PHARMACY ADMINISTRATION (PHAD)

PHAD 3001: Social and Admin Phararmacy I
Pharmacy Administration
The purpose of this course is to introduce students, in a structured way, to core forces that shape contemporary pharmacy practice. We will examine how health is defined and communicated, how evidence is located and applied, how care is organized and financed in the United States, and how the pharmaceutical industry operates within this ecosystem. To meet this purpose, the course is organized into four distinct but related content areas: • Introduction to Health, Behavior, & Communication • Drug Information Resources • Pharmaceutical Industry & Drug Approval Processes • U.S. Health Care Delivery & Financing
3 credits
Potentially offered with the following Instruction Type(s):
Lecture

PHAD 3002: Social and Admin Pharmacy II
Pharmacy Administration
This course provides an understanding of the principles of biostatistics, epidemiology, research design, quality in health care, medication safety with the underlying goal being the acquisition of skills used by pharmacists to seek, appraise, and apply knowledge from the biomedical literature to improve pharmacy practice and patient care.
3 credits
Potentially offered with the following Instruction Type(s):
Lecture

PHAD 3550: The Anthropology of Drugs
Pharmacy Administration
What is a drug? Is it different from a pharmaceutical? How? What separates therapeutic use of a drug from abuse? Where do these substances come from? How are they accessed? Transformed? How do we know something is effective? Does the development and use of a drug vary globally or perpetuate inequalities? This course is an anthropological exploration of such questions.
3 credits
Prerequisites
24 Earned Credits.
Potentially offered with the following Instruction Type(s):
Lecture

PHAD 3930: Lrng. & Tching: A Prof. Elec
Pharmacy Administration
The goal of this course is to provide pharmacy students with a forum to exchange ideas, refine specific skills, and enhance their knowledge of concepts related to teaching and learning. These topics are relevant to a student's own personal journey as a lifelong learner, as well as to current and future teaching experiences that individuals may have, either as a pharmacist (patient education) or pharmacy educator (preceptor or faculty member).
2 credits
Prerequisites
24 Earned Credits.
Potentially offered with the following Instruction Type(s):
Lecture

PHAD 3940: Intermed. Biostats for Pharma.
Pharmacy Administration
A course designed to provide pharmacy students with an overview of frequently used statistical procedures in the biomedical literature. This course focuses on the application of statistical methods to produce actionable information and also introduces students to the use of statistical software packages.
2 credits
Prerequisites
24 Earned Credits.
Potentially offered with the following Instruction Type(s):
Lecture

PHAD 3950: Pharmacy Ethics
Pharmacy Administration
After an introductory overview of ethical theory and professional codes of ethics, we will analyze case studies that involve conflicts in moral and ethical and professional principles, issues related to the allocation of medical resources, reproduction, the doctor/patient relationship, and pharmaceutical research.
3 credits
Prerequisites
24 Earned Credits.
Potentially offered with the following Instruction Type(s):
Lecture

PHAD 3960: Mktg. for Cmnty. Pharmacists
Pharmacy Administration
This course is an elective focused on exploring the factors affecting use and acceptance of, delivery of, promotion of, and pricing of innovative pharmacy products in the community pharmacy setting. The ability of pharmacists to develop innovative services and market them to patients, health care providers, payers, government agencies, and others is crucial to the advancement of pharmacy. Students will be introduced to marketing principles and how they are applied in community pharmacy.
1 credit
Prerequisites
24 Earned Credits.
Potentially offered with the following Instruction Type(s):
Lecture

PHAD 3970: Surv of Medication Nonadherenc
Pharmacy Administration
The purpose of this course is to examine patient nonadherence in its many forms in the health care system and to discover best practices that help resolve nonadherence behaviors to ensure optimal therapeutic outcomes.
1 - 2 credits
Prerequisites
24 Earned Credits.
Potentially offered with the following Instruction Type(s):
Lecture

PHAD 4300: Res. Methods for Pharmacists
Pharmacy Administration
Every year hundreds of thousands of patients are harmed by both the over, and under, use of available medical knowledge. This is a staggering statistic. One way to bend the curve on errors related to pharmacy is by improving the generation, and integration, of knowledge in pharmacy practice by improving pharmacy practice research.
2 credits
Prerequisites
24 Earned Credits.
Potentially offered with the following Instruction Type(s):
Lecture

PHAD 4780: History of Pharmacy
Pharmacy Administration
This course covers the development of the field of pharmacy in the West from the ancient period to the present.
3 credits
Prerequisites
24 Earned Credits.
Potentially offered with the following Instruction Type(s):
Lecture

PHAD 4850: Industry Crs. for Pharmacists
Pharmacy Administration
As part of this course, students will interact directly with and hear from executives and leaders across the pharmaceutical industry who have successfully navigated various roles and functions after obtaining graduate and/or Pharm.D. degrees. This elective course will provide a unique perspective to potential Pharm.D. students by exploring career options within the life sciences industry that allows students to leverage their pharmacy training but do so outside of traditional pharmacy roles. Often, pharmacy students have limited exposure to how pharmaceutical organizations structure their business, and as a result, have a limited understanding of roles and career opportunities that can be pursued. This course will include recorded presentations from a diverse set of industry leaders and will conclude with an industry career mapping by course participants.
3 credits
Potentially offered with the following Instruction Type(s):
Lecture

PHAD 4860: Princ. of Managed Care Pharm
Pharmacy Administration
This elective course will provide student pharmacists with a practical understanding of key aspects of managed care pharmacy, including pharmacy benefit management tools and strategies, specialty pharmacy, types of health insurance programs, quality measures, health outcomes, and more. Students will learn about pharmacy benefit design, formulary management, drug utilization review, private and government payers, industry relations and pharmaceutical reimbursement, access and quality measures, and pharmacy clinical and educational programs. Students will apply managed care principles to better understand access, total and pharmacy cost of care, and quality of medications. Students will also explore the various career and postgraduate training options in managed care pharmacy and other nontraditional pharmacy pathways.
2 credits
Potentially offered with the following Instruction Type(s):
Lecture

PHAD 4920: Current Issues in Health Care
Pharmacy Administration
This elective course is designed to provide pharmacy students an opportunity to broaden their knowledge of current health care issues.
2 credits
Prerequisites
24 Earned Credits.
Potentially offered with the following Instruction Type(s):
Lecture

PHAD 4950: Tech. for Pharm & Bio-Pharm Sa
Pharmacy Administration
Phad 495 is a fully online course in which you will learn about the basic requirements, activities, responsibilities, and techniques for those employed as a pharmaceutical sales representative. You will learn introductory information regarding how pharmaceutical drugs are approved in the U.S., and the role of the salesperson in the in-person marketing and representation of those drugs to health care providers. You will also be introduced to the process of selling, take part in online discussions, quizzes, readings, and lectures, and have an individual interview with a medical representative identified by you.
3 credits
Prerequisites
24 Earned Credits.
Potentially offered with the following Instruction Type(s):
Lecture

PHAD 4960: Principles of Pharma. Mktg.
Pharmacy Administration
The nature and scope of the pharmaceutical industry, its marketing practices and environment.
3 credits
Prerequisites
24 Earned Credits.
Potentially offered with the following Instruction Type(s):
Lecture

PHAD 4970: Personal Fin. for Pharmacists
Pharmacy Administration
Graduation is an exciting time full of wonderful opportunities and finally ... income! But, it can also be an overwhelming time when it comes to personal financial management. Hands-on exercises and projects throughout the semester will give students the tools to evaluate how their money is currently being spent, set short-term and long-term financial goals, reduce their tax liability, adequately insure themselves and their assets, make sound investment choices, prepare for retirement, navigate the stock market, evaluate mutual funds, strategize for major purchases, evaluate and select a financial planner, manage money during major life changes, and prevent theft of their identity.
2 credits
Prerequisites
24 Earned Credits.
Potentially offered with the following Instruction Type(s):
Lecture

PHAD 5045: Asp. of Pediatric Pharm Pract.
Pharmacy Administration
This course focuses on social and administrative scenarios related to the care of pediatric patients and the role of the pharmacist. Simulated cases will be used to guide the students through common pediatric situations and encounters. Example topics may include, but are not limited to, health literacy, medication access for pediatric patients, medication error management, age-based communication strategies, medication adherence, barriers and facilitators to medication administration, quality of life measurement among pediatric patients, caregiver issues in pediatric practice, health promotion and disease prevention in children, management of a pediatric pharmacy practice, etc. Emphasis will be placed on the student's ability to evaluate each scenario, identify the pertinent social and administrative issues that need to be addressed, and to work with a team in developing a plan for addressing these issues.
2 credits
Potentially offered with the following Instruction Type(s):
Lecture

PHAD 5046: Film and Pharmacy
Pharmacy Administration
Lights, Camera, Action! This interdisciplinary course provides students the opportunity to consider health, illness, and patient/provider perceptions through the lens of feature films. Example topics may include but are not limited to access to care, depression/anxiety, HIV/AIDS, research ethics, illicit drug use, corporate responsibility, quality of life, obesity, alcoholism, poverty, death/dying, and underserved/uninsured populations. Emphasis will be placed on the student's ability to lead and engage in critical and active discussions surrounding issues of interest and utilize social learning opportunities to deepen an understanding of the pharmacy profession, the health care system, public health initiatives, and most importantly, the patient.
2 credits
Potentially offered with the following Instruction Type(s):
Lecture

PHAD 5047: Phy & Psychosoc Asp. Wom's Hlt
Pharmacy Administration
This course will explore women's health across the life span. Physical and psychosocial aspects of women's health will be covered. The course will emphasize health promotion and disease prevention.
3 credits
Potentially offered with the following Instruction Type(s):
Lecture

PHAD 5410: Problems in Pharm Admin.
Pharmacy Administration
Investigation of individual problems.
1 - 6 credits
Potentially offered with the following Instruction Type(s):
Independent Study

PHAD 5420: Problems in Pharm Admin.
Pharmacy Administration
Investigation of individual problems.
1 - 6 credits
Potentially offered with the following Instruction Type(s):
Independent Study

PHAD 5470: Medical Anthropology
Pharmacy Administration
Social factors in health and illness. Social influences on need, demand, provision, and compliance with medical care.
3 credits

PHAD 5490: Hlth Care and Contemp Society
Pharmacy Administration
Development, current organization, and financing of the contemporary health care system in the United States from a comparative perspective. Specific topics include provider socialization, provider-consumer interaction, health care as an industry, and the health care system of the future.
3 credits
Potentially offered with the following Instruction Type(s):
Seminar

PHAD 5545: Asp. of Pediatric Pharm Pract.
Pharmacy Administration
This course focuses on social and administrative scenarios related to the care of pediatric patients and the role of the pharmacist. Simulated cases will be used to guide the students through common pediatric situations and encounters. Example topics may include, but are not limited to, health literacy, medication access for pediatric patients, medication error management, age-based communication strategies, medication adherence, barriers and facilitators to medication administration, quality of life measurement among pediatric patients, caregiver issues in pediatric practice, health promotion and disease prevention in children, management of a pediatric pharmacy practice, etc. Emphasis will be placed on the student's ability to evaluate each scenario, identify the pertinent social and administrative issues that need to be addressed, and to work with a team in developing a plan for addressing these issues.
2 credits
Potentially offered with the following Instruction Type(s):
Lecture

PHAD 5546: Film and Pharmacy
Pharmacy Administration
Lights, Camera, Action! This interdisciplinary course provides students the opportunity to consider health, illness, and patient/provider perceptions through the lens of feature films. Example topics may include but are not limited to access to care, depression/anxiety, HIV/AIDS, research ethics, illicit drug use, corporate responsibility, quality of life, obesity, alcoholism, poverty, death/dying, and underserved/uninsured populations. Emphasis will be placed on the student's ability to lead and engage in critical and active discussions surrounding issues of interest and utilize social learning opportunities to deepen an understanding of the pharmacy profession, the health care system, public health initiatives, and most importantly, the patient.
2 credits
Potentially offered with the following Instruction Type(s):
Lecture

PHAD 5547: Phy & Psychosoc Asp. Wom's Hlt
Pharmacy Administration
This course will explore women's health across the life span. Physical and psychosocial aspects of women's health will be covered. The course will emphasize health promotion and disease prevention.
3 credits
Potentially offered with the following Instruction Type(s):
Lecture

PHAD 5910: Problems in Pharm Admin.
Pharmacy Administration
Investigation of individual problems.
1 - 6 credits
Potentially offered with the following Instruction Type(s):
Independent Study

PHAD 5920: Problems in Pharm Admin.
Pharmacy Administration
Investigation of individual problems.
1 - 6 credits
Potentially offered with the following Instruction Type(s):
Independent Study

PHAD 5970: Medical Anthropology
Pharmacy Administration
Social factors in health and illness. Social influences on need, demand, provision, and compliance with medical care.
3 credits
Potentially offered with the following Instruction Type(s):
Seminar

PHAD 5990: Hlth Care and Contemp Society
Pharmacy Administration
Development, current organization, and financing of the contemporary health care system in the United States from a comparative perspective. Specific topics include provider socialization, provider-consumer interaction, health care as an industry, and the health care system of the future.
3 credits

PHAD 6001: Foundations of Medical Affairs
Pharmacy Administration
This course is designed to provide students with an in-depth overview of medical affairs and its critical role in bridging scientific research, clinical practice, and commercial strategy within the pharmaceutical and bio-pharmaceutical industry. Students will explore key functions including clinical and scientific communication, medical and market access strategy, health economics and outcomes research, and stakeholder engagement in this course. Emphasis will be placed on evidence-based decision-making, ethical practices, and cross-functional collaboration in the industry.
3 credits
Potentially offered with the following Instruction Type(s):
Lecture

PHAD 6002: Primary Mktg Research in HC
Pharmacy Administration
This course is designed to provide a comprehensive exploration of primary market research methodologies and their application in the pharmaceutical and biopharmaceutical industry. Students will learn how to design, execute, analyze, and interpret market research studies that inform business and scientific decision-making. Through case studies and the capstone project, students gain practical experience with research design, sampling, questionnaire development, data collection, analysis, and interpretation.
3 credits
Potentially offered with the following Instruction Type(s):
Lecture

PHAD 6003: Eval & App of Real-World Evid
Pharmacy Administration
This course provides a comprehensive exploration of Health Economics and Outcomes Research (HEOR), Real-World Data (RWD), and Real-World Evidence (RWE) in the pharmaceutical and biotechnology industries. Students will examine how HEOR principles inform market access strategies, reimbursement decisions, and learn to critically evaluate RWE literature. The curriculum covers fundamental health economics concepts, comparative effectiveness research, economic modeling, and patient-centered outcomes research. Students will develop proficiency in working with diverse real-world data sources, applying advanced analytics techniques, and communicating data-driven insights to varied stakeholders. Through case studies, hands-on data projects, and real-world applications, learners will gain practical skills in developing HEOR strategies, conducting outcomes research, and leveraging evidence to demonstrate value in healthcare decision-making across global markets.
3 credits
Potentially offered with the following Instruction Type(s):
Lecture

PHAD 6004: US Manag Care Payers & Reim St
Pharmacy Administration
This course provides a comprehensive examination of the US managed care and payer systems, exploring the complex landscape of healthcare financing, delivery, and reimbursement. Students will analyze various health plan types, payment models across channels of trade, and the regulatory environment shaping managed care. The curriculum covers critical topics including provider network contracting, utilization and quality management, Medicare and Medicaid programs, and market access strategies. Through exploration of healthcare policy, stakeholder engagement, and ethical considerations, students will develop strategic insights into payer decision-making processes. The course emphasizes practical application through case studies and a capstone project, equipping learners with the knowledge to navigate payer relationships, understand reimbursement challenges, and develop effective market access strategies for pharmaceutical and biotechnology products in the U.S. healthcare system.
3 credits
Potentially offered with the following Instruction Type(s):
Lecture

PHAD 6300: Intro to Implementation Sci.
Pharmacy Administration
This course provides an introduction to dissemination and implementation (D&I) science (i.e., translational research in health). In this course, students will have the opportunity to explore the following topics: the importance and language of D&I science; designs, methods, and measures; differences and similarities across clinical, public health, and policy settings; selected tools for D&I research and practice; and future issues.
3 credits
Potentially offered with the following Instruction Type(s):
Lecture

PHAD 6430: Seminar in Current Hlth Topics
Pharmacy Administration
Pharmacy administration departmental seminar.
1 credit
Potentially offered with the following Instruction Type(s):
Seminar

PHAD 6440: Seminar in Current Hlth Topics
Pharmacy Administration
Pharmacy administration departmental seminar. Z grade
1 credit
Potentially offered with the following Instruction Type(s):
Seminar

PHAD 6610: Epidemiology & Hlth Data Mgmt.
Pharmacy Administration
Methods and techniques of health data collection with emphasis on use in health planning.
3 credits
Potentially offered with the following Instruction Type(s):
Seminar

PHAD 6790: Primary Data Techniques
Pharmacy Administration
An overview of the primary research techniques used in executing research projects related to pharmaceutical marketing and/or pharmacy management. Included are sampling, instrument development, and data collection using several personal interview and self-administered survey techniques. Prerequisite requirements for this course may also be satisfied by consent of instructor.
3 credits
Potentially offered with the following Instruction Type(s):
Lecture

PHAD 6870: Secondary Data Techniques
Pharmacy Administration
Techniques and principles useful in using secondary data to answer research questions, including data and data source evaluation, accessing and preparing secondary databases, and review of common data types and sources.
3 credits
Potentially offered with the following Instruction Type(s):
Lecture/Lab

PHAD 6880: Research Method and Techniques
Pharmacy Administration
An introduction to the research process from project inception to its conclusion. Students will be exposed to issues surrounding the establishment of the problem statement, hypothesis generation and testing, measurement, research design, sampling theory, data collection and analysis, and ethical conduct in research.
3 credits
Potentially offered with the following Instruction Type(s):
Lecture

PHAD 6890: Pharma. and Hlthcare Plcy
Pharmacy Administration
The delivery and financing of health care, pharmaceuticals and pharmacy services; development and implications of pharmaceutical and healthcare policies in the public and private sectors at the federal and state levels.
3 credits
Potentially offered with the following Instruction Type(s):
Lecture

PHAD 6900: Data Mgmt. and Stat. Software
Pharmacy Administration
To introduce students to data management and provide a survey of statistical software.
3 credits
Potentially offered with the following Instruction Type(s):
Lecture

PHAD 6930: Health Economics
Pharmacy Administration
The financing and delivery of health care in the U.S., including economics of health care, economics of the U.S. health care system, and current policy issues including health care expenditures, health care reform, and economics of the uninsured.
3 credits
Potentially offered with the following Instruction Type(s):
Lecture

PHAD 6980: Non-thesis Research
Pharmacy Administration
This course will provide students without prior research experience a chance to complete a research project, write a manuscript, and demonstrate their research skills before beginning the dissertation process.
1 - 3 credits
Potentially offered with the following Instruction Type(s):
Independent Study

PHAD 6997A: Thesis
Pharmacy Administration
No grade
1 - 12 credits
Potentially offered with the following Instruction Type(s):
Thesis

PHAD 7740: Research in Pharm Admin.
Pharmacy Administration
Investigation of individual problems.
1 - 3 credits
Potentially offered with the following Instruction Type(s):
Independent Study

PHAD 7800: General Linear Models
Pharmacy Administration
An intermediate-level course in regression analysis methods covering the basic theory and application of the general linear model (GLM) to conduct relevant analyses. Simple and multiple linear regression are extensively covered as well as a number of procedures falling under the general category of analysis of variance (ANOVA).
3 credits
Potentially offered with the following Instruction Type(s):
Seminar

PHAD 7810: Applied Multivariate Analysis
Pharmacy Administration
An intermediate-level course examining techniques generally considered to be multivariate in nature or having a multivariate approach to analyzing date (e.g., multivariate analysis of variance, repeated- measures analysis or variance, discriminant analysis, logistic regression, cluster analysis, and factor analysis).
3 credits
Potentially offered with the following Instruction Type(s):
Lecture

PHAD 7830: Adv Pharma. Mkting & Pt. Beha
Pharmacy Administration
Doctoral seminar exploring the factors affecting acceptance, distribution, promotion, and economics of pharmaceutical marketing and the theoretical perspectives in understanding behavior in the medication use process.
3 credits
Potentially offered with the following Instruction Type(s):
Lecture

PHAD 7860: Patient Reported Outcomes
Pharmacy Administration
Patient-Reported Outcomes (PRO) studies evaluate the impact of disease, medical care, and treatment from the patient's perspective. The overall objective of this course is to familiarize students with the understanding and application of PRO in health services and outcomes research. The course will involve discussion on PRO topics including quality of life and health-related quality of life, generic and disease-specific PRO instruments, health state preferences (values and utilities), patient satisfaction, measurement issues (including applications of classical test theory, item response theory, Rasch analysis), and adherence to therapy. Principles of measurement, reliability, validity, responsiveness, analysis, and interpretation in the context of PRO measures will also be discussed.
3 credits
Potentially offered with the following Instruction Type(s):
Lecture

PHAD 7920: BioPharma. Dev. and Mktg
Pharmacy Administration
This course is designed to provide participants with insight into the administrative procedures involved in the developing and marketing of new biomedical innovations, from discovery to market approval, including both industrial and policy perspectives.
3 credits
Potentially offered with the following Instruction Type(s):
Lecture

PHAD 7940: Pharmacoeconomics
Pharmacy Administration
Principles and analytical techniques in assessing the overall value of pharmaceutical products, services, programs, and other health care interventions, including hands-on experience of pharmacoeconomic modeling.
3 credits
Potentially offered with the following Instruction Type(s):
Lecture

PHAD 7960: Pharmacoepidemiology
Pharmacy Administration
This graduate-level course is designed to familiarize students in pharmacy or other health care fields with the principles of pharmacoepidemiology. To this end, the course would provide a comprehensive review of research study designs used in the science of pharmacoepidemiology. It would also involve a discussion of primary literature that details case examples of drugs withdrawn from the United States (US) drug market due to adverse events.
3 credits
Potentially offered with the following Instruction Type(s):
Lecture

PHAD 7998A: Dissertation
Pharmacy Administration
No grade
1 - 18 credits
Potentially offered with the following Instruction Type(s):
Dissertation

PHAD 7999A: Spec. Top. in Pharm Administra
Pharmacy Administration
Course designed to cover special topics in pharmacy administration or health care administration in general that are not covered in regular courses and may be suitable for MS or PhD students in pharmacy administration or other related disciplines.
1 - 3 credits
Potentially offered with the following Instruction Type(s):
Lecture