UNC ESHELMAN SCHOOL OF PHARMACY

Introduction

Pharmacists are drug information experts and are among the most trusted and most accessible of health care professionals. Generalists practice in a variety of environments, including community pharmacies, health-system pharmacies, and the pharmaceutical and health care industries. Specialty pharmacy practitioners pursue training beyond the doctor of pharmacy (Pharm.D.) through residencies and fellowships and may ultimately practice in areas such as pediatrics, geriatrics, cardiology, oncology, ambulatory/community care, and others.

Pharmacists evaluate complex approaches to drug therapy and advise patients and other health care professionals on strategies to achieve the best results from pharmaceutical care. Other pharmacists are engaged in practices that monitor, manage, and implement policies affecting drug prescribing and use across large groups of patients, such as those enrolled in a health plan.

The UNC Eshelman School of Pharmacy's doctor of pharmacy is a 4-year professional program that offers a curriculum centered on patient care. The doctor of pharmacy leads to a strong understanding of health quality and delivery across many innovative avenues.

Our Pharm.D. program offers a highly immersive curricula, where students aren't confined to classroom lecture environment. Patient care immersion experiences commence during students' second year of study.

As if the changes in health care and employer demands aren't enough, the amount of information about health and medicines that aspiring health professionals must master has grown substantially. We no longer accept the outdated assumption that a professor's job is to teach you everything you need to know. We recognize that you are a native of this highly interconnected world where information is easily available and freely accessible and technologies abound to support your learning.

Advising

Advising in the UNC Eshelman School of Pharmacy is a form of teaching. Advising fosters within student pharmacists skills, abilities, and dispositions that encourage directed career exploration as well as ongoing professional development, lifelong learning, and growth. Faculty advisors serve as content experts and mentors and are assigned to new students prior to the first semester of study. To fully maximize both curricular and co-curricular experiences, students are encouraged to schedule consistent and ongoing advising appointments throughout the course of their study. Professional advisors are also available to assist with student success strategies, decision making, and goal setting. Advising-related inquiries can be addressed to the Office of Curricular and Student Affairs (http://pharmacy.unc.edu/osa/) in 109 Beard Hall.

Facilities

The UNC Eshelman School of Pharmacy houses state-of-the-art teaching and research laboratory facilities. The School utilizes cutting-edge video teleconferencing and recording equipment used primarily for delivery of instruction to the satellite campus but also available to graduate and continuing education.

Career Opportunities

Pharmacy offers a variety of opportunities for career advancement and job security. Because pharmacy education draws from the chemical, physical, biological, and behavioral sciences to develop its knowledge base, pharmacists can contribute to the rational use of medications in many settings. Pharmacists work in all areas of the health care system, including

- Community pharmacy, as a practitioner or a manager in a retail pharmacy, clinic, or office practice
- Health system pharmacy, as practitioner, supervisor, or manager in large or small hospitals, nursing homes, extended care facilities, and health-maintenance organizations
- Pharmaceutical industry, in positions involving research, production, product development, product marketing, and drug information
- Government, in the United States Public Health Service, Veterans Administration, Drug Enforcement Administration, Food and Drug Administration, and military services

Admission Requirements

The doctor of pharmacy requires at least two years of undergraduate study (at least 72 credit hours), followed by four years of study in the professional program.

Applicants must complete all prerequisites by the end of May of the year they plan to enroll.

Students who will have earned a baccalaureate degree prior to enrolling in their first year of the program must complete the math and science prerequisites only.

Students who will not have earned a baccalaureate degree prior to enrolling in their first year of the program must complete both the math and science prerequisites and the general education requirements.

Application Procedures

Students applying to the UNC Eshelman School of Pharmacy must submit complete applications to the Pharm.D. program through the Pharmacy College Application Service (PharmCAS) and the school. For application deadlines, processes, and procedures, visit the website (http://www.pharmacy.unc.edu).

Prerequisites

All prerequisite courses must be completed with a letter grade of C minus or better (not Pass/Fail).

If you have a bachelor's degree:

Code	Title	Hours
CHEM 101 & 101L	General Descriptive Chemistry I and Quantitative Chemistry Laboratory I [H, F]	4
CHEM 102 & 102L	General Descriptive Chemistry II and Quantitative Chemistry Laboratory II [H, F]	4
CHEM 241 & 241L	Modern Analytical Methods for Separation and Characterization and Laboratory in Separations and Analytical Characterization of Organic and Biological Compounds [1, H]	4
CHEM 261	Introduction to Organic Chemistry I [H]	3

CHEM 262 & 262L	Introduction to Organic Chemistry II and Laboratory in Organic Chemistry [H]	4
BIOL 101 & 101L	Principles of Biology and Introductory Biology Laboratory [H, F]	4
BIOL 252 & 252L	Fundamentals of Human Anatomy and Physiology and Fundamentals of Human Anatomy and Physiology Laboratory [H]	4
MCRO 251	Introductory Medical Microbiology	4
PHYS 114	General Physics I: For Students of the Life Sciences [F]	4
PHYS 115	General Physics II: For Students of the Life Sciences [2, F]	4
MATH 231	Calculus of Functions of One Variable I [H, F]	4
STOR 151 or STOR 155	Introduction to Data Analysis or Introduction to Data Models and Inference	3
CHEM 430	Introduction to Biological Chemistry [H]	3

H Honors version available. An honors course fulfills the same requirements as the nonhonors version of that course. Enrollment and GPA restrictions may apply.

F FY-Launch class sections may be available. A FY-Launch section fulfills the same requirements as a standard section of that course, but also fulfills the FY-SEMINAR/FY-LAUNCH First-Year Foundations requirement. Students can search for FY-Launch sections in ConnectCarolina using the FY-LAUNCH attribute.

1 Only required for students completing prerequisite courses at UNC–Chapel Hill.

2 Not required of students completing CHEM 241/CHEM 241L at UNC–Chapel Hill.

If you do not have a bachelor's degree:

Students enrolling in the program without a bachelor's degree are required to complete at least two years of undergraduate coursework (at least 60 semester credit hours) including the math, science, and general education prerequisites from a regionally accredited institution.

Code	Title	Hours
CHEM 101 & 101L	General Descriptive Chemistry I and Quantitative Chemistry Laboratory I [H, F]	4
CHEM 102 & 102L	General Descriptive Chemistry II and Quantitative Chemistry Laboratory II [H, F]	4
CHEM 241 & 241L	Modern Analytical Methods for Separation and Characterization and Laboratory in Separations and Analytical Characterization of Organic and Biological Compounds [1, H]	4
CHEM 261	Introduction to Organic Chemistry I [H]	3
CHEM 262 & 262L	Introduction to Organic Chemistry II and Laboratory in Organic Chemistry [H]	4
BIOL 101 & 101L	Principles of Biology and Introductory Biology Laboratory [H, F]	4
BIOL 252 & 252L	Fundamentals of Human Anatomy and Physiology and Fundamentals of Human Anatomy and Physiology Laboratory [H]	4
MCRO 251	Introductory Medical Microbiology	4
PHYS 114	General Physics I: For Students of the Life Sciences [F]	4
PHYS 115	General Physics II: For Students of the Life Sciences [2, F]	4
MATH 231	Calculus of Functions of One Variable I [H, F]	4
STOR 151 or STOR 155	Introduction to Data Analysis or Introduction to Data Models and Inference	3
CHEM 430	Introduction to Biological Chemistry [H]	3

H Honors version available. An honors course fulfills the same requirements as the nonhonors version of that course. Enrollment and GPA restrictions may apply.

F FY-Launch class sections may be available. A FY-Launch section fulfills the same requirements as a standard section of that course, but also fulfills the FY-SEMINAR/FY-LAUNCH First-Year Foundations requirement. Students can search for FY-Launch sections in ConnectCarolina using the FY-LAUNCH attribute.

1 Only required for students completing prerequisite courses at UNC–Chapel Hill.

2 Not required of students completing CHEM 241/CHEM 241L at UNC–Chapel Hill.

General Education Prerequisites

English 105 (Composition and Rhetoric)	3
Social sciences; 2 courses; examples of accepted courses include psychology, sociology, economics, political science, and anthropology	6
Humanities; two courses; examples of accepted courses include English, history, philosophy, ethics, ethnic and gender studies, social justice, or foreign language study	6

Program of Study

The Pharm.D. grants entry into the profession and practice of pharmacy. It is neither an undergraduate nor a graduate degree program, but rather a professional degree such as an M.D. or D.D.S. The Pharm.D. curriculum requires a minimum of two years to satisfy prerequisite requirements, normally completed in the General College, followed by four years of professional coursework. Students are subject to the requirements in place when they are admitted to the program.

The doctor of pharmacy program is accredited by the Accreditation Council for Pharmacy Education. Graduates of the school's Pharm.D. program may sit for the state licensure examination for pharmacists.

The school has a satellite campus for the Pharm.D. program at Asheville, NC. The first students were enrolled in this satellite program in August

2011. Students based at the satellite campus receive the same instruction and are subject to the same admission and progression standards as students on the Chapel Hill campus.

Students graduating from the UNC Eshelman School of Pharmacy are expected to develop the following core competencies through coursework, immersion experiences (practical), and co-curricular experiences:

1. In-depth knowledge and proficient skills in the pharmaceutical sciences and the practice of pharmacy: Demonstrate an in-depth understanding of medicines, human health, and health care, and apply the principles and practice of pharmacy to advance human health and health systems
2. Accessing and analyzing information: Identify, locate, critically evaluate, and process information to arrive at an informed opinion
3. Critical thinking and problem solving: Engage in the comprehensive exploration of issues, ideas, and events to identify, prevent, or solve problems
4. Communication: Effectively develop, express, and listen to ideas that inform, inspire, or create focus
5. Collaboration and influence: Work effectively with others to create networks and groups that respect differences and make progress toward a common goal
6. Adaptability: Demonstrate a willingness and ability to change in order to fit new surroundings, ideas, trends, and technologies
7. Initiative: Be self-directed; seek out new opportunities, ideas, and strategies; take responsibility for implementing plans and ideas
8. Curiosity and inquisitiveness: Demonstrate a desire to learn and understand more than is currently understood
9. Professionalism and ethical behavior: Uphold the highest standards of professional and ethical behavior and act appropriately, thoughtfully, and with integrity at all times

In addition, pharmacy graduates must pass national and state licensing examinations in order to practice as pharmacists.

Program Requirements

See the Courses tab for a list of required and available courses.

Special Opportunities in the UNC Eshelman School of Pharmacy

Student Organizations

Pharmacy students are active in campus and community activities through their involvement with approximately 15 pharmacy student organizations. They belong to groups that link them to such national professional organizations as the American Pharmacists Association and the American Society of Health System Pharmacists. Pharmacy students provide medication reviews for elderly citizens, staff clinics for indigent patients, and participate in health fairs on campus and in local malls or corporations. Several times each year trips are planned to attend meetings across the nation. Student leadership is fostered through intentional involvement in student organizations and enrolled students are highly encouraged to invest in the opportunities offered through student organizations.

Experiential Education

The school provides doctor of pharmacy students with a structured, supervised program of participation in the practice of pharmacy. Students gain experience in problem solving and providing patient care while applying the foundational and pharmaceutical sciences learned in the classroom and laboratories. Under the supervision of faculty and selected preceptors, students learn to make decisions based on professional knowledge and judgment. The school requires up to 15 months of full-time precepted practice with early practice experiences in the second and third professional year, followed by nine months of advanced practice experiences in the fourth professional year. The experiential education requirements of the program meet the North Carolina Board of Pharmacy experience requirement (1,500 hours) to sit for the licensure examination.

Residencies and Fellowships

To increase the depth of their education, many Pharm.D. graduates seek residency training in pharmacy practice. Pharmacy residencies, like medical residencies, provide stipends for further clinical training. There are over 4,000 pharmacy residency positions in the United States with sites in hospitals, community pharmacies, and some specialized facilities. Residency programs may be taken in general pharmacy practice and in specialty areas such as pediatrics, drug information, infectious diseases, oncology, psychiatry, and many others. Some Pharm.D. graduates seek additional training in research methods in drug development, pharmacokinetics, pharmacoeconomics, or pharmacotherapy. Postgraduate fellowship programs involve advanced training in these areas and may occur at academic centers or in the pharmaceutical industry. Like residencies, they are paid positions.

Distinguished Professors

Kristy Ainslie, Pharmacoengineering and Molecular Pharmaceutics
Jeffrey Aubé, Chemical Biology and Medicinal Chemistry
Ronny Bell, Pharmaceutical Outcomes and Policy
Bob Blouin, Pharmacotherapy and Experimental Therapeutics
Kim Brouwer, Pharmacotherapy and Experimental Therapeutics
Stefanie Ferreri, Practice Advancement
Stephen Frye, Chemical Biology and Medicinal Chemistry
Leaf Huang, Pharmacoengineering and Molecular Pharmaceutics
Michael Jay, emeritus, Pharmacoengineering and Molecular Pharmaceutics
Alexander Kabanov, Pharmacoengineering and Molecular Pharmaceutics
Angela Kashuba, Pharmacotherapy and Experimental Therapeutics, Dean of Eshelman School of Pharmacy

David Lawrence, Chemical Biology and Medicinal Chemistry
Craig Lee, Pharmacotherapy and Experimental Therapeutics
Jian Liu, Chemical Biology and Medicinal Chemistry
Denise Rhoney-Metzger, Practice Advancement
Betsy Sleath, Pharmaceutical Outcomes and Policy
Alexander Tropsha, Chemical Biology and Medicinal Chemistry

Paul Watkins, Pharmacotherapy and Experimental Therapeutics

Professor of the Practice

John Bamforth, Eshelman Institute for Innovation
Jon Easter, Practice Advancement
Ouita Gatton, Practice Advancement
Anthony Hickey, UNC Catalyst for Rare Disease
Stephanie Kiser, Practice Advancement

Professors

Timothy Ives, Practice Advancement
Jennifer Elston-Lafata, Pharmaceutical Outcomes and Policy
Samuel Lai, Pharmacoengineering and Molecular Pharmaceutics
Andrew Lee, Chemical Biology and Medicinal Chemistry

Rihe Liu, Chemical Biology and Medicinal Chemistry

Mary McClurg, Practice Advancement
William Zamboni, Pharmacotherapy and Experimental Therapeutics

Associate Professors

Albert Bowers, Chemical Biology and Medicinal Chemistry
Yanguang Cao, Pharmacotherapy and Experimental Therapeutics
Delesha Carpenter, Pharmaceutical Outcomes and Policy
Daniel Crona, Pharmacotherapy and Experimental Therapeutics
Julie Dumond, Pharmacotherapy and Experimental Therapeutics
Daniel Gonzalez, Pharmacotherapy and Experimental Therapeutics
Nathaniel Hathaway, Chemical Biology and Medicinal Chemistry
Erin Heinzen Cox, Pharmacotherapy and Experimental Therapeutics
Shawn Hingtgen, Pharmacoengineering and Molecular Pharmaceutics
Michael Jarstfer, Chemical Biology and Medicinal Chemistry
Jacqueline McLaughlin, Practice Advancement
Juliane Nguyen, Pharmacoengineering and Molecular Pharmaceutics
Sachiko Ozawa, Practice Advancement
Gauri Rao, Pharmacotherapy and Experimental Therapeutics
Robert Shrewsbury, Practice Advancement
Scott Singleton, Chemical Biology and Medicinal Chemistry
Kathleen Thomas, Pharmaceutical Outcomes and Policy
Carolyn Thorpe, Pharmaceutical Outcomes and Policy
Joshua Thorpe, Pharmaceutical Outcomes and Policy
Dennis Williams, Pharmacotherapy and Experimental Therapeutics
Timothy Wiltshire, Pharmacotherapy and Experimental Therapeutics
Qisheng Zhang, Chemical Biology and Medicinal Chemistry

Assistant Professors

Rachel Church, Pharmacotherapy and Experimental Therapeutics
Klarissa Jackson, Pharmacotherapy and Experimental Therapeutics
Lindsey James, Chemical Biology and Medicinal Chemistry
Alan Kinlaw, Pharmaceutical Outcomes and Policy
Robert McGinty, Chemical Biology and Medicinal Chemistry
Megan Roberts, Pharmaceutical Outcomes and Policy
Amanda Seyerle, Pharmaceutical Outcomes and Policy

Teaching Assistant Professor

Laura Rhodes, Practice Advancement

Research Professors

Kenneth Pearce Jr., Center for Integrative Chemical Biology and Drug Discovery (CICBDD)
Xiaodong Wang, Center for Integrative Chemical Biology and Drug Discovery (CICBDD)
Timothy Willson, Structural Genomics Consortium

Research Associate Professors

Eric Bachelder, Pharmacoengineering and Molecular Pharmaceutics
Elena Batrakova, Center for Nanotechnology in Drug Discovery (CNDD)
David Drewry, Structural Genomics Consortium
Juan Li, Pharmacoengineering and Molecular Pharmaceutics
Eugene Muratov, Chemical Biology and Medicinal Chemistry
Samantha Pattenden, Chemical Biology and Medicinal Chemistry
Elias Rosen, Pharmacotherapy and Experimental Therapeutics
Marina Sokolsky-Papkov, Pharmacoengineering and Molecular Pharmaceutics
Yongmei Xu, Chemical Biology and Medicinal Chemistry

Research Assistant Professors

Katelyn Arnold, Chemical Biology and Medicinal Chemistry
Alison Axtman, Structural Genomics Consortium
Mackenzie Cottrell, Pharmacotherapy and Experimental Therapeutics
Anita Crescenzi, Practice Advancement
Scott Davis, Pharmaceutical Outcomes and Policy
Yury Desyaterik, Pharmacotherapy and Experimental Therapeutics
Kevin Frankowski, Chemical Biology and Medicinal Chemistry
Masuo Goto, Chemical Biology and Medicinal Chemistry
Lauren Haar, Chemical Biology and Medicinal Chemistry
Dulcie Lai, Pharmacotherapy and Experimental Therapeutics
Jine Li, Chemical Biology and Medicinal Chemistry
Melanie Livet, Practice Advancement
Jillian Perry, Center for Nanotechnology in Drug Discovery (CNDD)
Paul Sapienza, Chemical Biology and Medicinal Chemistry
Zhenwei Song, Pharmacotherapy and Experimental Therapeutics
Junjiang Sun, Pharmacoengineering and Molecular Pharmaceutics
Jacqueline Tiley, Pharmacotherapy and Experimental Therapeutics
Qunzhao Wang, Chemical Biology and Medicinal Chemistry
Bin Xiao, Pharmacoengineering and Molecular Pharmaceutics

Clinical Professors

Robert Dupuis, Pharmacotherapy and Experimental Therapeutics
Adam Persky, Pharmacotherapy and Experimental Therapeutics
Jo Ellen Rodgers, Pharmacotherapy and Experimental Therapeutics
Mollie Scott, Practice Advancement
John Greene Shepherd, Practice Advancement

Clinical Associate Professors

Amanda H. Corbett, Pharmacotherapy and Experimental Therapeutics
Wendy Cox, Practice Advancement
Stephen Eckel, Practice Advancement
Suzanne Harris, Practice Advancement
Macary Marciniak, Practice Advancement
Nicole Pinelli Reitter, Practice Advancement
Philip Rodgers, Practice Advancement
Deborah Sturpe, Pharmacotherapy and Experimental Therapeutics
Charlene Williams, Practice Advancement

Clinical Assistant Professors

Heidi Anksorus, Practice Advancement
Amber Frick, Pharmacotherapy and Experimental Therapeutics
Kathryn Fuller, Practice Advancement
Kathryn Morbitzer, Practice Advancement
Benyam Muluneh, Pharmacotherapy and Experimental Therapeutics
Kimberly Sanders, Practice Advancement
Amanda Savage, Practice Advancement
Carla White, Practice Advancement
Jacqueline Zeeman, Practice Advancement

PHCY–Pharmacy

All courses and electives for the Pharm.D. program are listed below by year in the curriculum. See the Student Handbook (https://pharmdstudenthandbook.web.unc.edu/) and the program's Web site (https://pharmacy.unc.edu/education/pharmd/curriculum/) for information about course sequence by semester.

Professional Year 1

Code	Title	Hours
PHCY 500	Pharmacy Bridging Course	3
PHCY 501	On Becoming a Pharmacist	1
PHCY 502	Pathophysiology of Human Disease	3.5
PHCY 503	Molecular Foundations of Drug Action	3.5
PHCY 504	Evidence-Based Practice	3
PHCY 508	Pharmaceutical Calculations	1

PHCY 509	Immunizations and Medication Administration Training	1
PHCY 510	Foundations of Clinical Pharmacology	3
PHCY 511	Foundations of Pharmacokinetics	3
PHCY 512	Pharmaceutics and Drug Delivery Systems I	2
PHCY 513L	Pharmaceutical Compounding I: Nonsterile	1.5
PHCY 514	Pharmaceutics and Drug Delivery Systems II	1.5
PHCY 515L	Pharmaceutical Compounding II: Sterile	0.5
PHCY 516	Foundations of Patient Care	2
PHCY 519	Self-Care and Nonprescription Medications	1.5
PHCY 529	Pharmacotherapy: Foundations	3
Immersion Experience 1:		8
PHCY 591	Immersion Experience: Community	
PHCY 691	Immersion Experience: Health System	
Total Hours		**42**

Professional Year 2

Code	Title	Hours
PHCY 601L	Patient Care Lab	1.5
PHCY 609	The US Healthcare System	2
PHCY 611	Applied Clinical Pharmacology	3
PHCY 617	The Patient Care Experience	1.5
PHCY 619	Business of Healthcare: Focus on the Pharmacy Enterprise	2
PHCY 630	Pharmacotherapy: Applied	4
PHCY 631	Pharmacotherapy: Integrated I	5
PHCY 636	Leadership and Professional Development I	1
Immersion Experience 2:		8
PHCY 591	Immersion Experience: Community	
PHCY 691	Immersion Experience: Health System	
PHCY 791	Immersion Experience: Direct-Patient Care	
Electives		3
Total Hours		**31**

Professional Year 3

Code	Title	Hours
PHCY 718	The Patient Care Experience II	2
PHCY 722	Pharmacy Law: Regulation of Pharmacy Practice	3
PHCY 732	Integrated Pharmacotherapy II	5
PHCY 733	Integrated Pharmacotherapy III	5
PHCY 737	Leadership and Professional Development II	1
Immersion Experience 3:		8
PHCY 591	Immersion Experience: Community	
PHCY 691	Immersion Experience: Health System	
PHCY 791	Immersion Experience: Direct-Patient Care	
Electives		9
Total Hours		**33**

Professional Year 4

Code	Title	Hours
PHCY 898	Leading Change in Health Care I	1
PHCY 899	Leading Change in Health Care II	1
Immersion Experiences selected from the following options:		9
PHCY 886	Advanced Immersion Experience: Patient Care Elective I	
PHCY 887	Advanced Immersion Experience: Patient Care Elective II	
PHCY 888	Advanced Immersion Experience: Non-Patient Care Elective I	
PHCY 889	Advanced Immersion Experience: Non-Patient Care Elective II	
PHCY 891	Advanced Immersion Experience: Community	
PHCY 892	Advanced Immersion Experience: Health Systems	
PHCY 893	Advanced Immersion Experience: Ambulatory Care	
PHCY 894	Advanced Immersion Experience: General Medicine	
PHCY 895	Advanced Immersion Experience: Clinical I	
PHCY 896	Advanced Immersion Experience: Clinical II	
PHCY 897	Advanced Immersion Experience: Clinical III	
Additional elective courses		23
Total Hours		**34**

Electives

See the Student Handbook (https://pharmdstudenthandbook.web.unc.edu/) for the Pharm.D. Elective policy. The below list does not include all courses offered by other UNC departments and schools that may be approved electives.

Code	Title	Hours
PHCY 608I	Interprofessional Perspectives Diabetes Mellitus Management	2
PHCY 624	Research and Scholarship in Pharmacy I	1.5
PHCY 700	SHAC: Community Outreach and Service Learning	0
PHCY 725	Research and Scholarship in Pharmacy II	1.5
PHCY 726	Research and Scholarship in Pharmacy III	3
PHCY 800	Geriatric Pharmacy Practice	3
PHCY 801	Radiopharmacy I: Introduction to Radiopharmacy	2
PHCY 802	Radiopharmacy 2 - The Drugs of Nuclear Medicine	2
PHCY 803	Radiopharmacy 3	3
PHCY 804	Travel Medicine Care	1.5
PHCY 807	Veterinary Pharmacotherapy	3
PHCY 808	Critical Care	3
PHCY 810	The Science of Pharmaceutical Compounding	1
PHCY 811	Infectious Diseases	1.5
PHCY 812	Pediatric Pharmacotherapy	1.5
PHCY 813	Clinical Toxicology	1.5
PHCY 814	Disaster Preparedness and Emergency Care	1.5
PHCY 815	Data Science in Pharmacy	1
PHCY 817	Making Medicine: The Process of Drug Development	1.5
PHCY 822	Hematology/Oncology Pharmacotherapy	3
PHCY 823	International Clinical Classroom Case Discussion	2
PHCY 824	Solid Organ Transplantation Pharmacy Practice	1.5
PHCY 832	Innovations in Community-Based Pharmacy Practice	1.5
PHCY 833	Advanced Cardiovascular Pharmacy	1.5
PHCY 836	Prevention, Treatment, and Recovery of Substance Use Disorders	1.5

PHCY 837	Pharmacogenetics	1.5
PHCY 839	Global and Rural Health: Maximizing Interprofessional Teams to Impact Patient Outcomes	1
PHCY 840	Health Policy and Managed Care	3
PHCY 841	Rural Pharmacy Health 1: Introduction to Rural Pharmacy Practice	1.5
PHCY 842	Rural Pharmacy Health 2: Cultural Responsiveness in Rural Health	1.5
PHCY 843	Rural Pharmacy Health 3: Interprofessional Practice	1.5
PHCY 844	Rural Pharmacy Health 4: Population Health Management	1.5
PHCY 846	Perspectives in Mental Health	2
PHCY 847	Business of Health Care Seminar Series	1
PHCY 850	Pharmacy Internship and Career Development	1.5
PHCY 851	Foundations in Ambulatory Care	2
PHCY 852	Ambulatory Care Services I	1.5
PHCY 853	Ambulatory Care Pharmacy Services II	1.5
PHCY 854	Ambulatory Care Capstone Course	2
PHRS 815	Foundations in Implementation Science: Examples in Precision Health and Society	1.5

Contact Information

UNC Eshelman School of Pharmacy
Visit Program Website (http://www.pharmacy.unc.edu)
301 Pharmacy Lane, CB # 7355, Chapel Hill, NC 27599-7355
(919) 966-9429

Dean
Angela Kashuba
pharmacy_admissions@unc.edu