Curriculum - Doctor of Philosophy

CORE COURSES

**Pharm 545-546. Pharmacoconomics, Healthcare Systems Review. (3, 3)**

**Pharm 547. Research Design & Analysis (3)**
An introduction for graduate students in pharmacy administration to issues in pharmacy practice research. Research process, methods, measurement, tools, designs and ethics.

**Pharm 591. Seminar in Administrative Pharmacy. (1)**
This course will give the students experience in organizing and presenting their thoughts and interpretations on a selected subject. The seminar will provide the student with an opportunity to develop writing and formal oral presentation skills. (Students must register every semester.)

**Ed Psy 511. Introductory Educational Statistics. (3)**
Foundations of statistical methods for research producers. Covers sampling methods, descriptive statistics, standard scores, distributions, estimation, statistical significance testing. t-tests, correlation, chi-square, and effective size using SPSS for Windows and computation.

**Ed Psy 603. Applied Statistical Design and Analysis. (3)**
Includes factorial analysis of variance (ANOVA), planned comparisons, post hoc tests, trend analysis, effect size and strength of association measures, repeated measures designs. Emphasis on solving applied problems using statistical analysis with computer software.

**Ed Psy 604. Multiple Regression Techniques as Applied to Education. (3)**
Includes bivariate regression, multiple regression with continuous and categorical independent variables and interactions, orthogonal and nonorthogonal designs and selected post hoc analyses. Computer analysis conceptual understanding and applications to educational research are stressed.

**Ed Psy 606. Applied Multivariate Statistics. (3)**
Advanced statistical techniques including discriminant function analysis of variance, canonical correlation, principal components analysis and exploratory factor analysis. Emphasis on use and interpretation of computer software.
ELECTIVES:

**College of Education: Education Psychology:**

504. Statistical Software Applications for Education Research. [Mainframe Computer Software Use in Education.] (1-3) [3]
Provides open lab, practicum-style opportunity to learn SPSS for Windows. First five weeks (1 unit) cover introduction, orientation and basics. Remainder covers other techniques (1-2 credits) by arrangement with instructor.

607 Structural Equation Modeling. (3)
Theory, application, interpretation of Structural Equation Modeling techniques. Includes covariance structures, path diagrams, path analysis, model identification, estimation and testing; confirmatory factor analysis, structural equation modeling and linear structural relations using latent variables.

**Communication and Journalism:**

574. Diffusion of Innovations. (3)
The spread of new ideas, especially technological innovations, among the members of a system. Sources of innovation, importance of interpersonal networks in diffusion, and consequences of technological innovations.

**Economics:**

410. Topics in Health Economics. (3)
Specialized topics in health economics including medical education, national health insurance, comparative systems, drug industry and other contemporary issues. Emphasis on empirical applications in the study of health care issues.

501. Microeconomics I. (3)
Topics include producer and consumer theory, duality and welfare measures, competitive markets and monopoly and decision-making under uncertainty.

503. Economic Theory. (3)
Macro and micro theory with applications.

505. Applied Macroeconomics. (3)
Basic macroeconomic theory applied to current economic problems and policy issues.

506. Macroeconomics I. (3)

508. Statistics and Introduction to Econometrics. (3)
Discrete and continuous probability distributions; expectations; joint, conditional marginal
distributions; hypothesis testing; least squares estimators; violation of the least squares principle. Econometric software with applications.

509. Econometrics I. (3)
Theory and applications: ordinary and generalized least squares, hypothesis testing, dummy variable and distributed lag models; simultaneous equation and two stage least square models; forecasting. Emphasis on computer modeling.

510. Econometrics II. (3)
Simultaneous equation methods, nonlinear least squares, maximum likelihood method, qualitative dependent variable models, asymptotic properties and test statistics. Emphasis on computer modeling.

513. Microeconomics II. (3)
Competitive equilibrium and welfare economics. Topics from imperfect competition, decision-making under uncertainty, introduction to game theory and distribution theory.

514. Macroeconomics II. (3)

English:

513. Scientific, Environmental and Medical Writing (3)
Theoretical and practical studies of writing in the sciences. Addresses writing for both popular and professional audiences.

Health Education:

506. Health Behavior. (3)
This course explores multiple theories and models and their application in the development of health promotion programs to support change within individuals, families and communities.

Pharmacy:

597. Research Problems in Pharmaceutical Sciences. (1-5)
Research in pharmaceutical sciences.

599. Thesis. (1-6)

699. Dissertation, (1-9)

707. Administrative Pharmacy. (2)
Marketing and economic concepts of pharmacy practice, plus a focus toward marketing of pharmaceutical services as products, pharmacy finance and economics in operation pharmacoeconomics and decision-making.
Public Administration:

500. Public Management and Policy: (Contemporary Public Administration) (3)
Principles and methods of public management and policy analysis: policy formulation and implementation, organizational relations, institutional development, administrative process and public sector ethics.

530. Health Services Administration. (3).
Administrative and organizational arrangements for health care; manpower needs and resources; problems of coordination, supervision and delivery. Problems of preventive medicine with particular emphasis on environmental factors in health care.

Public Health:

Concepts of public health related to determinants of health; cultural, social and political concepts of disease; disease prevention; health promotion, including individual behavior change and community-based intervention; health policy.

502. [Biomed 565.] Epidemiologic Methods I. (3)
Provides an overview of the methods of epidemiologic research. Course is designed to provide students with the capability of understanding epidemiologic measures of disease occurrence, interpreting the findings of epidemiologic studies and integrating the results of epidemiologic research into public health practice.

504. [Biomed 564.] Rural Health. (Rural Health Issues.)
Increases awareness of the complex factors affecting delivery of rural health services in New Mexico and the U.S and examines rural health support systems and rural health policy.

505. [Biomed 602.] Cultural, Social and Behavioral Theory and Health. (3)
In-depth investigation of behavioral, social and cultural theory’s application to public health problem definition, prevention and intervention programs. Problem etiology and change strategy theories are investigated through application to specific public health problems among culturally distinct and marginalized groups in New Mexico. (Spring)

506. [Biomed 559.] Environmental/Occupational Health [Environmental and Occupational Health.] (3)
Applies the public health perspective to environmental and occupational disease. Students will learn to apply the ecologic principles of agent, host and environment to diseases associated with exposures to the physical environment and chemical contaminants.

520. [Biomed 566.] Epidemiologic Methods II(3)
Provides a good understanding of the principles and methods involved in the design, conduct, analysis and interpretation of epidemiologic research.
525 [Biomed 578.] Epidemiology Surveillance. (2)
Covers disease surveillance in the history of public health; establishing a disease surveillance system; surveillance of infectious diseases, chronic/environmental diseases and behavioral risk factors; surveillance system evaluation and surveillance in emergency conditions. Emphasizes the central role that surveillance plays in development of public health policy.

527. [Biomed 608.] Chronic Disease Epidemiology. (2)
Familiarize student with methods of measuring morbidity and mortality from chronic disease, surveillance of behavioral risk factors for chronic disease, the scientific basis and cost-benefit analysis of screening programs, evaluation of prevention efforts and modeling disease patterns to predict future needs.

550. [Biomed 573.] The Political Economy of Health. (3)
Examines economic policies associated with health and well-being. Critically reviews economic theories and arguments and analyses indicators of economic growth and income distribution. Introduces theories and tools of policy analysis to explore public health issues on the political agenda.

551. [Biomed 611.] Health Care Strategic Management. (2)
Designed to provide an overview of human resources in areas such as supervision and teamwork, and financial management to include budgeting and other management issues in health care organizations. Taught using case-study method.

554. [Biomed 603.] Health Care and Public Health Policy. (2)
Explores the private and public aspects of health care and public health. Emphasis is placed upon understanding the role of private initiatives like HMOs versus public initiatives like Medicare/Medicaid and public health in the U.S.

557. [Biomed 562.] International Health. (2)
This class applies economic, sociologic and anthropologic perspectives to health care problems across national and international groups. Strategies for analyzing needs in a cultural context are stressed.

564. [Biomed 574.] Health Communication. (23) (2)
Explores topics in patient-doctor and client-health care worker communication. From the public health standpoint, emphasizes communication about health promotion and disease prevention. Considers critically the communication processes in public health campaigns, especially how health policy issues are portrayed in mass media.

School of Management:

502. Accounting and Management Information Systems I. (3)
within Generally Accepted Accounting Principles. Foundations of corporate financial statement analysis.

503. Managerial Accounting. (3)
Primary emphasis on the role of accounting in the processes of management decision-making for planning and control. Topics include: relevant cost analysis, standard costing and analysis of variances; budgeting and responsibility accounting, planned capital expenditures.

504. Microeconomics for Managers. (3)
This is a course in microeconomics, which is the study of individual decision-making in a world in which wants exceed the available resources.

505. Macroeconomics for Managers. (3)
This course is intended to provide the student with a theoretical and applied knowledge of macroeconomics, money and banking and international economics.

506. Organizational Behavior and Diversity. (3)
Intensive examination of behavioral science research and theory as a basis for understanding, managing and changing organizations. The course emphasizes effective management with diverse individuals.

508. Ethical, Social, Political and Legal Environment. [Ethical, Political and Social Environment of Business.] (3)
Influence of the external environment on management decisions and organizational welfare and how organizations affect the external environment and society. Examination of impacts of ethical, social, political, legal, and technological systems on management and how managers can deal with external issues.

509. Legal issues in Management. [Legal Environment of Management.] (3)
An introduction to the law with emphasis on its application to decision making in the private, not-for-profit and public sectors.

510. Introduction to Information Processing. (3)
Management information system concepts: components of M.I.S., hardware, software, analysis, design, and implementation. Managerial issues of M.I.S. strategy and its effects on an organization’s productivity, effectiveness, and efficiency. Spreadsheet, database, graphics, and macro applications.

513. Technological Forecasting and Assessment. (3)
Methods used in forecasting broad scientific and technological advances and assessing their applicability in the commercial world, with stress upon the broad macro-level economic issues, such as competition, positioning of technology in the market and further research to apply the innovation to commercially viable products.
514. Technological Entrepreneurship. (3)
A clinical experience in the development of a new firm to exploit a significant technological innovation. Student teams work with inventors/entrepreneurs, faculty and external resources to establish new companies.

522. Marketing Management. (3)
Analysis of the marketing effort and decision-making process in private, not-for-profit and public institutions. Normative models for decision-making in different marketing situations. Analytical tools available for appraising, diagnosing, organizing, planning and implementing market plans. Analysis of economic, social and political forces leading to change in the market place. Development of concepts useful in evaluating marketing situations, including those in the international setting.

526. Financial Management. (3)
The finance function and its relation to other functions of a firm. Topics include: analysis and budgeting of funds, management of current assets, financing short-term and intermediate-term needs, planning long-term debt policy and capital structure, capital costs and budgeting, dividend policy, valuation, mergers and acquisition.

528. International Management. (3)
Theoretical foundations and conceptual frameworks for analyzing international management problems in diverse international institutions. Analysis of foreign environments within which multinational organizations operate; survey of various dimensions of international operations; awareness of differences in management practices around the world.

Statistics:

538. Biostatistical Method I for Public Health and Medical Sciences (3)
Covers basic statistical methods, including statistical summaries and inference. Methods of summarizing data include graphical displays and numerical summaries. Statistical inference includes hypothesis testing and confidence intervals. Methods for continuous and categorical data are studied.

539. Biostatisical Method II for Public Health and Medical Sciences (3)
Covers basic models used in the statistical analysis of studies in the medical sciences and public health field, with an emphasis on epidemiology. Linear regression, analysis of variance, logistic regression and survival models are studied.