

## PROFESSIONAL ELECTIVES, MINORS, AND INTERDISCIPLINARY SPECIALIZATIONS

Class of 2020 and beyond must complete 9 hours of electives prior to graduation. Elective coursework is to be taken while enrolled in the Doctor of Pharmacy program and courses taken prior to matriculation into the PharmD program may not be counted.

The following lists were compiled through input from faculty in the college and current PharmD students. The PharmD Program Committee continues to explore other elective options.

Inclusion of a course on this list does not guarantee permission to enroll. Students must still meet any course prerequisites or other requirements.

Courses may be repeated for credit for as many times as the course has been approved to be repeated. There is no additional restriction on repeating a course that counts for elective credit.

**“Usual delivery mode” in the list below indicates the primary or most common instruction mode for a given course. However, some courses, especially those offered outside the College, may be offered in multiple modes. Students should always check the instructional mode of a course for any given semester prior to enrolling.**

**\*\*Courses are subject to change at any time\*\***

### Approved Electives: College of Pharmacy Courses

Course Number	Credit Hours	Usual Delivery Mode	Course Title
PHR 5000 <i>*previous course number 7210</i>	2	In Person	Interdisciplinary Case Management for Working with Underserved Populations
PHR 5270 (cross-listed with Microbiology 5270)	3	In Person	Antibiotics and Microbial Natural Products
PHR 5402 *	3	Online	Introduction to Pharmacoeconomics
PHR 5460 <i>*previous course number 4460</i>	1	In Person	Current Addiction Neurobiology Literature
PHR 5500 <i>*previous course number 5130</i>	3	Hybrid	History of Pharmacy
PHR 5510 <i>*previous course number 5150</i>	3	In Person	Basics of Pharmaconutrition
PHR 5525 <i>*previous course number 7160</i>	1	Online	Advocacy in Pharmacy
PHR 5540 <i>*previous course number 5170</i>	2	In Person	Introduction to Clinical and Translational Pharmacy Research
PHR 5550 <i>*previous course number 5180</i>	2	Online	Topics in International Pharmacy
PHR 5560 <i>*previous course number 5610</i>	1.5	In Person	Success & Leadership in Pharmacy

Course Number	Credit Hours	Usual Delivery Mode	Course Title
PHR 5580 <i>*previous course number 5140</i>	1.5	Online	Professional Ethics
PHR 5590 <i>*previous course number 5190</i>	3	In Person	Chemical Dependency for Health Care Professionals
PHR 5798	2	In Person	International Healthcare Experience/Study Abroad
PHR 6193	Variable	In Person	Individual Studies in Pharmacy
PHR 6194	Variable	In Person	Group Studies in Pharmacy
PHR 6550	1	In Person	Pharmacy Students East Meets West Videoconference
PHR 7130	2	In Person	Humanistic Pharmacy
PHR 7140	2	Online	Neurobiology of Addiction
PHR 7150	1.5	In Person	Pediatric Pharmacotherapy
PHR 7170	3	In Person	Pain Palliative Care & Geriatrics
PHR 7180	1	In Person	CNS Drug Discovery
PHR 7190	1	In Person	Topics in Oncology Pharmacy
PHR 7230	2	Hybrid	Introduction to Veterinary Pharmacy
PHR 7250	3	Hybrid	Introduction to Critical Care Pharmacy Practice
PHR 7260	3	Hybrid	The Business of Pharmacy
PHR 7350	2	In Person	Drug Discovery & Drug Design
PHR 7370	2	In Person	Advanced Pharmaceutical Analysis
PHR /Nursing 7405 *	3	Online	Management of Clinical and Preclinical Studies Clinical Research Study and Site Management
PHR 7460 *	3	Online	Regulatory Strategy and Clinical Trial Reporting
PHR/ Nursing 7482 *	3	Online	Principles of Quality Management for Medical Product Development
PHR 7510	3	Online	Teaching in Pharmacy
PHR/Nursing 7560 +	3	Online	Clinical Trials I: Design and Regulation
PHR/Nursing 7561 +	3	Online	Clinical Trials II: Site Management and Study Leadership
PHR 7562 +	3	Online	Design and Management of Preclinical Studies
PHR 7570 *	3	Online	Pharmaceutical Safety & Risk Management
PHR 7572 *	3	Online	Global Regulations of Medical Products
PHR 7580 *+	3	Online	Principles of Safety Pharmacology
PHR 7582	3	Online	Organ System Toxicology
PHR 7583 +	3	Online	Advanced Organ Systems Toxicology and Risk Assessment
PHR 7586 +	3	Online	Integrative in Vivo Modeling for Drug Development: Application for Safety and Clinical Pharmacology
PHR 7588 +	3	Online	Toxic Substances
PHR 7620	2	In Person	Topics in Emergency Medicine Pharmacotherapy
PHR 7650	3	Online	Personal Finance for the Health, Law, and Public Policy Professional
PHR/Nursing 7770 *	3	Online	Fundamentals of Medical Product Regulatory Affairs Fundamentals of Medical Product Development and Regulation
PHR/Nursing 7782 *	3	Online	Research Design & Methods for Clinical & Preclinical Research Clinical Research Design and Methods
PHR 7784 *+	3	Online	Data Analysis and Interpretation in Clinical and Preclinical Research
PHR 7891	2	In Person	Chromatographic Methods
PHR 7893	2	In Person	Phytochemical Analysis of Natural Products

Course Number	Credit Hours	Usual Delivery Mode	Course Title
PHR 8005	3	In Person	Fundamentals of Drug Disposition
PHR 8008	1	In Person	Pharmaceutical Sciences Research & Communication
PHR 8025	3	In Person	Pharmacometrics
PHR 8070	2	In Person	Advanced Drug Delivery Systems
PHR 8194	1 to 6	In Person	Group Studies in Pharmaceutical Sciences
PHR 8390	2	In Person	Recent Advances in Pharmacognosy
PHR 8510	2	In Person	Advanced Pharmacognosy
PHR 8520	1	In Person	Research Ethics
PHR 8700	2	In Person	Theoretical & Experimental Pharmacology
PHR 8730	1	In Person	Contemporary Pharmacology
PHR 8740	1	In Person	History of Pharmacology & Drug Discovery
PHR 8880.02	.5	In Person	All College Seminar: Participation
PHR 8881.02	.5	In Person	Medicinal Chemistry Seminar Participation
PHR 8882.02	.5	In Person	Pharmaceutics Seminar Participation
PHR 8884	1	In Person	MS in Health-System Pharmacy Seminar
PHR 8885.02	.5	In Person	Pharmacology Seminar Participation
PHR 8993	1 to 6	In Person	Individual Studies in the Pharmaceutical Sciences
PHR 8999	1 to 6	In Person	Research in the Pharmaceutical Sciences

\* Course can also count toward the MACPR program

+ Course can also count toward the MS-Pharmacology program

See <https://pharmacy.osu.edu/online-programs> for more information

## **Minors and Interdisciplinary Specializations**

Courses approved for these minor and interdisciplinary specialization programs will count toward PharmD program elective hours. Students do not need to be enrolled in these specializations to obtain the elective hours.

### **Graduate Interdisciplinary Specialization in Aging**

Office of Geriatrics and Interprofessional Aging Studies

Contact: Cynthia Dougherty, Program Director

[Cynthia.dougherty@osumc.edu](mailto:Cynthia.dougherty@osumc.edu)

(614) 293-4815

More information: <https://aging.osu.edu/specialization-in-aging>

### **Graduate Interdisciplinary Specialization in Global Health**

Health Sciences Center for Global Health

Contact: Pam Potter, Program Director

[pamela.potter@osumc.edu](mailto:pamela.potter@osumc.edu)

(614) 292-3684

More information: <http://globalhealth.osu.edu/gisgh/>

### **Graduate Business Minor in Health Science**

The Fisher College of Business Graduate Programs Office

[businessminor@osu.edu](mailto:businessminor@osu.edu)

(614) 292-8511

More information: <https://fisher.osu.edu/graduate/graduate-minor-business-health-sciences>

## **Graduate Minor in Applied Clinical and Preclinical Research**

**\*\*PHR 5010 (Fundamentals of Pharmacology) and BIOPHRM 5600 (Introduction to General Pharmacology) are NOT open to PharmD students since the content is covered extensively throughout the PharmD curriculum\*\***

Applied Clinical and Preclinical Research Graduate Program

Contact: Nikki Herbert, Program Coordinator

[herbert.1865@osu.edu](mailto:herbert.1865@osu.edu)

(614) 688-3663

More information: <https://pharmacy.osu.edu/graduate-minor-applied-clinical-and-preclinical-research>

### **Approved Electives: Courses Offered by Other Units**

<b>Course Number</b>	<b>Credit Hours</b>	<b>Usual Delivery Mode</b>	<b>Course Title</b>
Accounting 2000	3	Hybrid	Foundations of Accounting
Accounting 2200	3	In Person	Introduction to Accounting I
Ag & Extension Education 8850	2	Online	Research Methods
Ag & Extension Education 8860	2	In Person	Research Design
Ag & Extension Education 8870	2	In Person	Analysis & Interpretation of Data
Bioethics 6000	3	Online	Theory & Foundations of Bioethics
Bioethics 6010 +	3	Online	Biomedical Research Ethics
Bioethics 6030	3	Online	Bioethics, Law & Public Policy
Bioethics 6040	1.5	Online	Bioethics Symposium
Bioethics 6050	1.5	Online	Bioethics Symposium
Biology 5001	1	In Person	Topics in Biology Teaching
BIOPHRM 7598 +	3	Online	Scientific Writing: Clinical Trial Protocol and Manuscript Development
Business Admin: Finance 1200	3	In Person	Personal Finance
Business Admin: Finance 3120	3	Hybrid	Foundations of Finance
Business: Mgmt & HR 3100	3	In Person	Foundations of Mgmt & Human Resources
Business: Mgmt & Science 3130	3	In Person	Foundations of Operations Management
Business: Marketing & Log 3150	3	In Person/Hybrid	Foundations of Marketing
Nursing 5115	1	In Person	<b>MINDSTRONG</b>
Business: MBA 6202	1.5	In Person	Leadership
Comparative Studies 2104	3	In Person	Literature, Science and Technology
Comparative Studies 3645	3	In Person	Cultures of Medicine
Comp Science & Engineering 2451	2	In Person	Advanced C Programming
Comp Science & Engineering 5241	2	In Person	Introduction to Database Systems
Comp Science & Engineering 5022	3	In Person	Software I: Software Components
Economics 2001.01	3	In Person	Principles of Microeconomics
Educational Studies: Educational Psychology 5194	1	In Person	Procrastination Accountability Groups
Educational Studies: Higher Ed & Stdt Affairs 8552	3	In Person	Impact of College on Students
Education: Teaching & Learning 7744	3	In Person	Problem Solving in STEM
Educational Studies: Workforce Develop & Edu 5635	3	Online	School Health Services

Course Number	Credit Hours	Usual Delivery Mode	Course Title
English 3304	3	In Person	Business and Professional Writing
English 3305	3	In Person	Technical Writing
Health & Rehab Science 4320	3	In Person	Clinical Interviewing & Risk Assessment in Healthcare
Health & Rehab Science 5300	3	Online	Management Principles & Human Resources for Health Professionals
Health & Rehab Science 5370	3	Online	U.S. Healthcare Policy & Delivery System
Health Info Mgt & Systems 5650	3	In Person	Healthcare Information Systems & Technology
History 3701	3	Online	History of American Medicine
MEDCOLL 7790	2	Online	Introduction to Applied Gerontology
Kinesiology: Hlth & Exer Sci 5703	3	In Person	Health Behavior Theory
Mechanical Engineering 5682.02	3	In Person	Product Design Engineering for Entrepreneurs
Medical Dietetics 3100	3	Online	Human Nutrition & Metabolism
Nursing 6430	3	Hybrid	Cultural Competence in Health Care: US and Global Contexts
Psychology 3550	3	In Person	Psychology of Childhood
Psychology 3551	3	In Person	Psychology of Adolescence
Psychology 4552	3	In Person	Psychology of the Adult Years
Psychology 5681	3	In Person	Development & Psychopathology
PUBHBIO 6210 +	3	Online	Design and Analysis of Studies in Health Sciences
PUBHBIO 6211 +	3	Online	Design and Analysis of Studies in Health Sciences II
Pub Hlth: Hlth Svcs Mgmt & Policy 7602	3	In Person	Health Insurance and Payment Policy
Pub Hlth: Hlth Svces Mgmt & Policy 7605	3	In Person	Introduction to Health Policy
Social Work 5002	3	Online	HIV/AIDS: Facts and Issues
Social Work 5025	3	In Person	Social Determinants of Health: An Interdisciplinary Perspective
Social Work 7620	3	Online	Integrative Seminar 1: Mental Health and Substance Abuse
Sociology 3630	3	In Person	Medical Sociology
Sociology 5629	3	In Person	Health Disparities in Social Context
Speech & Hearing Science 5714	3	In Person	Introduction to Sign Language
Veterinary Medicine 7564	1	In Person	Clinical Microbio & Pharmac of Antimicrobial Agents
Women's Gender & Sexuality Studies 2325	3	Online	Issues in Women's Health

\* Course can also count toward the MACPR program

+ Course can also count toward the MS-Pharmacology program

See <https://pharmacy.osu.edu/online-programs> for more information

**ALL foreign language courses are approved, including American Sign Language:**

ASL 1101 – Elementary American Sign Language I  
ASL 1102 – Elementary American Sign Language II  
ASL 1103 – Intermediate American Sign Language  
SPHHRNG 5714 – Introduction to Sign Language

6/29/2020

## INELIGIBLE COURSE LIST

These courses have been determined as unacceptable to use towards the electives requirement by the PharmD Program Committee. Students may take these courses on their own accord, but they will **NOT** count towards any PharmD degree requirements.

<b>Course Number</b>	<b>Course Title</b>
ARABIC 2241	Cult Contem Ar Wld
ANTHROP 2202	Intro to Cultr Anthro
ARTSSCI 2120	Internet tools
ARTSSCI Adv	Online Rsch
ARTSSCI 3142.01	Onl Res& Sci Lit
ARTSSCI 6110	Health Literacy (PHR 6110 instead)
ATHRNG 5510	Pharmacology in AT
CHINESE 5400	Perfrmance Tradtns
CLAS 2010	Scient Terminology
CSCRMFNS 2260	Fam Financial Mgt1
DANCE 1151	Hip Hop I
DANCE 2102	Contemporary II
DANCE 2114	Pointe
DANCE 2142	Jazz II
EDUPAES 1150	Lifetime Fitness and Wellness Training
EDUPAES 1152	Social Dance
EDUPAES 1153	Recreational Dance
EDUPAES 1161	Horseback Riding
EDUPAES 1162	Ice Skating
EDUPAES 1169	Martial Arts Forms
EDUPAES 1178	Swimming
EDUPAES 1188	Tennis
EDUPAES 1195	Yoga
ENTOMOL 3350	Social Insects
FDSCTE 1120	Wine & Beer W Cultr
FDSCTE 2200	Science of Food
FDSCTE 2410	Brewing Science
HDFS 2400	Life Span Hmn Devp
HTHRHSC 2500	Medical Terminology
HUMNNTR 2210	HUMNNTR 2210
HUMNNTR 2310	Fundamentals of Human Nutrition
HUMNNTR 3313	Food in Dif Cultrs
MEDIEVAL 4504	Arthurian Legends
MUSIC 1101	Beginning Piano
MUSIC 2208	MUSIC 2208
MUSIC 2224	MUSIC 2224
PHILOS 4900	Seminar
PSYCH 4305	Introduction to Psychopharmacology
WGSST 1110	Gender Sex and Power