

## **Academic Affairs**

College of Education and Human Ecology 172 Arps Hall 1945 North High Street Columbus, OH 43210 614-688-4571 Phone

By wil

## Memo

July 1, 2015

To: Randy Smith, Vice Provost of Academic Programs

Melissa Newhouse, Program Manager

CC: Andrew Zircher, Director of Assessment and Curriculum

Sarah Odum, Curriculum Coordinator

From: Bryan Warnick, Associate Dean of Academic Affairs

## RE: CURRICULUM UPDATE: BSED, EXERCISE SCIENCE EDUCATION, EXERCISE SCIENCE

The faculty and administration of the College of Education and Human Ecology (EHE) approve a revision to the Bachelor of Science in Education, Exercise Science Education major, Exercise Science specialization in the Department of Human Sciences. The proposal was approved by the EHE Curriculum Committee.

The revision put forward by faculty includes removing Pharmacy 4400 and allowing students to choose between Pharmacology 5600 and Pharmacy 2010. Pharmacy 4400 was recently reorganized and after consultation with Pharmacy 2 courses were identified that meet the pharmacology requirement for the specialization.

Documents included with this request include:

- Department letter of support
- 2. Program proposal
- 3. Proposed program sheet
- 4. Current program sheet for both Exercise Science and Health Promotion specializations
- 5. Updated curriculum map for both Exercise Science and Health Promotion specializations
- 6. Syllabus
  - a. Pharmacy 2010
  - b. Pharmacology 5600
- 7. Concurrence
  - a. Pharmacology 5600
  - b. Pharmacy 2010

EHE approves a revision to the Bachelor of Science in Education, Exercise Science Education major, Exercise Science specialization in the Department of Human Sciences and requests approval from the Council on Academic Affairs. If there are any questions, please contact me at warnick.11@osu.edu or our curriculum coordinator, Sarah Odum, at odum.11@osu.edu.

## **Odum, Sarah**

From: Folden, H

Sent: Wednesday, February 25, 2015 2:23 PM

To: Odum, Sarah

**Subject:** FW: Ex Sci major pharmacy course change

**Attachments:** pending.Summer 2015 start. BSED ES Exercise Science Program Sheet 02.24.2015.doc;

ES Curriculum Map.2.24.2015.docx; final.Summer 2012 start. BSED HP Exercise Science Program Sheet 05.30.2014.doc; final.Summer 2014 start. BSED ES Exercise Science Program Sheet 05.30.2014.doc; Ex Sci Pharmacy Course Curriculum Change.doc; PHR

2010 Syllabus.docx; PHR 5600 Syllabus.docx

## Sarah,

The members of the HS undergraduate studies committee approved the program change (PHARML 5600 or PHR 2010 instead of PHR 4400) in the Exercise Science program.

Let me know if you need anything further from me.

### Gene

H. Eugene Folden, Ph.D.
Associate Chair, Curriculum, HS
Chair, College Curriculum Committee
Associate Professor, Clinical
Department of Human Sciences
College of Education and Human Ecology
1787 Neil Avenue
129 Campbell Hall
Columbus, OH 43210
614-292-5676
Folden.1@osu.edu

From: Devor, Steven

Sent: Tuesday, February 24, 2015 2:48 PM

To: Folden, H

**Cc:** Piazza, Ramsey; Odum, Sarah; Maresh, Carl M. **Subject:** Ex Sci major pharmacy course change

## Gene.

Attached please find my formal letter of request for the pharmacy course change we discussed this morning at the Human Sciences advisor meeting. Several related items for this request are also attached here.

Stay well,



College of Education and Human Ecology
Program Area: Kinesiology
PAES Building, First Floor
305 W. 17<sup>th</sup> Avenue
Columbus, OH 43210

Phone: 614-292-5679 Fax: 614-292-7229 http://ehe.osu.edu/human-sciences

H. Eugene Folden Jr., Ph.D. Associate Professor, Clinical Associate Chair - Curriculum Department of Human Sciences – HDFS Program 129A Campbell Hall 1787 Neil Avenue Colubus, OH 43210

Dear Dr. Folden,

Currently, the Exercise Science specialization, one strand of the undergraduate major in Exercise Science within the College of Education and Human Ecology, requires Pharmacy (PHR) 4400 as a core part of the degree. However, in conversations with faculty and advisors in the Department of Pharmacy it has become clear that PHR 4400 is being reorganized to become a more focused laboratory experience that is not appropriate for undergraduate students in Exercise Science. Indeed, we have been informed that our undergraduate Exercise Science majors will be unable to enroll in PHR 4400 any longer.

Accordingly, we have worked to identify two additional pharmacy courses that will satisfy our major curricular requirements for our students. The two courses are PHR 5600 (an on-line only course) and PHR 2010 (a traditional lecture course). We have opted for two courses in order to provide our students with as much flexibility as possible, while still maintaining the necessary curricular information required from a pharmacy perspective. In reviewing the syllabi for both PHR 5600 and PHR 2010 the faculty find their content fulfills the pharmacology requirement for the curriculum.

With this proposed curricular change there is an increase in the maximum credit hours to complete the major without any allowable overlap from 130 to 131. However, when overlap is utilized with the major and General Education as well as within the General Education categories students will be able to complete the major with the minimum of 120 credit hours.

The faculty requests the pharmacy related changes be effective for students beginning Summer Semester, 2015. Our faculty will work with advisors to allow these options for students currently in the program given the changes in the course. We are seeking approval of this proposal by the Department of Human Sciences Undergraduate Studies Committee.

Attached to this proposal please find the updated major program sheet for the Exercise Science specialization as well as an updated curriculum map for the Exercise Science major, which includes specializations in Exercise Science and Health Promotion. Additionally, the syllabi for PHR 5600 and PHR 2010 are attached.

Please do not hesitate to contact me should you have any questions.

Be well,

Steven T. Devor, Ph.D., FACSM
Associate Professor
Kinesiology Program - Department of Human Sciences, and
Department of Physiology and Cell Biology
The Ohio State University
A50 PAES Building
305 West 17th Avenue
Columbus, OH 43210-1224

## BACHELOR OF SCIENCE IN EDUCATION, Exercise Science Exercise Science Specialization Program Sheet

Effective for students admitted to the College of Education and Human Ecology beginning Summer 2015

COURSE & NUMBER	HRS	GR	SM/YR	COURSE & NUMBER	HRS	GR	SM/YR
UNIVERSITY REQUIREMENTS (52-54)				Foundational Science Requirements (74-76)			
Writing (6)				ANATOMY 2300.04	4		
<sup>6</sup> ENGLISH 1110.01 or 1110.02 or <sup>1</sup> 1110.03	3			HTHRHSC 5550	3		
<sup>3, 5</sup> 2 <sup>nd</sup> level Writing Course (2367)	3			BIOCHEM 2210	4		
<sup>2,5</sup> Literature (3)	3			KNSFHP 1103 -Intr to Hith & Wilnss in Am Soc	2		
				KNHES 3209- Orientation to Ex. Sci.	1		
				<sup>6</sup> KNHES 2360- Kinesiology	4		
<sup>2,5</sup> Arts (3)	3			KNPE 2542- Lfspn Mtr Devel	3		
				KNHES 3414- Applied Exercise Physiology	4		
Math (5-7)				KNHES 4490- Graded Exer Testing	1		
<sup>6</sup> Math Placement M or higher, MATH 1148 or Equiv	0-4			KNHES 4525- Prom Beh Chnge	3		
MATH 1149 or 1150	3-5			Select 2 courses from the list below:	1		
Data Analysis (3) STAT 1350 or equiv	3			KNHES 5491- Body Comp Eval	'		
Data Alialysis (3) STAT 1350 of equiv				KNHES 5492- Muscl Strength &Tsting	1		
				KNHES 5493- Older Adult Exer Prescrp	'		
Natural Sciences (14)				KNHES 5652- Wrkste Hith Prom	3		
<sup>6</sup> BIOLOGY 1113	4			KNHES 5685- Adlt Exer Prog- Implementation AND	3		
<sup>6</sup> CHEM 1210 and <sup>6</sup> 1220	10			KNHES 5661.01- Beg Exer Phys Lab	1		
				KNHES 5704- Hith Prog Eval	3		
<sup>2, 3, 5</sup> Historical Study (3)	3			HUMNNTR 2310	3		
<sup>2, 3, 5</sup> Social Sciences (6)	6			PHARML 5600 or PHR 2010	3		
Take two social science courses from University				PHYSIO 3101 and 3102	3+3		
approved GE list. Choose from 2 different				OR	OR		
subcategories.				PHYSIO 3200	5		
				<sup>4</sup> PHYSICS 1200	5		
<sup>2, 3, 5</sup> Culture & Ideas or <sup>2, 3, 5</sup> Historical Study (3)	3			<sup>4</sup> PHYSICS 1201	5		
Open Option (6)				KNHES 5191- Internship	12		
Choice (recommended: <sup>4</sup> Physics 1200)	3						
Choice (recommended: <sup>4</sup> Physics 1201)	3						
				<sup>6</sup> Major Admission Requirements (see below)			
EHE 1100 (1)	1						
Electives (0)	0			TOTAL HOURS REQUIRED Minimum: 120 With	out over	lap <sup>4, 5</sup> :	: 131

<sup>&</sup>lt;sup>1</sup> English 1110.03 must be taken concurrently with English 1193.03

<sup>2</sup>Students must complete two Global Issues courses, which are typically met by selecting Literature, Art, Cultures & Ideas, or Historical Study courses that meet this requirement.

<sup>&</sup>lt;sup>3</sup> Students must complete one Social Diversity in the US course, which is typically met by selecting a 2nd Writing, Historical Study, or Social Science course that meets this requirement.

<sup>&</sup>lt;sup>4</sup>Recommended GE overlaps with major and can fulfill both GE and major requirement

<sup>&</sup>lt;sup>5</sup> Highlights category where overlap within the GE may occur, such as between Arts and Historical Study, Literature and Social Sciences, 2nd Writing and Social Sciences, etc.

<sup>&</sup>lt;sup>6</sup> Major Admission Requirements: Competitive review process requiring completion of Application packet, including 3 letters of recommendation and Statement of Prof. Goals, Minimum GPA of 3.0 after completion of 30 hours. Completion of the following courses with a C- or higher: Biology 1113, Chemistry 1210 & 1220, KNHES 2360 (Kinesiology), English 1110, Math 1148 April 1st deadline (for autumn term admission)

## BACHELOR OF SCIENCE IN EDUCATION, Exercise Science Exercise Science Specialization Program Sheet

Effective for students admitted to the College of Education and Human Ecology beginning Summer 2014

COURSE & NUMBER	HRS	GR	SM/YR	COURSE & NUMBER	HRS	GR	SM/YR
UNIVERSITY REQUIREMENTS (52-54)				Foundational Science Requirements (74)			
Writing (6)				ANATOMY 2300.04	4		
<sup>6</sup> ENGLISH 1110.01 or 1110.02 or <sup>1</sup> 1110.03	3			HTHRHSC 5550	3		
3,5 2 <sup>nd</sup> level Writing Course (2367)	3			BIOCHEM 2210	4		
<sup>2, 5</sup> Literature (3)	3			KNSFHP 1103 -Intr to Hith & Wilnss in Am Soc	2		
				KNHES 3209- Orientation to Ex. Sci.	1		
				<sup>6</sup> KNHES 2360- Kinesiology	4		
<sup>2, 5</sup> Arts (3)	3			KNPE 2542- Lfspn Mtr Devel	3		
				KNHES 3414- Applied Exercise Physiology	4		
Math (5-7)				KNHES 4490- Graded Exer Testing	1		
<sup>6</sup> Math Placement M or higher, MATH 1148 or Equiv	0-4			KNHES 4525- Prom Beh Chnge	3		
MATH 1149 or 1150	3-5			Select 2 courses from the list below:	1		
Data Analysis (3) STAT 1350 or equiv	3			KNHES 5491- Body Comp Eval	'		
Data Alialysis (3) STAT 1330 of equiv				KNHES 5492- Muscl Strength &Tsting	1		
				KNHES 5493- Older Adult Exer Prescrp	'		
Natural Sciences (14)				KNHES 5652- Wrkste Hith Prom	3		
<sup>6</sup> BIOLOGY 1113	4			KNHES 5685- Adlt Exer Prog- Implementation AND	3		
<sup>6</sup> CHEM 1210 and <sup>6</sup> 1220	10			KNHES 5661.01- Beg Exer Phys Lab	1		
				KNHES 5704- Hith Prog Eval	3		
<sup>2, 3, 5</sup> Historical Study (3)	3			HUMNNTR 2310	3		
<sup>2, 3, 5</sup> Social Sciences (6)	6			PHARM 4400	2		
Take two social science courses from University				PHYSIO 3101 and 3102	3+3		
approved GE list. Choose from 2 different				OR	OR		
subcategories.				PHYSIO 3200	5		
				<sup>4</sup> PHYSICS 1200	5		
<sup>2, 3, 5</sup> Culture & Ideas or <sup>2, 3, 5</sup> Historical Study (3)	3			<sup>4</sup> PHYSICS 1201	5		
Open Option (6)				KNHES 5191- Internship	12		
Choice (recommended: <sup>4</sup> Physics 1200)	3				1		
Choice (recommended: <sup>4</sup> Physics 1201)	3				+		
				<sup>6</sup> Major Admission Requirements (see below)			
EHE 1100 (1)	1						
Electives (0)	0			TOTAL HOURS REQUIRED Minimum: 120 With	out over	ap <sup>4, 5</sup> :	129
	1		1				

<sup>&</sup>lt;sup>1</sup>English 1110.03 must be taken concurrently with English 1193.03

<sup>&</sup>lt;sup>2</sup>Students must complete two Global Issues courses, which are typically met by selecting Literature, Art, Cultures & Ideas, or Historical Study courses that meet this requirement.

<sup>&</sup>lt;sup>3</sup> Students must complete one Social Diversity in the US course, which is typically met by selecting a 2nd Writing, Historical Study, or Social Science course that meets this requirement.

<sup>&</sup>lt;sup>4</sup>Recommended GE overlaps with major and can fulfill both GE and major requirement

<sup>&</sup>lt;sup>5</sup> Highlights category where overlap within the GE may occur, such as between Arts and Historical Study, Literature and Social Sciences, 2nd Writing and Social Sciences, etc.

<sup>&</sup>lt;sup>6</sup> Major Admission Requirements: Competitive review process requiring completion of Application packet, including 3 letters of recommendation and Statement of Prof. Goals, Minimum GPA of 3.0 after completion of 30 hours. Completion of the following courses with a C- or higher: Biology 1113, Chemistry 1210 & 1220, KNHES 2360 (Kinesiology), English 1110, Math 1148 April 1st deadline (for autumn term admission)

## BACHELOR OF SCIENCE IN EDUCATION, Exercise Science Health Promotion Specialization Program Sheet

Effective for students admitted to the College of Education and Human Ecology beginning Summer 2012

COURSE & NUMBER	SEM	GR	COURSE & NUMBER	SEM	GR	
UNIVERSITY REQUIREMENTS (52-54)			Foundational Science Requirements (13)			
Writing (6)			ANATOMY 2300.04	4		
<sup>6</sup> ENGLISH 1110.01 or 1110.02 or <sup>1</sup> 1110.03	3		HUMNNTR 2310	3		
3, 5 2 <sup>nd</sup> level Writing Course (2367)	3		PHYSIO 3101 and 3102	3+3		
<sup>2, 5</sup> Literature (3)	3		OR	OR		
			PHYSIO 3200	5		
<sup>2, 5</sup> Arts (3)	3		Major Requirements (57)			
			KNSFHP 1147 Prin of Fit & Well AND	1		
Math (5-7)			KNSFHP 1148.0x	1		
<sup>6</sup> Math Placement M or higher, MATH 1148 or Equiv	0-4		KNSFHP 1103 Intr to Hlth & Wllnss in Am Soc	2		
MATH 1149 or 1150	3-5		KNSFHP 2204 Sexuality and Health	2		
Data Analysis (3) STAT 1350 or equiv	3		KNSFHP 2250 Cancer Prevention	2		
			<sup>6</sup> KNHES 2360- Kinesiology	4		
Natural Sciences (14)			KNHES 3209 Orient to Exerc Sci	1		
<sup>6</sup> BIOLOGY 1113	4		KNSFHP 3314 AIDS Awareness	2		
<sup>6</sup> CHEM 1210 and <sup>6</sup> 1220	10		KNHES 3414 Applied Exercise Phys	4		
			KNHES 4490 Graded Exer Testing	1		
<sup>2, 3, 5</sup> Historical Study (3)	3		KNHES 4525 Prom Beh Chnge	3		
<sup>2, 3, 5</sup> Social Sciences (6)	6		KNHES 5491 Body Comp Eval	1		
Take two social science courses from University approved GE list. Choose from 2 different			KNHES 5492 Muscl Strength &Tsting	1		
subcategories.			KNHES 5493 Older Adult Exer Prescrp	1		
			ESWDE 5636 Teaching of Health	3		
<sup>2, 3, 5</sup> Culture & Ideas or <sup>2, 3, 5</sup> Historical Study (3)	3		KNHES 5651 Health prog Planning	3		
			KNHES 5652 Wrkste Hlth Prom	3		
Open Option (6)			KNHES 5703 Health Behavior Theory	3		
Choice	3		KNHES 5704 Hith Prog Eval	3		
Choice	3		KNHES 5685 Adlt Exer Prog- Implementation AND	3		
			KNHES 5661.01 Beg Exer Phys Lab	1		
			KNHES 5191 Internship	12		
EHE 1100 (1)	1		<sup>6</sup> Major Admission Requirements (see below)			
Electives (0)	0		TOTAL HOURS REQUIRED Minimum: 120	Vithout ov	verlan <sup>4, 5</sup>	125
English 1110.03 must be taken concurrently with English 1:	_	<u> </u>	The state of the s		~p .	

<sup>&</sup>lt;sup>1</sup> English 1110.03 must be taken concurrently with English 1193.03

<sup>&</sup>lt;sup>2</sup>Students must complete two Global Issues courses, which are typically met by selecting Literature, Art, Cultures & Ideas, or Historical Study courses that meet this requirement.

<sup>&</sup>lt;sup>3</sup> Students must complete one Social Diversity in the US course, which is typically met by selecting a 2nd Writing, Historical Study, or Social Science course that meets this requirement.

<sup>&</sup>lt;sup>4</sup>Recommended GE overlaps with major and can fulfill both GE and major requirement

<sup>&</sup>lt;sup>5</sup> Highlights category where overlap within the GE may occur, such as between Arts and Historical Study, Literature and Social Sciences, 2nd Writing and Social Sciences, etc.

<sup>&</sup>lt;sup>6</sup> Major Admission Requirements: Competitive review process requiring completion of Application packet, including 3 letters of recommendation and Statement of Prof. Goals, Minimum GPA of 3.0 after completion of 30 hours. Completion of the following courses with a C- or higher: Biology 1113, Chemistry 1210 & 1220, KNHES 2360 (Kinesiology), English 1110, Math 1148 April 1st deadline (for autumn term admission)

# Curriculum Map: Exercise Science Specialization

## Program Goals:

- 1. Understand the physiological and behavioral foundations of physical activity, health and fitness.
- 2. Explain the impact of physical activity, exercise, and sport on the health of individuals, groups, and communities.
  - 3. Promote basic and applied research on health, disease prevention, human behavior, and human performance.
- 4. Assess the educational and fitness needs of individuals, groups and communities to promote health and human performance.
- 5. Implement educational strategies to help individuals, groups, and communities to maintain and enhance physical performance, fitness, health, and quality of
- 6. Evaluate strategies to help individuals, groups, and communities to maintain and enhance physical performance, fitness, health, and quality of life.
  - 7. Study the structural, functional and behavioral phenomena related to health and exercise behavior in sport, clinical, and community settings.

## Exercise Science specialization

	1	2	33	4	5	9	7
BIOLOGY 1113	В						
CHEM 1210	В						
CHEM 1220	Ι						
BIOCHEM 2210	Ι						
PHYSIO 3101	В						
PHYSIO 3102	Ι						
HUMNNTR 2310	I	В					
ANATOMY 2300.04	В	В					
PHYSICS 1200	В						
PHYSICS 1201	В						
HTHRHSC 5550	I	I	В	А	В	В	I
PHARML 5600 OR PHR 2010	I						
KNSFHP 1103- Intr to Hith & Wilnss in Am Soc	В	В		В	В	В	
KNHES 2360 Kinesiology	I	I	В	В			В
KNHES 3209 Orientation to Ex. Sci.	В	В	В				
KNHES 4490 Graded Exer Testing	I			A			A

KNPE 2542 Lfspn Mtr Devel	Ι	I	В	В			
KNHES 5491 Body Comp Eval	I			A			A
KNHES 5492 Muscl Strength &Tsting	I			A			А
KNHES 5493 Older Adult Exer Prescrp	Ι			A			A
KNHES 4525 Prom Beh Chnge	Ι	I	I	В	А	I	I
KNHES 5652 Wrkste Hlth Prom	Ι	I	В	Ι	I	I	I
KNHES 3414 Applied Exercise Physiology	A	A	A	I			
KNHES 5704 Hlth Prog Eval	В	В	I	A		A	I
KNHES 5685 Adlt Exer Prog- Implementation	A	А	A	A			А
KNHES 5661.01 Beg Exer Phys Lab	А	A	A	А			A
KNHES 5191 Internship	А	A	A	А	А	A	А

# Curriculum Map: Health Promotion Specialization

## Program Goals:

- 1. Understand the physiological and behavioral foundations of physical activity, health and fitness.
- 2. Explain the impact of physical activity, exercise, and sport on the health of individuals, groups, and communities.
  - 3. Promote basic and applied research on health, disease prevention, human behavior, and human performance.
- 4. Assess the educational and fitness needs of individuals, groups and communities to promote health and human performance.

  5. Implement educational strategies to help individuals, groups, and communities to maintain and enhance physical performance, fitness, health, and quality of
- 6. Evaluate strategies to help individuals, groups, and communities to maintain and enhance physical performance, fitness, health, and quality of life.
  - 7. Study the structural, functional and behavioral phenomena related to health and exercise behavior in sport, clinical, and community settings.

## Health Promotion specialization

	1	2	3	4	5	9	7
BIOLOGY 1113	B						
CHEM 1210	B						
CHEM 1220	I						

PHYSIO 3101	В						
PHYSIO 3102	Ι						
HUMN NTR 2310	Ι	В					
ANATOMY 2300.04	В	В					
PHYSICS 1200	В						
PHYSICS 1201	В						
KNSFHP 1147 Prin of Fit & Well KNSFHP1148.0X	В						
KNSFHP 1103 Intr to Hlth & Wllnss in Am Soc	В	В		В	В	В	
KNHES 2360 Kinesiology	I	I	В	В			В
KNHES 4490 Graded Exer Testing	I			A			A
KNHES 5491 Body Comp Eval	I			А			Α
KNHES 5492 Muscl Strength &Tsting	I			А			А
KNHES 5493 Older Adult Exer Prescrp	I			A			A
KNHES 3209 Orient to Exerc Sci	В	В	В				
KNHES 4525 Prom Beh Chnge	I	I	I	В	A	I	I
KNHES 5652 Wrkste Hith Prom	I	I	В	I	I	I	I
KNHES 3414 Applied Exercise Phys	А	A	A	I			
KNHES 5703 Health Behavior Theory	А	A	Ι		В	I	А
KNHES 5704 Hlth Prog Eval	В	В	Ι	A		A	Ι
KNHES 5685 Adlt Exer Prog- Implementation	А	A	A	A			A
KNHES 5661.01 Beg Exer Phys Lab	A	A	A	А			А
KNSFHP 2250 Cancer Prevention	В			В	В		
KNSFHP 2204 Sexuality and Health	В			В	В		
KNHES 5191 Internship	A	А	A	A	A	A	A
KNSFHP 3314 AIDS Awareness	В			В	В		
KNHES 5651 Health Prog Planning	I		В	I	A	В	В
ESWDE 5636 Tching Hlth	I		В			I	

## PHR2010, Pharmacology: The Science Behind Drugs

3 Credit hours Fall 2014

### Instructor

Nicole Cartwright Kwiek, Ph.D. kwiek.1@osu.edu 442 Parks Hall 614-688-5951
Office hours are held in 442 Parks Hall on Tue and Thurs, 3-4PM. Additional times are available upon request.

## **Course description**

This course overviews principles underlying drug action, including an investigation of current treatments for a variety of common diseases as well as discussion of new and upcoming therapeutic strategies.

## **Course prerequisites**

None

## **Course learning outcomes**

After course completion, students will:

- 1. Map a drug's path in the body based on route of administration.
  - 2. Predict a drug's general effect(s) based on its target and understanding of physiology/pathophysiology.
  - 3. Identify factors contributing to varied drug response among a population.
  - 4. Apply knowledge of pharmacological principles in developing new therapeutic strategies.
  - 5. Pinpoint important historical pharmacological discoveries, identifying the role of scientific innovation and technology in advancing therapeutic treatments.
  - 6. Critically evaluate contemporary (and sometimes) controversial therapies and/or drug-related issues.

### Course schedule

The lectures will be held on Tues, Thurs from 2:20-3:40PM in 1184 Postle Hall.

## **Course materials**

Recommended textbook: Principles of Pharmacology, The Pathophysiologic Basis of Drug Therapy, 3<sup>rd</sup> Edition by David E. Golan et al. 2012. ISBN: 978-1-60831-270-2. We also highly recommend that students purchase a clicker (Turning Point ResponseRF card, available at most bookstores). Announcements, class notes, assignments, syllabus, etc. will be posted on Carmen.

## **Course policies**

**Grading policy** 

Total	400 pts
Exams (75% of the final grade)	300 pts
Quizzes (25% of the final grade)	100 pts

Your final grade will be calculated as follows:

**A** 93-100%, **A-** 90-92%, **B+** 87-89%, **B** 83-86%, **B-** 80-82%, **C+** 77-79%, **C** 73-76%, **C-** 70-72%, **D+** 67-69%, **D** 60-66%, **E** 0-59%

## Quizzes

Quizzes will be given during most weeks of the class. Some will be accessible via Carmen while others will be delivered unannounced in class. Your two lowest quiz grades will be dropped. Any missed in-class quizzes will result in a zero for that grade. **No exceptions.** 

## **Examinations**

There will three 100-point exams given during the semester: two midterms and a non-cumulative final exam. Typically, these exams will comprise multiple choice and short answer questions, including some data analysis

Copyright 2014. The Ohio State University. All rights reserved. No distribution, reproduction, display, or making of derivative works is allowed without first obtaining the express written permission of The Ohio State University.

questions. Makeup exams for any reason are approved at the discretion of the instructor, may be a different format than the regularly scheduled exam (e.g., oral), and will in the very least require documentation.

### Attendance

Attendance in class and recitations is not required but **highly suggested**. Students are expected to fully participate during class discussions, activities, etc. For your convenience, most course lectures will be captured and posted on Carmen. **Be aware that any live lectures that are not successfully captured due to technical difficulties will not be available or re-recorded.** 

### Extra credit

Students may earn up to 6 bonus points by <u>answering</u> other students' questions on the Carmen discussion board. (1 answer = 1 EC point)

### **Academic Conduct:**

It is the responsibility of the Committee on Academic Misconduct to investigate or establish procedures for the investigation of all reported cases of student academic misconduct. The term "academic misconduct" includes all forms of student academic misconduct wherever committed; illustrated by, but not limited to, cases of plagiarism and dishonest practices in connection with examinations. Instructors shall report all instances of alleged academic misconduct to the committee (Faculty Rule 3335-5-487). For additional information, see the Code of Student Conduct: <a href="http://studentlife.osu.edu/csc/">http://studentlife.osu.edu/csc/</a>.

### **Student Disability:**

Students with disabilities that have been certified by the Office for Disability Services will be appropriately accommodated and should inform the instructor as soon as possible of their needs. The Office for Disability Services is located in 150 Pomerene Hall, 1760 Neil Avenue; telephone 292-3307, TDD 292-0901; <a href="http://ods.ohio-ohio-state.edu/">http://ods.ohio-ohio-state.edu/</a>.

## Lecture schedule:

Date	Day	Lecture	Topic	Highlights
8/28	Th	1	Intro	What is a drug?
9/2	T	2	Pharmacokinetics	Getting drugs in
9/4	Th	3	Pharmacokinetics	Getting drugs in and around
9/9	T	4	Pharmacokinetics	Getting drugs out
9/11	Th	5	Pharmacodynamics	Drug targets
9/16	T	6	Pharmacodynamics	Drug targets; dose-response
9/18	Th	7	Toxicity; factors affecting drug response	Age, disease, drug-drug interactions
9/23	T	8	Factors affecting drug response	Placebo effect
9/25	Th	9	Factors affecting drug response	Pharmacogenomics
9/30	T	10	Exam 1	
10/2	Th	11	How drugs alter enzyme function	COX and NSAIDs
10/7	T	12	How drugs alter enzyme function	PDEs and sildenafil
10/9	Th	13	How drugs alter hormonal function	Hormonal birth control
10/14	T	14	How drugs alter hormonal function	Diabetes
10/16	Th	15	How drugs alter autonomic function	Anatomy, function, survey of drugs
10/21	T	16	How drugs alter autonomic function	Nerve gas
10/23	Th	17	How drugs alter CNS function	Anatomy, function; depression
10/28	T	18	How drugs alter CNS function	Pain
10/30	Th	19	Drug abuse/addiction	Reward pathway, overview of drugs; marijuana
11/4	T	20	Exam 2	
11/6	Th	21	How drugs alter immune function	Asthma, allergies
11/11	T	22	NO CLASS	
11/13	Th	23	How drugs kill cells	Principles of chemotherapy; anti-cancer
11/18	T	24	How drugs kill cells	Antibiotics
11/20	Th	25	Re-thinking antimicrobial therapy	The microbiome
11/25	T	26	Vaccines	Flu, HPV vaccines, controversy
12/2	T	27	Drug testing	Clinical trial process
12/4	Th	28	Alternative therapies	Survey; establishing rigor in trials
12/9	T	29	Therapeutic frontiers	New-and-upcoming therapeutic strategies
Finals			Final exam (non-cumulative)	

## SYLLABUS Autumn 2014

## **Course Director:**

Frederick A. Villamena, PhD
Associate Professor, College of Medicine, Department of Pharmacology
473 W. 12<sup>th</sup> Ave., Room 012A
(614)-292-8215 (office)
villamena.1@osu.edu

Office hours by appointment

## **Course Description:**

Introductory course emphasizing the general principles of pharmacology using a systems-based and mechanism-based approach. The course provides a simple overview of the subject to students who have not previously been exposed to pharmacology.

## **Prerequisite:**

Prior coursework in physiology and chemistry, or permission of instructor. Not open to students with credit for Pharmacology 600.

## **Objectives:**

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

- 1. Describe factors that affect the pharmacokinetic properties (drug absorption, distribution, metabolization, and elimination in the body) and pharmacodynamics properties (relationship between drug concentration and response in the body) of drugs.
- 2. Apply basic principles of cell biology, biochemistry, physiology, pathophysiology, and genetics to explain how human diseases are treated with drugs.
- 3. Identify major drug classifications, and for each identify prototype drug names, indications, mechanism of action, and therapeutic and adverse actions.
- 4. Identify and demonstrate proficiency using sources of reference material for drug information.

## **Course Topics:**

Unit I: Principles of Drug Therapy

Unit II: Drugs Affecting the Autonomic Nervous System Unit III: Drugs Affecting the Central Nervous System Unit IV: Drugs Affecting the Cardiovascular System Unit V: Drugs Affecting the Endocrine System

Unit VI: Drugs Affecting Other Organs

Unit VII: Chemotherapeutic Drugs

Unit VIII: Anti-Inflammatory Drugs and Autacoids

## Additional Course Faculty (assisted in preparing lesson materials):

Rene Anand, PhD Andrej Rotter, PhD

Professor Professor

College of Medicine, Dept. of Pharmacology College of Medicine, Dept. of Pharmacology

Roger Briesewitz, PhD Jasmine Talameh, PharmD PhD Sr. Research Scientist Post-Doctoral Researcher

**OSU Comprehensive Cancer Center** College of Medicine, Dept. of Pharmacology

Howard Gu, PhD Wolfgang Sadee, Dr.rer.nat.

**Associate Professor** Professor and Chair

College of Medicine, Dept. of Pharmacology College of Medicine, Dept. of Pharmacology

Joseph Kitzmiller, MD, PhD Ryan Matthew Smith, Ph.D. **Assistant Professor** Research Assistant Professor

College of Medicine, Dept. of Pharmacology College of Medicine, Dept. of Pharmacology

Elaine Mokrzan, PhD Kirk Mykytyn, PhD Senior Research Associate, Associate Professor

Nationwide Children's Hospital College of Medicine, Dept. of Pharmacology

Marjorie Niedecker, PhD, RN Jim McAuley, PhD, RPh Professor Assistant Professor - Clinical Colleges of Nursing and Pharmacy

College of Pharmacy, Div. of Pharmacy Practice

and Administration

### **Course Materials and Resources**

## **Required Text Book:**

The following text book is required for the course:

Richard A. Harvey, Michelle A. Clark, Richard Finkel, Jose A. Rey, Karen Whalen (2011). Lippincott's Illustrated Reviews: Pharmacology (5th Edition). Lippincott Williams & Wilkins, ISBN: 9781451113143

## **Supplemental Textbooks:**

The following textbooks are available online through the Prior Health Sciences Library:

1. Katzung, Masters, Trevor. (2011). Basic and Clinical Pharmacology (12<sup>rd</sup> ed.). McGraw-Hill. ISBN: 9780071764018. http://www.accessmedicine.com/resourceTOC.aspx?resourceID=723

 Laurence L. Brunton, Bruce A. Chabner, Björn C. Knollmann. (2011). Goodman & Gilman's The Pharmacological Basis of Therapeutics, (12<sup>th</sup> ed.). McGraw-Hill. ISBN: 9780071624428. http://www.accessmedicine.com/resourceTOC.aspx?resourceID=651

## **Recommended Web Links:**

In light of the availability of more than 300,000 marketed over-the-counter drugs and approximately 6,000 prescription drugs in over 80 therapeutic classes, this course is designed to teach students how to quickly find accurate information about drugs by using reliable resources available online:

- U.S. Food and Drug Administration Drugs: <a href="http://www.fda.gov/Drugs/default.htm">http://www.fda.gov/Drugs/default.htm</a>.
- Medline Plus Drugs and Supplements: <a href="http://www.nlm.nih.gov/medlineplus/druginformation.html">http://www.nlm.nih.gov/medlineplus/druginformation.html</a>. A service of the U.S. National Library of Medicine and the National Institutes of Health.
- DailyMed: <a href="http://dailymed.nlm.nih.gov/dailymed/about.cfm">http://dailymed.nlm.nih.gov/dailymed/about.cfm</a>. Collaboration between the U.S. Food and Drug Administration (FDA) and the U.S. National Library of Medicine (NLM). Professional product labels are accessed by entering a brand or generic name in the search box. Also provides tabs to access information such as Adverse Reactions and Dosage and Administration. Features links to other useful information related to the drug:
  - 1. Medline Plus a U.S. government website with information on wide variety of medical and drug information.
  - 2. Find Clinical Trials an international registry of clinical trials for drugs and medical devices.
  - 3. Biochemical Data Summary a database of unique bioinformatics and cheminformatics information that combines detailed drug information.
  - 4. Search PubMed Articles direct link the NLM's PubMed/Medline data base. For example, if you have accessed the professional product label for clopidogrel (Plavix) clicking on this link will take you directly to literature citations about clopidogrel.
  - 5. Presence in Breast Milk takes the user to another U.S. government website, LactMed (a free fully documented, peer reviewed database on drugs in breast milk).
  - NIH Drug Information Portal: <a href="http://druginfo.nlm.nih.gov/drugportal/drugportal.jsp">http://druginfo.nlm.nih.gov/drugportal/drugportal.jsp</a>.

## **Conduct of the Course**

This is an online course presented through the use of materials on the Carmen course website which include weekly online lectures and occasional discussion assignments. In addition, students are required to do readings from the course textbook and online resources. Students are expected to prepare for and complete quizzes by posted deadlines and participate actively in online group discussions.

Based on university policy, for each credit hour, it is expected that each week students spend one hour (traditionally spent in a classroom setting) plus two additional hours (traditionally spent outside of the classroom) dedicated to course studies. Accordingly, for a 3-credit-hour online course, students are expected to dedicate approximately nine hours per week completing the readings, viewing online lessons, responding to any discussion questions, studying for quizzes, and taking the quizzes.

## **Carmen Online Technical Information:**

All components of Pharmacology 5600 will use The Ohio State University's course management system, Carmen: <a href="https://carmen.osu.edu">https://carmen.osu.edu</a>. Access to Carmen requires the use of your University login (name.#) and password. Information concerning your University email and login account can be found at <a href="https://acctmgt.service.ohio-state.edu/">https://acctmgt.service.ohio-state.edu/</a>. Help on Carmen specific questions can be found at <a href="https://carmen-services.it.ohio-state.edu/carmen-help/students/">https://carmen-services.it.ohio-state.edu/carmen-help/students/</a>.

As part of Carmen, your homepage after you log in will reflect all courses that you are taking across the University. Twenty-four hour technical support can be reached at: Carmen/TELR - Phone: 614-688-4357 (688-HELP) or through the OCIO Help Web page at: <a href="https://ocio.osu.edu/help/">https://ocio.osu.edu/help/</a>.

Course content will be available via Carmen. Grades will be posted via Carmen.

## **Course Policies Regarding Student Work**

The course is set up so that each week begins on Saturday and ends on the following Friday at midnight. Quizzes must be taken by Friday at 11:59pm unless otherwise stated on the course schedule. If a discussion is assigned for a given week, the discussion board will open on Saturday at 9:00 AM (with the exception of the first week of class) and end on the following Friday at 11:59pm. Work must be submitted and quizzes completed by the dates and times indicated. Any late work must be emailed to the instructor and will receive a grade penalty based on the extent of delay unless negotiated with the course faculty prior to the due date.

**QUIZZES MUST BE COMPLETED WITHOUT THE ASSISTANCE OF ANY OTHER INDIVIDUAL.** Quizzes are open book, open note, and open Internet. All discussion board postings must be original and not composed in collaboration with another student.

Students are to monitor the course's Carmen website and read all postings on the Pharmacology 5600 News and Open Discussion Board site.

Failure to comply with course policies may result in investigation by the University Committee on Academic Misconduct.

## Student Evaluation: Grading Policy; Quizzes, and Discussions

## **Grading Policy**:

Student grades will be determined by the following distribution of points for each element of student evaluation:

3 Discussion Forums 10 % 12 Weekly Quizzes 85 % Final Assignment 5% Total Points 100 %

Total points will be translated into final course grades as follows:

A	4	93-100%	В	83-86%	С	73-76%	D	60-66%
A	۱-	90-92%	B-	80-82%	C-	70-72%	Ε	59% and below
Е	3+	87-89%	C+	77-79%	D+	67-69%		

## **Explanation of Student Evaluation**

## 1. Participation in Discussion Forums

Online discussion topics are accessed on the Carmen website either from the Content tab on the course navigation bar or by clicking on the Activities tab and dropping down to Discussions link. The instructor will monitor all discussions as well as the time spent by students on the discussions.

Participation is essential in graduate level courses. Preparation for responding to the online group discussion forums is based on readings, reviewing websites, as well as being current on local, state, and federal news related to health care issues. Students are expected to participate actively in online discussions with questions, comments, alternate positions, and information gained from reading and from experience. Students are also expected to read others' postings on the Discussion Board and reflect this in their responses. It is expected that the student's postings will be professional, respectful of others' perspectives, and that grammar and spelling will be professional.

It is strongly suggested that students compose the student's postings in a word processing program, apply grammar and spellcheck, and then cut and paste to the Discussion board. If Internet connections are lost or the student is timed out of Carmen, the posting could be lost otherwise. Please do not post comments as an attachment.

Discussion forums will be comprised of one or more questions to be addressed by students in their postings. The schedule for discussion forums is in the course calendar and on the Carmen website.

- Students will be randomly divided into groups of 5-7.
- Discussion boards open on Saturday of their scheduled week by 9:00 AM (with the exception of the first week of class).
- ONE main posting must be completed by the specified deadline and must include at least two
  references, which the student should list at the end of the post. The post should be two to
  three paragraphs in length.
- ONE response to a peer's main posting must then be posted by the specified deadline. The post should be at least one paragraph in length and does not require a reference.
- "Me too" or "I agree with him/her" types of postings do NOT count as postings. Postings must add content to the discussion, present different viewpoints, and represent thoughtful reflection and critiquing of ideas.
- Students must read all entries of other group members as well as any entries made on the discussion board by their professors.
- Postings should provide new insights, comments, thoughts, information from the readings, websites, and media. Postings should also comment on previous postings from peers and can provide a different perspective. The goal is to exchange ideas and try to simulate an actual discussion. Divergent perspectives are encouraged. Respect for differing perspectives is required. If students disagree, please do so respectfully.

• While there is no minimum word length or line length required for a post, it must be significant, substantial, and relate to the context of the ongoing discussion.

Each discussion forum is worth 10 points total. Points for class participation will be scored for each discussion board week according to the following grading rubric:

Category	Fully meets expectations (2 points each)	Partially meets expectations (1 point each)	Does not meet expectations (0 points)
Quantity	Contributes at least 2 postings (one main and one response) for each discussion board.	Contributes only 1 posting.	Contributes no postings or postings are late.
Quality	Consistently makes comments and/or asks questions which increase course knowledge and stimulate thinking in both main and response postings.	Makes comments and asks questions which stimulate thinking and increase knowledge in one posting but not both, or in an inconsistent manner.	Makes comments that reaffirm existing knowledge only, in both postings.
Resources	Consistently provides high level resources including evidence-based studies, documents, reliable news sources, and websites.	Occasionally provides resources and/or documentation and/or inconsistently use high quality sources of evidence.	Lacks appropriate resources.
Critical Thinking	Participation demonstrates analysis and decision making with stated rationale including evidence-based responses.	*See note.	Participation reflects problem solving in general, vague manner, with minimal or lack of supportive rationale.
Application	Applies pharmacology concepts from readings, literature, and reliable websites to each discussion board question.	*See note	Does not apply pharmacology concepts from readings, literature, and reliable websites to each question.

\*Note: There is no intermediate "credit" in these categories. THERE WILL BE NO CREDIT GIVEN FOR ANY LATE POSTINGS!

## 2. Quizzes

While taking quizzes, students may use their notes, their texts, and the Internet but are NOT permitted to seek any help from any individual. Students are not permitted to print quiz questions.

<u>Quizzes</u>: Each quiz will consist of 30 multiple-choice questions to be answered in 40 minutes. Questions will be based on course lectures and the course text.

Students will be given two attempts on each quiz. The attempt with the higher score for each quiz will be considered for the final grade tabulation. However, please note that the second attempt for each quiz will bring up mostly new questions.

<u>Time limits</u>: Students will have 40 minutes to answer 30 quiz questions. The course website records the time taken by each student to complete a quiz. If a student takes more time than allocated to complete a quiz, one point per exceeded minute may be deducted from the quiz score.

<u>Deadlines</u>: Students must *complete* the quizzes (not simply *start* the quizzes) by the posted deadlines (Fridays at 11:59pm; see course calendar). Please be sure to begin the quiz early enough so that the quiz is completed and submitted before the 11:59pm deadline. Both attempts on a quiz must be completed before the due date and time.

## **University Policies**

## **Academic and Professional Misconduct:**

Students are subject to the provisions in the "Code of Student Conduct" (copies located in the Office of Student Life, 3034 Ohio Union, 1739 N. High St., or online at <a href="http://studentaffairs.osu.edu/resource\_csc.asp">http://studentaffairs.osu.edu/resource\_csc.asp</a>). Failure to comply with these policies will be handled as outlined in this document.

### **Students with Disabilities:**

Students requesting accommodation for disability are responsible for notifying the course director by the end of the **first week** of the semester to discuss specific needs. Self-identification is the only way to assure that the instructor can make the appropriate accommodation. Students should provide a letter from the Office for Disability Services (150 Pomerene Hall, 1760 Neil Avenue; Office: (614) 292-3307; FAX: (614) 292-4109; VRS: (614) 292-4190; email: <a href="mailto:ods@osu.edu">ods@osu.edu</a>) to verify the disability.

## **Course Schedule**

Week	Lippincott's Illustrated Reviews:	Instructor	Quiz Due Date	Discussion Board
Week 1	Pharmacology (5th Ed.) (Harvey) General Principles of Pharmacology	Neidecker		Classes Begins
Begins				Wednesday, Aug
Wed. Aug 27				27 Introduce Yourself
Aug 27				Due Friday Aug 29
				11:59pm
				Discussion Topic 1
				date posting:
				Friday Aug 29
				11:59pm
	Unit 1: Principles of Drug Therapy			
Week 2	Ch 1. Pharmacokinetics	Gu	Quiz 1	Discussion Topic 1
Begins	Ch 2. Drug-Receptor Interactions and	Kitzmiller	due Friday, Sept 5	(response)
Aug 30	Pharmacodynamics		11:59pm	Due Friday
	Special Topic: Pharmacogenomics	Kitzmiller		Sept 5 11:59pm
	Unit 2: Drugs Affecting the Autonomic Nervous System			
Week 3	Ch 3. The Autonomic Nervous System	Talameh	Quiz 2	
Begins	Ch 4. Cholinergic Agonists	Talameh	due Friday, Sept 12	
Sept 6	Ch 5. Cholinergic Antagonists	Talameh	11:59pm	
	Ch 6. Adrenergic Agonists	Talameh		
	Ch 7. Adrenergic Antagonists	Talameh		
	Unit 3: Drugs Affecting the Central Nervous System			
Week 4	Ch 8. Neurodegenerative Diseases	Mykytyn	Quiz 3	
Begins	Ch 9. Anxiolytic and Hypnotic Drugs	Anand	due Friday, Sept 19	
Sept 13	Ch 10. Central Nervous System Stimulants	Gu	11:59pm	
•	Ch 11. Anesthetics	Gu	,	
Week 5	Ch 12. Antidepressants	Mykytyn	Quiz 4	
Begins	Ch 13. Antipsychotic Drugs	Mykytyn	due Friday, Sept	
Sept 20	Ch 14. Opioids	Sadee	2611:59pm	
	Ch 15. Epilepsy	McAuley		
	Unit 4: Drugs Affecting the Cardiovascular System			
Week 6	Ch 16. Heart Failure	Villamena	Quiz 5	
BeginsSe	Ch 17. Antiarrhythmics	Villamena	due Friday, Oct 3	
pt 27	Ch 18. Antianginal Drugs	Villamena	11:59pm	
	Ch 19. Antihypertensives	Villamena		
Week 7	Ch 20. Blood Drugs	Villamena	Quiz 6	
Begins	Ch 21. Hyperlipidemias	Mykytyn	due Friday, Oct	
Oct 4	Ch 22. Diuretics	Mykytyn	1011:59pm	
Week 8				Discussion Topic 2
Begins				date posting:
Oct 11				Wednesday Oct 15
				11:59pm Discussion Topic 2
				(response)
				Due Friday
				Oct 17 11:59pm
	Unit 5: Drugs Affecting the Endocrine			
	System			

March 0	Ch 22 Dituitem and Thursid	Datta	0	
Week 9	Ch 23. Pituitary and Thyroid	Rotter	Quiz 7	
Begins	Ch 24. Insulin and Other Glucose-	Anand	due Friday, Oct 24	
Oct 18	Lowering Drugs		11:59pm	
	Ch 25. Estrogens and Androgens	Talameh		
	Ch 26. Adrenal Hormones	Smith		
	Unit 6: Drugs Affecting Other Organs			
Week 10	Ch 27. Respiratory System	Smith	Quiz 8	
Begins	Ch 28. Gastrointestinal and Antiemetic	Smith	due Friday, Oct 31	
Oct 25	Drugs		11:59pm	
	Ch 29. Erectile Dysfunction, Osteoporosis,	Villamena		
	and Obesity			
	Unit 7: Chemotherapeutic Drugs			
Week 11	Ch 30. Principles of Antimicrobial Therapy	Gu	Quiz 9	
Begins	Ch 31. Cell Wall Inhibitors	Gu	due Friday, Nov 7	
Nov 1	Ch 32. Protein Synthesis Inhibitors	Gu	11:59pm	
	Ch 33. Quinolones, Folic Acid Antagonists,	Gu		
	& Urinary Tract Antiseptics			
Week 12	Ch 34. Antimycobacterials	Mokrzan	Quiz 10	
Begins	Ch 35. Antifungal Drugs	Mokrzan	due Friday, Nov 14	
Nov 8	Ch 36. Antiprotozoal Drugs	Mokrzan	11:59pm	
	Ch 37. Anthelmintic Drugs	Mokrzan		
	Ch 38. Antiviral Drugs	Mokrzan		
Week 13	Ch 39. Anticancer Drugs	Briesewitz	Quiz 11	
Begins	Ch 40. Immunosuppressants	Talameh	due Friday, Nov 21	
Nov 15	Cit 40. Illimunosuppressants	raidiffeff	11:59pm	
700 13	Unit 8: Anti-inflammatory Drugs and		11.55pm	
	Autacoids			
Nov 26-	Thanksgiving Holiday			
30	Thanksgiving Honday			
Week 14	Ch 41. Anti-inflammatory Drugs	Villamena	Quiz 12	
Begins	Ch 42. Autacoids & Autacoid Antagonists	Rotter	due Friday, Dec 5	
Nov 22	Ch 43. Toxicology	Villamena	11:59pm	
	CIT 43. TOXICOTOGY	Villattietta	11.53pm	Diameter Terris 2
Week 15				Discussion Topic 3
Begins				Date posting:
Dec 6				Saturday Dec 6
				11:59pm
				Discussion Topic 3
				(response)
				Due Friday
				Dec 12 11:59pm
Finals				Final Assignment
Week				Due Tuesday Dec
Begins				16 11:59pm
Dec 13	1	1	1	1

## **Odum, Sarah**

From: Piazza, Ramsey

**Sent:** Friday, March 13, 2015 1:48 PM

To: Odum, Sarah

**Subject:** FW: Request for Concurrence with Pharmol 5600

FYI

## Ramsey



## Ramsey Piazza, M.S.

Assistant Director of Scholarships and Undergraduate Curriculum

The College of Education and Human Ecology Undergraduate Student Services

A100 PAES Building, 305 W. 17th Avenue, Columbus, OH 43210
614-292-9261 Office / 614-688-4609 Fax
piazza.18@osu.edu http://ehe.osu.edu/ugss

From: andrejrotter@gmail.com [mailto:andrejrotter@gmail.com] On Behalf Of Andrej Rotter

Sent: Friday, March 13, 2015 1:46 PM

To: Piazza, Ramsey

Cc: Neidecker, Marjorie; Villamena, Frederick; Devor, Steven; Mykytyn, Kirk; Parthun, Mark

Subject: Re: Request for Concurrence with Pharmcl 5600

## Hello Ramsey,

as a follow up to our phone conversation I would like to let you know that the Department of Pharmacology, as well as the future Department of Biological Chemistry and Pharmacology, guarantee that the PHARMCL 5600 will be offered every semester (including the summer) and that your exercise science students will be accommodated subject to having fulfilled the current prerequisites. Thank you for your interest in the course.

Best regards, Andrej Rotter, PhD Professor Vice-chair for Education Department of Pharmacology

On Tue, Feb 24, 2015 at 11:34 AM, Mykytyn, Kirk < <u>Kirk.Mykytyn@osumc.edu</u>> wrote:

Hi Ramsey,

I'm forwarding your message to Andrej Rotter. He is the chair of our graduate studies committee and is the person who can approve the request. Best,
Kirk
Kirk Mykytyn, PhD
Associate Professor
Department of Pharmacology
The Ohio State University
5034 Graves Hall
333 West 10th Ave.
Columbus, OH 43210
(office) <u>614-292-4985</u>
(lab) <u>614-292-2152</u>
(FAX) <u>614-292-7232</u>
email: mykytyn.1@osu.edu
From: Piazza, Ramsey [mailto:piazza.18@osu.edu] Sent: Tuesday, February 24, 2015 10:31 AM To: Mykytyn, Kirk Cc: Neidecker, Marjorie; Villamena, Frederick; Devor, Steven Subject: Request for Concurrence with Pharmcl 5600

## Kirk

The faculty will be putting PHARMCL 5600 up as a course addition to our undergraduate degree in exercise science. Part of that curricular process asks that we show a concurrence agreement with your department attesting to the fact your department understands this course is a part of our degree and that we will be sending our students to enroll in your course and you agree to accommodate them. I'm not certain who would be the designated individual in your department to approve this request, but if you could forward this request to the

person you feel appropriate to respond, that will greatly assist our department in having this change made to our curriculum. I have copied the other individuals who were included in our correspondence as well as Dr. Devor, the program head for our exercise science program.

Thank you for your time

## Ramsey



## THE OHIO STATE UNIVERSITY

## Ramsey Piazza, M.S.

Assistant Director of Scholarships and Undergraduate Curriculum

The College of Education and Human Ecology Undergraduate Student Services

A100 PAES Building, 305 W. 17th Avenue, Columbus, OH 43210

614-292-9261 Office / 614-688-4609 Fax

piazza.18@osu.edu http://ehe.osu.edu/ugss

From: Mykytyn, Kirk [mailto:Kirk.Mykytyn@osumc.edu]

Sent: Wednesday, October 22, 2014 9:00 AM

To: Piazza, Ramsey

Cc: Neidecker, Marjorie; Villamena, Frederick

Subject: RE: Pharmcl 5600

Hi Ramsey,

I appreciate the head's up. The additional enrollment will not be a problem at all. Best,

Kirk

Kirk Mykytyn, PhD

**Associate Professor** 

Department of Pharmacology

The Ohio State University

5034 Graves Hall

333 West 10th Ave.

Columbus, OH 43210

(office) <u>614-292-4985</u>

(lab) <u>614-292-2152</u>

(FAX) <u>614-292-7232</u>

email: mykytyn.1@osu.edu

From: Piazza, Ramsey [mailto:piazza.18@osu.edu]

Sent: Tuesday, October 21, 2014 2:00 PM

To: Mykytyn, Kirk

Cc: Neidecker, Marjorie; Villamena, Frederick

Subject: RE: Pharmol 5600

## Kirk

I wanted to alert you we cleared using your course in our curriculum for Sp15, SU,15,AU15 grad. We have had a clamoring from SP16 grads who would also like to take the course. The faculty are fine with that however I did want to alert you to this as potential that's another 40 to 50 people tapping into your enrollments, I don't want to assume your capacity to deliver your course. I will not announce this to our students until we know you are fine with the addition. And if you are when the announcement goes out I will note the course is offered summer, autumn, and spring so students don't rush to the spring offering alone.

Thanks for your time.

Ramsey



Ramsey Piazza

## Assistant Director of Academic Advising

The Ohio State University

**Undergraduate Student Services** 

College of Education and Human Ecology

Phone <u>(614)-292-9261</u>

From: Mykytyn, Kirk [mailto:Kirk.Mykytyn@osumc.edu]

Sent: Thursday, October 16, 2014 2:26 PM

To: Piazza, Ramsey

Cc: Neidecker, Marjorie; Villamena, Frederick

Subject: RE: Pharmcl 5600

Hi Ramsey,

Thanks for the update. Please find attached a copy of the syllabus for the current semester. My colleague Erick Villamena is the course director this semester and I will be the director in the Spring. I'm excited about having such a large group of exercise science students. Best,

Kirk

Kirk Mykytyn, PhD

**Associate Professor** 

Department of Pharmacology

The Ohio State University

5034 Graves Hall

333 West 10th Ave.

Columbus, OH 43210

(office) <u>614-292-4985</u>

(lab) <u>614-292-2152</u>

(FAX) <u>614-292-7232</u>

email: mykytyn.1@osu.edu

From: Piazza, Ramsey [mailto:piazza.18@osu.edu]

Sent: Thursday, October 16, 2014 1:01 PM

To: Mykytyn, Kirk

Cc: Neidecker, Marjorie; Villamena, Frederick

Subject: RE: Pharmcl 5600

## Kirk

I wanted to update you. We will be directing our exercise science students graduating this spring to enroll in your spring course for their pharmacology requirement. Previously the course was used with no problem. And I recall being contacted by your department when the redesign was under way for feedback. That is a level of attentiveness not typical of many. In researching the issue I can't find a particular reason why exercise science discontinued the course in the curriculum. It appears it was a likely oversight in the quarter to semester conversion. Our enrollment will likely account for at most 50 seats this spring. We will be exploring adding the course back as an option going forward. So I will be back in contact in terms of that at a later date.

Thank you for your positive and quick response. My experiences have been very positive in dealing with yourself and your department and I appreciate your time. I will be in contact in the future in terms of our plans going forward. If possible could you send me a syllabus for the course? I need to collect data towards compiling my report for the faculty to consider..

## Ramsey



Ramsey Piazza

Assistant Director of Academic Advising

The Ohio State University

**Undergraduate Student Services** 

College of Education and Human Ecology

Phone <u>(614)-292-9261</u>

From: Mykytyn, Kirk [mailto:Kirk.Mykytyn@osumc.edu]

Sent: Monday, October 06, 2014 4:06 PM

To: Piazza, Ramsey

Cc: Neidecker, Marjorie; Villamena, Frederick

Subject: RE: Pharmcl 5600

Hi Ramsey,

That is great, we would love to have the exercise science students in 5600. As you may know, this course was recently redesigned with interactive online presentations and discussion groups and the feedback from the students has been very favorable. The course is also a core course of the recently created Master of Applied Clinical and Preclinical Research program and so we definitely plan to continue offering it going forward. In fact, it will be offered all year, including over the summer semester. The Director of the MACPR program, Margie Neidecker (Cc'd on this email), spearheaded the redesign of 5600 and would be a good contact about future courses. Best,

Kirk

Kirk Mykytyn, PhD

**Associate Professor** 

Department of Pharmacology

The Ohio State University

5034 Graves Hall

333 West 10th Ave.

Columbus, OH 43210

(office) 614-292-4985

(lab) <u>614-292-2152</u>

(FAX) 614-292-7232

email: mykytyn.1@osu.edu

From: Piazza, Ramsey [mailto:piazza.18@osu.edu]

Sent: Monday, October 06, 2014 2:40 PM

**To:** Mykytyn, Kirk **Subject:** Pharmol 5600

Hello Dr. Mykytyn.

I work with the faculty in the exercise science program. Our program used to list this course as a requirement. We recently moved the requirement to PHR 4400. However it appears that course may not actually be a solution. I anticipate we may be sending our majors back to this course which would account for close to 50 seats. I wanted to give you a heads up about this. I was also hoping you could direct me to someone in your department who works with the planning for courses going forward. At one point we thought this course was going to be withdrawn, I'd like to connect with however considers those types of decisions as we may be a steady audience for the course going forward. Our students mostly take the PHYSIOCB 3200 or 3101-3102 sequence and have exercise physiology as well so they should easily fulfill the prerequisites for the course.

Thanks for your time.

Ramsey

## THE OHIO STATE UNIVERSITY

Ramsey Piazza

Assistant Director of Academic Advising

The Ohio State University

Undergraduate Student Services

College of Education and Human Ecology

Phone <u>(614)-292-9261</u>

## **Odum, Sarah**

**From:** Piazza, Ramsey

**Sent:** Thursday, March 05, 2015 3:54 PM **To:** Odum, Sarah; Devor, Steven

**Subject:** RE: Ex Sci major pharmacy course change

I heard back from Pharmacology, Pharmacy confirmed they were forwarding it to their chair but I did not hear back. Pharmacology called me and in principle they agree but they are in the process of merging departments with Molecular Biochemistry so they cannot put anything in writing until that process is concluded.

## Ramsey



### Ramsey Piazza, M.S.

Assistant Director of Scholarships and Undergraduate Curriculum

The College of Education and Human Ecology Undergraduate Student Services

A100 PAES Building, 305 W. 17th Avenue, Columbus, OH 43210

614-292-9261 Office / 614-688-4609 Fax

piazza.18@osu.edu http://ehe.osu.edu/ugss

From: Odum, Sarah

**Sent:** Thursday, March 05, 2015 2:33 PM **To:** Devor, Steven; Piazza, Ramsey

Subject: FW: Ex Sci major pharmacy course change

Hi Steve and Ramsey,

I wanted to check-in. I am preparing materials for Curriculum Committee. Has a response come from Pharmacy regarding concurrence?

Thank you, Sarah

Sarah A. Odum, MA Curriculum Coordinator

The Ohio State University

College of Education and Human Ecology Academic Affairs

614-292-3180 Office

From: Devor, Steven

Sent: Tuesday, February 24, 2015 2:48 PM

To: Folden, H

**Cc:** Piazza, Ramsey; Odum, Sarah; Maresh, Carl M. **Subject:** Ex Sci major pharmacy course change

Gene.