

Graduate Minor in Applied Clinical and Preclinical Research

For more information, please visit:

[College of Nursing Master of Clinical Research](#)
[College of Pharmacy Master of Science](#)
[Translational Pharmacology](#)

The Graduate Minor in Applied Clinical and Preclinical Research is comprised of an interdisciplinary curriculum offered entirely online by the Colleges of Nursing, Pharmacy, and Medicine at The Ohio State University. The courses provide students and research professionals with the foundation for conducting clinical and preclinical research studies. Students in the health and social sciences, engineering, business, and law with an interest in clinical and preclinical research will benefit from this program of study. The coursework addresses the theory and practice of research methods, the ethics of human subject and animal research, the regulation of medical products, and the business of research operations and management. Completion of the coursework in the minor meets the major competencies established by the [Joint Task Force Core Competencies for Clinical Research Professionals](#).

To apply for the Minor in Applied Clinical and Preclinical Research, please follow the steps outlined on the [Graduate School website](#).

For additional information, please contact Ashley Sherf (sherf.3@osu.edu; 614-247-9759), program assistant for the online master's programs in Translational Pharmacology

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Course #	Course Title	Credits	Terms Offered	Delivery Mode
Research Ethics Course – required of all students (1-3 credits)				
Select one:				
o Nursing 7781	Responsible Conduct of Research Biomedical Research Ethics	3	SP	Online
o Bioethics 6010	Research Ethics	3	AU,SP	Online
o Pharmacy 8520	Research Ethics	1	SU	In-Person
o BIOPHRM 7510	Professional & Ethical Issues in Biomedical Science	2	SP	In-Person
o Vision Sc. 7960	Ethics in Biomedical Research	2	AU,SP	In-Person
Additional Required Courses – select Option 1 or Option 2 (9 credits)				
o Option 1: Clinical Research Administration Focus – Students must take the following three courses				
Nursing/Pharmacy 7770	Fundamentals of Medical Product Development and Regulation	3	AU, SU	Online
Nursing/Pharmacy 7782	Research Design and Methods for Clinical Research	3	AU	Online
Nursing/Pharmacy 7405	Management of Clinical Studies (prereq.: NURS/PHR 7770)	3	SP	Online
o Option 2: Translational Pharmacology Focus – Students must take the following two courses <i>plus</i> one elective				
BIOPHRM/Nursing/Pharmacy 7560	Clinical Trials I: Design and Regulation	3	AU	Online
BIOPHRM/Nursing/Pharmacy 7561	Clinical Trials II: Management and Leadership	3	SP	Online
Option 2 electives – select one:				
o BIOPHRM 5600	Intro. To General Pharmacology Fundamentals of Pharmacology	3	AU, SP, SU	Online
o Pharmacy 5010	Fundamentals of Pharmacology	3	SU	Online
o Pharmacy 7562	Design & Management of Preclinical Studies	3	AU	Online
o Pharmacy 7784	Data Analysis and Interpretation for Clinical and Preclinical Research	3	AU	Online
o PUBHBIO 6210	Applied Biostatistics I	3	AU, SP, SU	Online & In-Person
o PUBHBIO 6211	Applied Biostatistics II	3	SU, SP	Online & In-Person
o MCR 7404	Project Management for Healthcare and Clinical Research	3	SU	Online
o MCR 7481	Data Management and Informatics in Clinical Research	3	SP	Online
o MCR 7482	Regulatory Strategy, Writing, and Leadership	3	SU	Online
o MCR 7402/ Pharmacy 5402	Econ. Eval. of Healthcare Intervention	3	AU, SP	Online
o Pharmacy 7460	Regulatory Strategy, Writing, and Leadership	3	SU	Online
o Pharmacy 7570	Pharmaceutical Safety & Risk Management	3	AU	Online
o Pharmacy 7572	Global Regulation of Medical Products	3	SP	Online
o Pharm/CBG 5700	Intro. To Personalized Therapeutics and Pharmacogenomics	3	SP	Online
o Pharmacy 7580	Principles of Safety Pharmacology	3	SP	Online
o Pharmacy 7582	Organ System Toxicology	3	AU, SP	Online
o Pharmacy 7584	Applied Pharmacokinetics and Pharmacodynamics	3	SP	Online
o Pharmacy 7586	Integrative in Vivo Modeling for Drug Development	3	SU	Online
o Pharmacy 7595	Scientific Writing: Clinical Trial Protocol and Manuscript Development	3	SP	Online

AU = autumn semester, SP = spring semester, SU = summer term

Department abbreviations: CBG = Cancer Biology and Genetics; BIOPHRM = Biological Chemistry and Pharmacology;

HTRHSC = Health and Rehabilitation Sciences; PUBHBIO = Public Health Biostatistics