

## Cover Sheet: Request 10077

### PHA 5561 Pathophysiology & Patient Assessment II

#### Info

|             |  |
|-------------|--|
| Process     | Course Modify Ugrad/Pro  |
| Status      | Pending  |
| Submitter   | Beck,Diane Elizabeth beck@cop.ufl.edu  |
| Created     | 2/26/2015 12:54:13 AM  |
| Updated     | 2/27/2015 9:24:32 AM   |
| Description | <p>This course occurs during Year 1 - Spring Semester of the new 2015 Curriculum.</p> <p>The course is a modification of the current PHA 5561 course in the following ways: Title, Credit Hours, Course Description, Pre-requisites, Instructors, Course Objectives, Weekly Course Schedule, Required Textbooks, and Methods of Evaluation/Grade determination.</p> <p>A UCC1 Form is being submitted per David Julian since there has not been a recent UCC review of the course.</p> |

#### Actions

| Step                              | Status   | Group                                      | User                  | Comment | Updated   |
|-----------------------------------|----------|--|-----------------------|---------|-----------|
| Department                        | Approved | COP - Interdisciplinary Studies            | Whalen, Karen         |         | 2/26/2015 |
| College                           | Approved | COP - College of Pharmacy                  | Beck, Diane Elizabeth |         | 2/27/2015 |
| University Curriculum Committee   | Pending  | PV - University Curriculum Committee (UCC) |                       |         | 2/27/2015 |
| Statewide Course Numbering System |          |  |                       |         |           |
| Office of the Registrar           |          |  |                       |         |           |
| Student Academic Support System   |          |  |                       |         |           |
| Catalog                           |          |  |                       |         |           |
| College Notified                  |          |  |                       |         |           |

### Recommended SCNS Course Identification

1. Prefix PHA      2. Level 5      3. Number 561      4. Lab Code None

5. Course Title Pathophysiology and Patient Assessment II

6. Transcript Title (21 character maximum) Pathphys-Pt Assess II

7. Effective Term Spring

8. Effective Year 2016

9. Rotating Topic? No

10. Amount of Credit 3

11. If variable, # minimum and # maximum credits per semester.

12. Repeatable credit? No

13. If yes, total repeatable credit allowed #

14. S/U Only? No

15. Contact Type Regularly Scheduled [base hr]

16. Degree Type Professional

17. If other, please specify: [Click here to enter text.](#)

18. Category of Instruction Introductory

### 19. Course Description (50 words maximum)

Second of a two-course sequence that integrates foundational knowledge related to pathophysiology and patient assessment. Active learning sessions and simulated patient assessments provide application of key concepts related to pathophysiology and patient assessment.

### 20. Prerequisites

PHA 5560 Pathophysiology and Patient Assessment I  
PHA XXXX Principles of Patient Centered Care

### 21. Co-requisites

[Click here to enter text.](#)

### 22. Rationale and Placement in Curriculum

The first year of the Pharm.D. curriculum introduces principles and concepts. These are applied during years 2 and 3 as students complete a series of body system courses. This course sequence prepares students for Patient Care I which is taken in the following 8 weeks.

23. Complete the syllabus checklist on the next page of this form.

### Syllabus Requirements Checklist

The University's complete Syllabus Policy can be found at:

[http://www.aa.ufl.edu/Data/Sites/18/media/policies/syllabi\\_policy.pdf](http://www.aa.ufl.edu/Data/Sites/18/media/policies/syllabi_policy.pdf)

The syllabus of the proposed course **must** include the following:

- ☒ Course title
- ☒ Instructor contact information (if applicable, TA information may be listed as TBA)
- ☒ Office hours during which students may meet with the instructor and TA (if applicable)
- ☒ Course objectives and/or goals
- ☒ A weekly course schedule of topics and assignments.
- ☒ Methods by which students will be evaluated and their grades determined
- ☒ Information on current UF grading policies for assigning grade points. This may be achieved by including a link to the appropriate undergraduate catalog web page:  
<https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx>.
- ☒ List of all required and recommended textbooks
- ☒ Materials and Supplies Fees, if any
- ☒ A statement related to class attendance, make-up exams and other work such as: *"Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found in the online catalog at:  
<https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>."*
- ☒ A statement related to accommodations for students with disabilities such as: *"Students requesting classroom accommodation must first register with the Dean of Students Office. The Dean of Students Office will provide documentation to the student who must then provide this documentation to the Instructor when requesting accommodation."*
- ☒ A statement informing students of the online course evaluation process such as: *"Students are expected to provide feedback on the quality of instruction in this course based on 10 criteria. These evaluations are conducted online at <https://evaluations.ufl.edu>. Evaluations are typically open during the last two or three weeks of the semester, but students will be given specific times when they are open. Summary results of these assessments are available to students at <https://evaluations.ufl.edu/results>."*

It is **recommended** that the syllabus contain the following:

- ☒ Critical dates for exams or other work
- ☒ Class demeanor expected by the professor (e.g. tardiness, cell phone usage)
- ☒ The university's honesty policy regarding cheating, plagiarism, etc.

*Suggested wording: UF students are bound by The Honor Pledge which states, "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor 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." The Honor Code (<http://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/>) specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obligated to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the instructor or TAs in this class.*

- ☒ Contact information for the Counseling and Wellness Center: <http://www.counseling.ufl.edu/cwc/>, 392-1575; and the University Police Department: 392-1111 or 9-1-1 for emergencies

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## PHA 5561 Pathophysiology and Patient Assessment II

Spring 2016, Block 3,  
3 Semester Credit Hours

### Course Purpose:

The **Pathophysiology and Patient Assessment II** course is the second of a two-course sequence that provides students with an integrated knowledge base in the physiological functions of the human body to prepare students for the understanding of pathological changes pertinent to the development and progression of various diseases. Corollary to the establishment of a solid understanding of human pathophysiology, key concepts will be reinforced through the application of learned knowledge to problem solving in the simulated patient assessment modules built into the course sequence.

**Teaching Partnership Leaders:** Bin Liu, Ph.D. Associate Professor

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

Office: MSB P2-31

Phone: 352-273-7747

Office Hours: by email and appointment

### Teaching Partners:

TBA

Maureen Keller-Wood, Ph.D. Email: [kellwewd@cop.ufl.edu](mailto:kellwewd@cop.ufl.edu) Phone: 352-273-7687

Joanna Peris, Ph.D. Email: [peris@cop.ufl.edu](mailto:peris@cop.ufl.edu) Phone: 352-273-7688

Randell Doty, Pharm.D. Email: [doty@cop.ufl.edu](mailto:doty@cop.ufl.edu) Phone: 352-294-4984

**Academic Coordinator:** Christine Salama, M.A.

Email: [csalama@ufl.edu](mailto:csalama@ufl.edu)

Office: HPNP 4312

Phone: 352-273-5617

Office Hours: by email and appointment

### This Course Will Prepare You to Perform the Following Activities Which the Public Entrusts a Pharmacist to Perform:

**EPA A1.** Gather patient information (subjective and objective data).

**EPA A2.** Interpret patient data, and identify medication-related problems and develop a prioritized problem list.

**EPA A3.** Formulate evidence-based care plans. (In collaboration with an interprofessional team).

## Course Objectives

Upon completion of this course, the student will:

1. Differentiate between the conditions for Innate and Adaptive Immunity
2. Distinguish between acute and chronic inflammation using Patient Assessment data
3. Describe how the gastrointestinal system functions and the pathophysiology of common gastrointestinal disorders related to disruption of motility, absorption or secretion..
4. Describe homeostasis and the function of the endocrine axis in metabolism and maintenance of glucose, lipid and calcium homeostasis.
5. Describe the endocrine control of: male and female reproduction, growth, food intake and mineral metabolism
6. Describe the pathophysiology of glucose and lipid metabolism in types of diabetes.
7. Describe the pathophysiology of the neurological system including the following: excitatory and inhibitory amino acids, neurotransmitters, and sensory processing.
8. Describe the pathophysiology related to ventricular and meningeal disorders and stroke.
9. Describe the physical signs and lab values that represent the physiological changes that occur in the following systems which are discussed during this course:
  - Immunological
  - Gastroenterological
  - Endocrine
  - Neurological
10. Collaborate as a team member and solve a problem/case that requires interpretation of pathophysiological findings including lab values, patient assessment findings, and diagnostic procedure results.

## Pre-Requisite Knowledge and Skills

PHA XXXX Pathophysiology and Patient Assessment I; PHA XXXX Principles of Patient-Centered Care

## Course Outline

| Week   | Instructor | Related Learning Objectives | Module Topic/Learning Activities   | Instructor Contact Hours |
|--------|------------|-----------------------------|--|--------------------------|
| Week 1 |            |                             | Introductory Module<br>Introduction, Course tour: (1) Educational video  | 0.25                     |
| Week 1 | Liu        | 1 and 2                     | <b><i>Module 1: Immune Function and Inflammatory Response</i></b><br><b>Online/Individual Study (videos and readings):</b> | 6 hrs                    |

| Week   | Instructor  | Related Learning Objectives | Module Topic/Learning Activities   | Instructor Contact Hours |
|--------|-------------|-----------------------------|--|--------------------------|
|        |             |                             | 1. Innate Immunity: cellular and molecular mediators<br>2. Adaptive immunity: antigen recognition, processing, presentation<br>3. Adaptive immunity: B cells, T cells, antibodies<br>4. Acute Inflammation<br>5. Chronic Inflammation<br>6. Hypersensitivity and wound healing<br>Self-Assessments   |                          |
| Week 2 | Liu/<br>TBA | 1,2,9,10                    | <b>Module 1: Immune Function and Inflammatory Response (Cont'd)</b><br><b>In-Class Activity 1:</b><br>Quizzes - IRAT and TRAT<br>Patient Assessment 1<br><i>Immune Function &amp; Inflammatory Response</i><br>(Team Based Learning)<br>(e.g., CBC [WBC, Hgb, Hct, Platelets, Neutrophils, lymphocytes, monocytes, eosinophils], basic signs and symptoms of infection; basic physical assessment findings of infection) | 2 hrs                    |
|        |             | 1,2,9                       | <b>Exam 1</b>  | 2 hrs                    |
|        |             | 3                           | <b>Module 2: Gastrointestinal system</b><br><b>Online/Individual Study (videos and readings):</b><br>GI System Videos<br>Self-Assessments  | 3 hrs                    |
| Week 3 | TBA         | 3                           | <b>Module 2: Gastrointestinal system (Contd)</b><br><b>Online/Individual Study (videos and readings):</b><br>GI System Videos<br>Self-Assessments  | 2 hrs                    |
|        |             | 3,9,10                      | <b>In-Class Activity 2:</b><br>Quizzes - IRAT and TRAT<br>Gastrointestinal System (Team Based Learning) Patient Assessment 2<br>e.g., coagulation INR, PPT; basic signs and symptoms of liver disease, physical assessment findings of liver disease)  | 2 hrs                    |
| Week 4 | Kellerwood  | 4,5                         | <b>Module 3: Endocrine System</b><br><b>Online/Individual Study (videos and</b>  |                          |

| Week   | Instructor | Related Learning Objectives | Module Topic/Learning Activities   | Instructor Contact Hours |
|--------|------------|-----------------------------|--|--------------------------|
|        |            |                             | <b>readings):</b> Educational Videos –<br>1. Overview of principles – feedback, homeostasis<br>2. Male reproduction<br>3. Female reproduction-menstrual cycle<br>4. Female reproduction – menopause, pregnancy<br>5. Bone and Growth<br>6. Calcium homeostasis<br>7. Thyroid hormone/metabolism<br><br>Self-Assessments  | 7 hrs                    |
| Week 5 | Kellerwood | 6                           | <b><i>Continued - Module 3: Endocrine System Online/Individual Study (videos and readings):</i></b><br>Educational Videos<br>1. Thyroid – metabolism (2nd hr)<br>2. Glucose metabolism (adrenal, pancreas, etc) 2hrs<br>3. Lipid metabolism (pancreas, gut hormones, etc)<br>4. Diabetes overview<br>5. Control of food intake and obesity<br>Self-Assessments | 6 hrs                    |
|        |            | 4,5,6,9,10                  | <b><i>In-Class Activity 3:</i></b><br>Quizzes - IRAT and TRAT<br><b><i>Endocrine System</i></b> (Team Based Learning)<br>Patient Assessment 3<br>(e.g., hypoglycemia and hyperglycemia signs and symptoms, Serum glucose interpretation, basic physical assessment findings of diabetes)   | 2 hrs                    |
| Week 6 | Peris      | 4,5,6,9                     | <b>Exam 2</b>  | 2 hrs                    |
|        |            | 7                           | <b><i>Module 4 - Neurological System Online/Individual Study (videos and readings):</i></b><br>Educational Videos<br>1. Excitatory and inhibitory amino acids<br>2. Serotonin and norepinephrine<br>3. Dopamine and acetylcholine<br>4. Peptide neurotransmitters<br>5. Sensory processing   | 5 hours                  |

| Week   | Instructor | Related Learning Objectives | Module Topic/Learning Activities   | Instructor Contact Hours                           |
|--------|------------|-----------------------------|--|--|
|        |            |                             | Self-Assessments   |  |
| Week 7 | Peris      | 8                           | <b>Module 4 - Neurological System (Contd)</b><br><b>Online/Individual Study (videos and readings):</b><br>Educational Videos<br>1. Other sensory disorders<br>2. Ocular disorders<br>3. Ventricular and meningeal disorders<br>4. Stroke – types and disease mechanisms<br>Self-Assessments<br><br><b>In-Class Activity 4:</b><br>Quizzes - IRAT and TRAT<br><b>Neurological System (Team Based Learning)</b><br>Patient Assessment 4<br>(e.g., Mental status Exam, Neurological exam, Initial Stroke Assessment (FAST)) | 5 hrs<br><br><br><br><br><br><br><br><br><br>2 hrs |
| Week 8 |            | 7,8,9,10                    | <b>Exam 3 (Final)</b>  |  |

## Textbooks

### Required

1. Readings, research articles and chapters from ebooks that may be accessed via the HSC Library (AccessPharmacy and AccessMedicine).
2. Nemire R, Kier K, Assa-Eley MT. Pharmacy Student Survival Guide. 3<sup>rd</sup> Edition. McGraw-Hill, (Chapter 11 – Interpretation of Clinical Laboratory Data).

## Student Evaluation & Grading

### Evaluation Methods and how grades are determined

| Assessment Item   | Grade value         |
|---|---------------------|
| In-Class Patient Assessment Activities/ Team Based Learning: Readiness Assessments (IRAT and TRAT) and Team Based Learning: Team/Peer Assessment N = 4) | 40 % (10% each x 4) |
| Exams (3)   | 60% (20% each x 3)  |



## Grading Scale

|            |    |
|------------|----|
| > 92.5%    | A  |
| 89.5-92.4% | A- |
| 86.5-89.4% | B+ |
| 82.5-86.4% | B  |
| 79.5-82.4% | B- |
| 76.5-79.4% | C+ |
| 72.5-76.4% | C  |
| 69.5-72.4% | C- |
| 66.5-69.4% | D+ |
| 62.5-66.4% | D  |
| 59.5-62.4% | D- |
| < 59.4%    | E  |

**Rounding of grades:** Final course grade will only be rounded up if the decimal is 0.5 or higher. The above scale depicts this policy.

## 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

## Class Attendance Policy

### Policy Across All 1PD-3PD courses:

Class attendance is mandatory for active learning sessions such as problem-solving sessions, case discussions, and laboratory sessions. Student attendance may be excused by the Teaching Partnership Leader in the following situations: documented illness, family emergencies, religious holidays, and other reasons of serious nature. Conflict with work schedules is an unexcused absence.

Requests for excused absences MUST be made by an email to the Academic Coordinator and the course facilitator prior to the scheduled session. The student is responsible for follow up and confirming whether the absence is excused or unexcused. The Teaching Partnership Leader and your campus specific director must be Cc'd in this communication. The following format is recommended:

**To:** Academic Coordinator and Campus Course Facilitator

**CC:** Teaching Partnership Leader and your specific campus director

**Subject:** PHA XXXX – Excused Absence request

Dear Prof. \_\_\_\_\_,

Professionally and politely request an excused absence.

Explain the nature of conflict and rationale for receiving an excused absence.

Thank the faculty member for their consideration of your special request.

Salutation,

Type in your full name and last 4 digits of UF-ID #, and Campus Name

Failing to follow this policy will render the absence not excusable. A request for an "excused absence" does not guarantee acceptance. No precedence can be drawn from any courses in the College of Pharmacy or any other college within University of Florida.

Makeup assignment(s) will be made for any excused absence(s) and must be submitted **within one-week of the missed session(s)**. If the situation leads to missing multiple class sessions and makeup becomes difficult, the student and Teaching Partnership Leader will meet with the Associate Dean of Student Affairs to explore options such as a remediation plan or course withdrawal.

Class attendance requires full engagement of activities and discussions. The following are unacceptable during class: 1) read non-course related materials that are either in hard-copy or web-based, 2) study for other courses, 3) use a laptop for activities that are not course-related. Class participation will be reduced in such situations.

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

#### **Additional Policy Specific to This Course:**

Failure to attend class or engage in these sessions will result in deductions in the participation proportion of the course grade.

### **Quiz/Exam Policy**

#### **Policy across All 1PD-3PD courses:**

1. Students must arrive and be seated promptly to be eligible to take the exam. 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.
2. No talking or other disruptive behavior during the distribution or taking of the exam.
3. Calculators must meet the following requirements: Only nonprogrammable calculators are allowed during exams for this course.
4. If you encounter calculator problems (e.g., dead battery), contact the Proctor.
5. 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.
6. Other exam rules may be instituted during the progression of the course.
7. 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. 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.*

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**Additional Policy Specific to This Course:**

One comprehensive final exam will be administered at the end of course. The exam will be given simultaneously on all campuses and will include multiple choice, true/false and matching questions.

**Make-up Quiz/Exam Policy****Policy across All 1PD-3PD courses:**

Makeup exams are given only under special circumstances. If the student is unable to take a scheduled examination, the Teaching Partnership Leader and Academic Coordinator must be notified before the examination. In addition, a written letter of explanation, requesting that the absence from the exam be excused, must be presented before the exam or immediately afterwards. An excused absence is allowable when: 1) the student is hospitalized and/or has been advised by a licensed medical practitioner or hospital not to attend the exam, or 2) if there is a documented death of an immediate family member. All excused absences will be considered on an individual basis by the Teaching Partnership Leader. For unusual situations (e.g., wedding that was planned before admission), the faculty member will communicate with student affairs.

Depending on the decision, a comprehensive exam may be given, which will contain material from all previous exams. The questions on the makeup exam may be in the form of essay, short answer, or multiple-choice. With the exception of highly extenuating circumstances, failure to follow the prescribed procedures or failure to attend the announced comprehensive examination will result in a grade of zero for that exam. A request for an "excused absence" does not guarantee acceptance. No precedence can be drawn from any courses in the College of Pharmacy or any other college within University of Florida.

The makeup exam must be taken **within one-week of the missed exam**. In extenuating circumstances (e.g., hospitalization, faculty availability), the instructor may arrange an alternate deadline for the exam.

The student may contact the instructor to obtain details about why points were deducted. The student has two weeks following the return of the Exam to clarify any questions and appeal any possible grading errors. Any appeals on the final examination must be made in writing and submitted to your facilitator. **When an appeal is made to re-grade an Exam, the entire Exam will be reevaluated and scored.**

**Additional Policy Specific to this Course:**

Make-up quizzes are not offered. The lowest quiz grade will be dropped. An alternate make-up exam can be made available for students with excused absences or extenuating circumstances at the discretion of course faculty.

**Policy on Old Quizzes and Assignments**

Old quizzes and assignments are not provided.

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## **General College of Pharmacy Course Policies**

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

1. University Grading Policies (Assigning Grade Points)
2. Concerns, Appeals, and Complaints
3. Academic Integrity Policy
4. Psychomotor and Learning Expectations
5. How to Request Learning Accommodations
6. Faculty and Course Evaluations
7. Computer and Other Technology Requirements
8. Expectations in Class and Other Learning Activities
9. Communications - Discussion Board Policy
10. Communications - Email
11. Religious Holidays
12. Counseling & Student Health Services
13. How to Access Services for Student Success
14. Faculty Lectures/Presentations Download Policy

Please see the following URL for this information:

<http://www.cop.ufl.edu/wp-content/uploads/dept/studaff/policies/General%20COP%20Course%20Policies.pdf>

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## Appendix A. Faculty and Staff: Who to Contact

### Academic Coordinator:

1. Questions about dates, deadlines, meeting place
2. Availability of handouts and other course materials
3. Assignment directions
4. Questions about grade entries gradebook (missing grades, wrong grade)
5. Assistance with ExamSoft®

### Teaching Partnership Leaders

1. Issues related to course policies (absences, make up exams, missed attendance)
2. Questions about grades
3. Concerns about performance
4. Guidance when there are performance problems (failing grades)
5. General questions about content

### Other Teaching Partnership Faculty Members

1. Questions about specific content

### Technical Support:

Contact the College of Pharmacy MediaHelp Desk for assistance with course-related technical issues (e.g., Canvas access, video access, printing of documents). The MediaHelp Desk may be reached via the following:

**Phone:** 352-273-6281 (9am-4PM ET)

**Email:** [mediahelp@cop.ufl.edu](mailto:mediahelp@cop.ufl.edu) (response is delayed outside of M-F 9AM-4PM ET)

Contact the University of Florida Computing Help Desk for addresses issues related to:

1. Gatorlink accounts,
2. Gatorlink email,
3. myUFL, and
4. ISIS.

**Phone:** (352)-392-4357