SPPS 207 Introduction to Health Care Systems and Policy
Students are introduced to the organization, financing and delivery of health care services in the United States. Using access to prescription drugs as one framework, the relationship of providers, patients, payers, producers, purchasers and policy makers will be analyzed as a critical review of the systems assets and liabilities. In addition, discussions will include other comparisons of other national health policies and current United States health policy issues and controversies.

SPPS 208 Study Design
Students attain critical appraisal skills of medical/pharmacy literature for therapeutic decisions. Study designs range from randomized controlled trials to observational registries including clinical, economic and humanistic endpoints. Elements of hypothesis, populations, procedures, methods, validity, execution, analysis, reporting, and ethical considerations are presented.

SPPS 216 Laboratory Medicine
Laboratory Medicine is an introduction to fundamental laboratory biological tissue testing. Emphasis is placed on general interpretation of laboratory data, normal and abnormal, the systematic use of laboratory tests in the evaluation and management of the most common and important clinical conditions, and the anticipated changes when therapeutics are applied.

SPPS 220 Drug Information
Building on Pharmacy Informatics Drug Information is an introduction and focus on the various types of drug information and databases available to the pharmacy practitioner and their application to patient care. Practical exercises will provide the student with hands-on experience using numerous drug information sources, analysis and evaluation techniques.

SPPS 230 Foundations of Human Biology
Foundations of Human Biology is an interdisciplinary course in the integrated sciences curriculum of Human Health and Disease in which the biological basis of modern medicine will be discussed. This includes a fundamental background in relevant cell biology, molecular biology, and genetics. Group study and collaboration are encouraged.
SPPS 231 Cardiovascular System
Cardiovascular System, in the integrated sciences curriculum Human Health and Disease, emphasizes the normal function of the cardiovascular system, focusing on cardiovascular physiology, related cell and molecular biology and pharmacology. To assure that pharmacology can be successfully integrated into this and subsequent organ system blocks, Cardiovascular System includes lectures on some important principles of pharmacology, including drug-receptor interactions and the physiology and pharmacology of the autonomic nervous system.

SPPS 232 Pulmonary System
The Pulmonary System block in the Human Health and Disease courses incorporates anatomy, histology, physiology and pharmacology of the pulmonary system with an emphasis on normal lung function and related physiology, cell and molecular biology, and pharmacology and an introduction to pulmonary disease. Both clinical and basic science faculty will teach the course, which emphasizes the importance of collaboration and teamwork in modern medical and pharmacy practice.

SPPS 233 Gastrointestinal System
The Gastrointestinal System block in the Human Health and Disease courses introduces key physiological concepts necessary to understand and treat patients with digestive and liver diseases. In keeping with an integrated approach to medical and pharmaceutical education, the course spans various disciplines, ranging from Physiology and Pharmaceutical Biology to Anatomy, Histology, and Pharmacology. Pathophysiological principles and links to specific disease states will be mentioned.

SPPS 234 Renal System
The Renal System of the integrated sciences curriculum Human Health and Disease emphasizes normal function of the kidney and urinary tract, focusing on kidney physiology, cell and molecular biology and pharmacology. Small-group sessions and laboratories incorporating Renal Problem Set/Case Studies will help students master important concepts in kidney physiology. In the Drug Excretion small-group session students will discuss problems in pharmacokinetics and drug excretion. Renal System also includes team-based learning (TBL) sessions in which students work on problems presented by the instructor.

SPPS 236 Immunology and Hematology
Immunology & Hematology of the integrated sciences curriculum, two separate courses under a single course, presents immunology followed by hematology. Immunology provides the fundamental background of the human immune system including allergy and autoimmunity. Hematology will extend the cellular immunology background to diseases of blood cells. Hematology will include lectures, cases, and laboratories and balance active and passive learning to optimally provide a clinically relevant understanding of the human blood system.

Updated September 2014
**SPPS 237 Endocrinology, Reproduction and Metabolism**
ERM provides an integrated introduction to the physiology of the endocrine, reproductive and metabolic systems of humans. ERM imparts an understanding of the cell and molecular biology, pharmacology and biochemical principles underlying metabolism, the mechanisms of hormone action, and the role of the endocrine system in regulation of homeostasis and reproduction.

**SPPS 238 Microbiology**
Microbiology of the integrated sciences curriculum is designed to provide the basic biology of microbial pathogens, the mechanisms by which they cause disease, the host's defenses against microbial infection, and the principles of antimicrobial therapy, incorporating related cell and molecular biology, and pharmacology. This will establish a useful body of knowledge relevant to the diagnosis, treatment, and prevention of infectious diseases and to provide a basic framework for continuous learning.

**SPPS 239 Pharmacy Topics in Endocrinology**
This course introduces students to endocrinology with an emphasis on endocrine pathophysiology. Topics include feedback control theory, the major hormone systems, presentation of hormone and drug receptors and targets and pharmacy applications. Course is designed to provide a foundation/enhance the SSPPS/SOM integrated Scientific Curriculum course SPPS 237.

**SPPS 247 Principles of Pharmacology and Physiology**
An introduction to the principles of pharmacology and physiology at the molecular and cellular level including the cardiovascular, pulmonary and gastrointestinal systems as a foundation for preparing students for therapeutics.

**SPPS 248 Principles of Pharmacology and Physiology**
An introduction to the principles of pharmacology and physiology with a focus on the renal, musculoskeletal, neurological and CNS systems to prepare students with a foundation for therapeutics.

**SPPS 249 Principles of Pharmacology and Physiology**
An introduction to the principles of pharmacology and physiology with a focus on hematology, endocrinology, reproduction, metabolism and microbiology and immunology as a foundation for therapeutics.