to be taken from study; drug's role in therapy or clinical practice implications; or the need for any further research in area	1.0 pts Conclusion did not summarize accurately and completely TWO of the following key points to be taken from study; drug's role in therapy or clinical practice implications; or the need for any further research in area	0.0 pts Failed to give conclusion OR conclusion completely inaccurate	3.0 pts
List strengths and limitations of study	2.0 pts Multiple strengths and limitations of the study	1.0 pts Strengths and limitations of the study addressed, but did not emphasize the most significant strengths or limitations	0.0 pts Strengths and limitations of the study not addressed	2.0 pts	
Recommends how study and results should change current pharmacy practice <i>Examples of questions to address include: How will I change my practice based on results? If not why? Eg poorly designed study, results showed no difference to standard of care, etc</i>	3.0 pts Team appropriately recommends how study will change practice and provides thorough explanation of why or why not	2.0 pts Team recommends how study will change practice but doesn't thoroughly explain why or why not	0.0 pts Team does not discuss how the study results will change their practice nor provide an appropriate recommendation for change in practice	3.0 pts	

## Journal Club Rubric

Criteria	Ratings			Pts
Speaking Style, Distractors (um, like...), Eye Contact	3.0 pts Spoke clearly, easy to understand, very few distractors, maintained good eye contact throughout	2.0 pts Difficult to hear some of the presentation, some distractors used, occasionally made eye contact	1.0 pts Difficult to hear/understand, distractors used throughout, read presentation from notes	3.0 pts
Timing (not including questions)	3.0 pts 16 to 20 minutes	1.0 pts <16 min or >20 mins		3.0 pts

Total Points: 24.0

To achieve a grade of satisfactory, the student must achieve at least 17 of 24 points.

### Appendix C: Rubric for Assessing Student Participation in In-Class Discussions

#### Grade Determination:

To receive a grade of satisfactory, the student must achieve a score of at least 7 of 9 points.

	<b>Exemplary (Score = 3)</b>	<b>Proficient (Score = 2)</b>	<b>Developing (Score = 1)</b>	<b>Unacceptable (Score = 0)</b>
<b>Preparation for In-Class Discussion</b>	Student is always prepared to provide thoughtful, evidence-based answers when called on by instructors. Student can always support their answers with sound clinical reasoning.	Student is mostly prepared to provide thoughtful, evidence-based answers when called on by instructors. Student can support their answers somewhat with sound clinical reasoning.	Student is somewhat prepared to provide thoughtful, evidence-based answers when called on by instructors. Student does not consistently provide sound clinical reasoning for their answers.	Student is unprepared to discuss reasoning and/or rationale for answers during in-class discussion (i.e., is "guessing") or has not completed the assigned work.
<b>Quality of comments</b>	Comments always insightful & constructive; uses appropriate terminology. Comments balanced between general impressions, opinions & specific, thoughtful criticisms or contributions.	Comments mostly insightful & 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 & personal taste, e.g., "I love it", "I hate it", "It's bad" etc.
<b>Listening Skills</b>	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 & build on others' remarks. Occasionally needs encouragement or reminder from instructor of focus of comment.	Student is often inattentive and needs reminder of focus of class. Occasionally makes disruptive comments while others are speaking.	Student is consistently inattentive or disruptive to class discussion.