

# PHARMACY (PHAR)

## PHAR 500 Educational Tour (0 Credits)

Lecture: 0, Lab: 0

College/School: College Of Pharmacy/Hlth Sci.

Department: Phar Adm and Adm Health Scienc

## PHAR 501 Pharmacotherapy IB : Renal Disorders (1 Credits)

Lecture: 1

An integrated organ based approach to pharmacotherapy that combine knowledge of pathophysiology, medicinal chemistry, pharmacology, applied pharmacokinetics and therapeutics to develop pharmaceutical care plans for patients with disorders of the Renal system.

College/School: College Of Pharmacy/Hlth Sci.

Department: Phar Praticce/Clinical Hlth Sci

## PHAR 502 Independent Study (1-4 Credits)

Lecture: 1-4

Students enrolled in this course will engage in independent study for a didactic pharmacy course that is in the pharmacy curriculum, but not available for enrollment during the current semester. Variable number of hours of lecture per week,/ Students may enroll in up to a total of 8 semester credit hours of Independent Study while in the professional pharmacy program. Special permission form the Associate Dean of Academic Affairs required for registration.

College/School: College Of Pharmacy/Hlth Sci.

Department: Phar Praticce/Clinical Hlth Sci

## PHAR 503 Pharmacotherapy IIA : Endocrine System Disorders (3 Credits)

Lecture: 3

An integrated organ based approach to pharmacotherapy that combine knowledge of pathophysiology, medicinal chemistry, pharmacology, applied pharmacokinetics and therapeutics to develop pharmaceutical care plans for patients with disorders of the endocrine system.

College/School: College Of Pharmacy/Hlth Sci.

Department: Dpt of Pharmaceu Sc& Env HS

## PHAR 504 Pharmacotherapy IA : Nervous System Disorders (4 Credits)

Lecture: 4

An integrated organ based approach to pharmacotherapy that combine knowledge of pathophysiology, medicinal chemistry, pharmacology, applied pharmacokinetics and therapeutics to develop pharmaceutical care plans for patients with disorders of the nervous system.

College/School: College Of Pharmacy/Hlth Sci.

Department: Dpt of Pharmaceu Sc& Env HS

## PHAR 505 Pharmacotherapy IIB : Cardiovascular Disorders (3 Credits)

Lecture: 3

An integrated organ based approach to pharmacotherapy that combine knowledge of pathophysiology, medicinal chemistry, pharmacology, applied pharmacokinetics and therapeutics to develop pharmaceutical care plans for patients with disorders of the Cardiovascular system.

College/School: College Of Pharmacy/Hlth Sci.

Department: Dpt of Pharmaceu Sc& Env HS

## PHAR 510 Pharmacotherapy Skills Lab I (1 Credits)

Lecture: 0, Lab: 3

Gather and evaluate information for the purpose of developing a patient-centered pharmaceutical care plan for disorders pertaining to the nervous, cardiovascular and urinary systems. Prerequisites: Completion of all 400 level and fall semester P2 courses in the professional pharmacy program.

College/School: College Of Pharmacy/Hlth Sci.

Department: Phar Praticce/Clinical Hlth Sci

## PHAR 511 Pharmacy Practice III Lab (1 Credits)

Lab: 3

Application of concepts presented in PHAR 522 to patient care.

Prerequisites: Completion of all 400-level courses in the professional pharmacy program.

College/School: College Of Pharmacy/Hlth Sci.

Department: Phar Praticce/Clinical Hlth Sci

## PHAR 512 Patient Assessment Laboratory (1 Credits)

Lab: 3

Application of basic patient assessment techniques, terminology and the modifications caused by common diseases states and drug therapy.

Topics include: acquisition of a comprehensive patient history, advanced cardiac life support, development of triage and referral skills, and use of OTC point of care testing devices Prerequisite: Completion of all 400-level courses in the professional pharmacy program.

College/School: College Of Pharmacy/Hlth Sci.

Department: Phar Praticce/Clinical Hlth Sci

## PHAR 513 Pharmaceutics III Lab (1 Credits)

Lab: 3

Pharmaceutics III Laboratory (1) Demonstrations, experiments, simulations, case studies, recitation, presentations, and small group discussions to accompany PHAR 533. Three hours of laboratory per week. Prerequisite/Corequisite: Successful completion of or concurrent enrollment in PHAR 533.

Prerequisite(s): (PHAR 533 (may be taken concurrently))

College/School: College Of Pharmacy/Hlth Sci.

Department: Dpt of Pharmaceu Sc& Env HS

## PHAR 514 Pharmaceutics IV Lab (1 Credits)

Lab: 3

Pharmaceutics IV Laboratory (1) Demonstrations, case studies, recitation, presentations, and small group discussions to accompany PHAR 534.

Three hours of laboratory per week. Prerequisite/Corequisite: Successful completion of or concurrent enrollment in PHAR 534.

Prerequisite(s): PHAR 534 (may be taken concurrently)

College/School: College Of Pharmacy/Hlth Sci.

Department: Dpt of Pharmaceu Sc& Env HS

## PHAR 515 Pharmacy Seminar (1 Credits)

Lecture: 2

Pharmacy Seminar (1) Discussions on relevant research topics and literature in the clinical and pharmaceutical sciences. Student presentations and discussions required. One hour of lecture per week.

Prerequisite: Completion of all 400-level courses in the College of Pharmacy and Health Sciences.

College/School: College Of Pharmacy/Hlth Sci.

Department: Dpt of Pharmaceu Sc& Env HS

## PHAR 516 Pharm Practice Experience III (1 Credits)

Lecture: 1

Students will be exposed to and participate in supervised pharmacy practice activities in a variety of contemporary community pharmacy practice settings. Prerequisites: Completion of all 400-level courses in the professional pharmacy program.

College/School: College Of Pharmacy/Hlth Sci.

Department: Phar Praticce/Clinical Hlth Sci

**PHAR 517 Pharm Practice Experience IV (1 Credits)****Lecture: 1**

Continued development of skills acquired in PHAR 416. Students will be exposed to and participate in supervised pharmacy practice activities allowing direct interaction with diverse patient populations in a variety of practice settings. Prerequisites: Completion of all 400 level courses in the professional pharmacy program.

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Phar Praticce/Clinical Hlth Sci

**PHAR 518 Prin of Drug Action Lab III (1 Credits)****Lab: 3**

Demonstrations, case studies, recitation, presentations, and small group discussions to accompany PHAR 538. Prerequisites: PHAR 439, PHAR 419, and completion of all 400-level courses in the professional pharmacy program. Co-requisite: Successful completion of or concurrent enrollment in PHAR 538.

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Phar Praticce/Clinical Hlth Sci

**PHAR 519 Pharm III Pharmacokinetics Lab (1 Credits)****Lab: 3**

Examples and problems utilizing pharmacokinetic principles as applied to drug therapy. Prerequisites: PHAR 434, PHAR 414, and completion of all 400-level courses in the professional pharmacy program. Co-requisite: Successful completion of or concurrent enrollment in PHAR 539.

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Phar Praticce/Clinical Hlth Sci

**PHAR 520 Integrated Laboratory I (2 Credits)****Lab: 2**

Gather, evaluate and integrate evidence based medical information and patient specific data for the purpose of developing a patient- centered pharmaceutical care plan for disorders pertaining to the nervous, and renal disorders.

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Phar Praticce/Clinical Hlth Sci

**PHAR 521 Non Prescription Product (2 Credits)****Lecture: 2, Lab: 0**

Non-Prescription Products (2) Study of non-prescription drug items and prosthetics which allows the student to evaluate over-the-counter products and make judgments concerning benefits to patients. Two hours of lecture per week. Prerequisites: Completion of all 400-level courses.

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Phar Praticce/Clinical Hlth Sci

**PHAR 522 Pharmacy Practice III (2 Credits)****Lecture: 2**

Prescription and non-prescription medication alterations specific for special population patients (e.g. pediatric, geriatric, pregnant, sickle cell, cystic fibrosis, and others). Dosage calculations, dosage adjustments and drug monitoring for positive/negative outcomes in special population patients are discussed. Prerequisites: Completion of all 400-level courses in the professional pharmacy program.

**Prerequisite(s):** (PHAR 422 and PHAR 412 and PHAR 434 and PHAR 414 and PADM 430 and PHAR 417 and PHAR 415 and PHAR 439 and PHAR 419)

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Phar Praticce/Clinical Hlth Sci

**PHAR 523 Pharmacy Practice III : Complementary and Alternative Medicines (2 Credits)****Lecture: 2**

Study of non prescription complementary and alternative medications and prosthetics which allows students to appropriately evaluate, select and counsel patients on the use, benefit and adverse effects of the products.

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Dpt of Pharmaceu Sc& Env HS

**PHAR 526 IPPE I - Community I (2 Credits)****Lecture: 2**

Students will be exposed to and participate in supervised pharmacy practice activities in a variety of contemporary community pharmacy practice settings.

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Phar Praticce/Clinical Hlth Sci

**PHAR 527 IPPE - Community II (1 Credits)****Lecture: 1**

Students will be exposed to and participate in supervised pharmacy practice activities in a variety of contemporary community pharmacy practice settings.

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Dpt of Pharmaceu Sc& Env HS

**PHAR 529 Integrated Laboratory II (2 Credits)****Lab: 2**

Gather, evaluate and integrate evidence based medical information and patient specific data for the purpose of developing a patient- centered pharmaceutical care plan for disorders pertaining to the cardiovascular, and endocrine disorders.

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Dpt of Pharmaceu Sc& Env HS

**PHAR 530 Principles of Drug Action I (3 Credits)****Lecture: 3**

An integrated course incorporating pathophysiology, pharmacology, and pharmaceutical/medicinal chemistry concepts essential to understanding the basis of drug use in diseases of the nervous and renal systems. Core concepts include mechanism of drug action and the chemical basis of pharmacology.

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Phar Praticce/Clinical Hlth Sci

**PHAR 531 Pharmacoeconomic Outcomes (3 Credits)****Lecture: 3**

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Phar Praticce/Clinical Hlth Sci

**PHAR 532 Drug Info and Literature Eval (3 Credits)****Lecture: 3**

Drug Information and Literature Evaluation (3) Principles of evaluation of primary literature and its implications in the provision of evidence- based pharmaceutical care. Prerequisite/Corequisite: Completion of all 400 level and fall semester P2 courses in the professional pharmacy program.

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Phar Praticce/Clinical Hlth Sci

**PHAR 533 Pharmaceutics Dosage Form II (3 Credits)****Lecture:** 3

Pharmaceutics III - Dosage Forms II (3) Biopharmaceutics and applications of physiochemical principles to drugs, dosage forms, and drug action. Three hours of lecture per week. Prerequisites: PHAR 414 and PHAR 434. Corequisite: Concurrent enrollment in PHAR 513.

**Prerequisite(s):** (PHAR 434 and PHAR 414 and PHAR 513 (may be taken concurrently))

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Dpt of Pharmaceu Sc& Env HS

**PHAR 534 Pharmaceutics IV (3 Credits)****Lecture:** 3

Pharmaceutics IV - Dosage Forms III (3) Explores the principles and application of novel drug delivery systems and sterile products. Three hours of lecture per week. Prerequisites: PHAR 513 and PHAR 533. Corequisite: Concurrent enrollment in PHAR 514.

**Prerequisite(s):** (PHAR 513 and PHAR 533) and PHAR 514 (may be taken concurrently)

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Dpt of Pharmaceu Sc& Env HS

**PHAR 536 Patient Assessment & Phys Diag (2,3 Credits)****Lecture:** 3

Patient Assessment and Physical Diagnosis (3) Applications of physical diagnostic examinations in various pathological states for provision of pharmaceutical care. Three hours of lecture per week. Prerequisite: Completion of all 400-level courses in the College of Pharmacy and Health Sciences.

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Phar Pratic/Clinical Hlth Sci

**PHAR 538 Principles of Drug Action III (3 Credits)****Lecture:** 3

Continuation of PHAR 439. Interdisciplinary course incorporating pathophysiology, pharmacology, and pharmaceutical/medicinal chemistry concepts essential to understanding the basis of drug use in diseases of the eye, ear, nose, and throat, integumentary system, and endocrine system. Prerequisites: PHAR 439, PHAR 419, and completion of all 400-level courses in the professional pharmacy program. Co-requisite: Successful completion of or concurrent enrollment in PHAR 518.

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Phar Pratic/Clinical Hlth Sci

**PHAR 539 Pharm III Pharmacokinetics (3 Credits)****Lecture:** 3

Basic principles of in vivo drug kinetics (linear and nonlinear), principles of bioavailability/bioequivalence, and factors that affect bioavailability of a drug such as physio-chemical properties, dosage formulations, and physiological factors. Prerequisites: PHAR 434, PHAR 414, and completion of all 400-level courses in the professional pharmacy program. Co-requisite: Successful completion of or concurrent enrollment in PHAR 519.

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Phar Pratic/Clinical Hlth Sci

**PHAR 541 Principles of Drug Action II (4 Credits)****Lecture:** 4

An integrated course incorporating pathophysiology, pharmacology, and pharmaceutical/medicinal chemistry concepts to understanding the basis of drug use in diseases of the cardiovascular and endocrine systems. Core concepts include mechanism of drug action and the chemical basis of pharmacology.

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Dpt of Pharmaceu Sc& Env HS

**PHAR 542 Pharmacotherapy I (4 Credits)****Lecture:** 4

Pharmacotherapy I - Nervous System Disorders (4) An integrated course in which practice-based education outcomes from pathophysiology, pharmacology, medicinal chemistry, applied pharmacokinetics, and the clinical sciences are used to develop pharmaceutical care plans for patients with disorders of the nervous system. Prerequisite/ Corequisite: Completion of all 400 level and fall semester P2 courses in the professional pharmacy program.

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Phar Pratic/Clinical Hlth Sci

**PHAR 543 Pharmacotherapy II (4 Credits)****Lecture:** 4

Pharmacotherapy II - Cardiovascular and Urinary System Disorders (4) An integrated course in which practice-based education outcomes from pathophysiology, pharmacology, medicinal chemistry, applied pharmacokinetics, and the clinical sciences are used to develop pharmaceutical care plans for patients with disorders of the cardiovascular and genitourinary system. Prerequisite/Corequisite: Completion of all 400 level and fall semester P2 courses in the professional pharmacy program.

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Phar Pratic/Clinical Hlth Sci

**PHAR 581 Clinical Clerkship (4,8 Credits)****Lecture:** 0, **Lab:** 40

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Dpt of Pharmaceu Sc& Env HS

**PHAR 601 Special Problems (1-8 Credits)****Lecture:** 2-8

Special Problems (0-8) Methods in pharmaceutical sciences and clinical research; application of hypothesis formulation, literature evaluation, experimental design, clinical skills, data acquisition/analysis, and formal presentations. Variable number of hours of lecture per week. Students may enroll in up to a total of 8 semester credit hours of Special Problems while in the professional pharmacy program. Prerequisite: Special permission by the Department.

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Phar Pratic/Clinical Hlth Sci

**PHAR 610 Pharmacotherapy Skills Lab II (1 Credits)****Lab:** 3

Pharmacotherapy Skills Lab II (1) Gather and evaluate information for the purpose of developing a patient-centered pharmaceutical care plan for disorders pertaining to the immune system, infectious diseases and respiratory system. Prerequisite/Corequisite: Completion of all 500-level courses in the professional pharmacy program.

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Phar Pratic/Clinical Hlth Sci

**PHAR 611 Pharmacotherapy Skills Lab III (1 Credits)****Lab:** 3

Substance Abuse Education (2) Drug educational program for organizing and training pharmacy students to speak to junior and senior high school students on the potential hazards of drug abuse. Two hours of lecture per week. Prerequisite: Second professional year standing in the College of Pharmacy and Health Sciences or consent of the instructor.

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Phar Pratic/Clinical Hlth Sci

**PHAR 614 Pharmaceutics V Lab (1 Credits)****Lab:** 3

Pharmaceutics V Laboratory (1) Demonstrations, case studies, recitation, presentations, computer simulations, and small group discussions to accompany PHAR 634. Three hours of laboratory per week. Prerequisite/Corequisite: Successful completion of or concurrent enrollment in PHAR 634.

**Prerequisite(s):** PHAR 634 (may be taken concurrently)**College/School:** College Of Pharmacy/Hlth Sci.**Department:** (R)Dept of Pharmaceutical Sci**PHAR 615 Prescription Practice Lab (1 Credits)****Lecture:** 0, **Lab:** 3

Prescription Practice Laboratory (1) Continuation of PHAR 635 with emphasis on appropriate dispensing practices and procedures. Three hours of laboratory per week. Prerequisite/Corequisite: Successful completion of or concurrent enrollment in PHAR 635 and completion of all 500-level courses.

**College/School:** College Of Pharmacy/Hlth Sci.**Department:** Phar Praticce/Clinical Hlth Sci**PHAR 616 Pharmaceutics VI Lab (1 Credits)****Lab:** 3

Pharmaceutics VI Laboratory (1) Demonstrations, case studies, recitation, presentations, and small group discussions to accompany PHAR 636. Three hours of laboratory per week. Prerequisite/Corequisite: Successful completion of or concurrent enrollment in PHAR 636.

**Prerequisite(s):** PHAR 636 (may be taken concurrently)**College/School:** College Of Pharmacy/Hlth Sci.**Department:** Dpt of Pharmaceu Sc& Env HS**PHAR 617 Medication Therapy Management (1 Credits)****Lecture:** 1

Application of medication knowledge to improve medication therapy outcomes for patient using patient data, medication reviews to formulate treatment plans, educating patients to assure medication adherence and monitoring efficacy and safety of therapy.

**College/School:** College Of Pharmacy/Hlth Sci.**Department:** Dpt of Pharmaceu Sc& Env HS**PHAR 618 Pharm Practice Experience V (1 Credits)****Lecture:** 1

Introductory Pharmacy Practice Experiences V- Health Care Systems (1) Introductory participation in pharmaceutical care in institutional and other health care settings. Prerequisite/Corequisite: Completion of all 500-level courses in the professional pharmacy program.

**College/School:** College Of Pharmacy/Hlth Sci.**Department:** Phar Praticce/Clinical Hlth Sci**PHAR 619 Pharm Practice Experience VI (1 Credits)****Lecture:** 1

Introductory Pharmacy Practice Experiences VI- Health Care Systems (1) Continuation of introductory participation in pharmaceutical care in institutional and other health care settings. Prerequisite/Corequisite: Completion of all 500 level and fall semester P3 courses in the professional pharmacy program.

**College/School:** College Of Pharmacy/Hlth Sci.**Department:** Phar Praticce/Clinical Hlth Sci**PHAR 620 Integrated Laboratory III (2 Credits)****Lab:** 2

Gather, evaluate and integrate evidence based medical information and patient specific data for the purpose of developing a patient- centered pharmaceutical care plan for disorders pertaining to the infectious diseases, immune and respiratory system disorders.

**College/School:** College Of Pharmacy/Hlth Sci.**Department:** Phar Praticce/Clinical Hlth Sci**PHAR 621 Integrated Laboratory IV (1 Credits)****Lab:** 1

Gather, evaluate and integrate evidence based medical information and patient specific data for the purpose of developing a patient- centered pharmaceutical care plan for disorders pertaining to the gastrointestinal system disorders.

**College/School:** College Of Pharmacy/Hlth Sci.**Department:** Dpt of Pharmaceu Sc& Env HS**PHAR 627 IPPE III - Healthcare Systems (2 Credits)****Lecture:** 2

Introductory participation in pharmaceutical care in institutional and other health care settings.

**College/School:** College Of Pharmacy/Hlth Sci.**Department:** Phar Praticce/Clinical Hlth Sci**PHAR 628 IPPE IV - Healthcare Systems (1 Credits)****Lecture:** 1

Introductory participation in pharmaceutical care in institutional and other health care settings.

**College/School:** College Of Pharmacy/Hlth Sci.**Department:** Dpt of Pharmaceu Sc& Env HS**PHAR 629 Principles of Drug Action IV (2 Credits)****Lecture:** 2

An integrated course incorporating pathophysiology, pharmacology, and pharmaceutical/medicinal chemistry concepts to understanding the basis of drug use in diseases of the gastrointestinal system. Core concepts include mechanism of drug action and the chemical basis of pharmacology.

**College/School:** College Of Pharmacy/Hlth Sci.**Department:** Dpt of Pharmaceu Sc& Env HS**PHAR 630 Pharmacotherapeutics I (3 Credits)****Lecture:** 3

Pharmacotherapeutics I (3) Series of organized lectures stressing rational drug therapy in acute and chronic disease states. Three hours of lecture per week. Prerequisite: Completion of all 500-level courses in the College of Pharmacy and Health Sciences.

**College/School:** College Of Pharmacy/Hlth Sci.**Department:** Phar Praticce/Clinical Hlth Sci**PHAR 631 Drug Information Literature (3 Credits)****Lecture:** 3

Drug Information, Literature, and Research Methods (3) Study of basic statistical analysis, study design, and literature assessment. Emphasis placed on comprehensive evaluation of published studies and development of research protocols. Three hours of lecture per week. Prerequisite: Completion of all 500-level courses in the College of Pharmacy and Health Sciences.

**College/School:** College Of Pharmacy/Hlth Sci.**Department:** Phar Praticce/Clinical Hlth Sci

**PHAR 632 Professional Comm Counseling (3 Credits)****Lecture:** 3, **Lab:** 0

Professional Communications/Counseling (3) Interactive course designed to guide pharmacy students in the development of effective counseling and communication skills. Three hours of lecture per week. Prerequisite/Corequisite: Completion of all 500-level courses in the College of Pharmacy and Health Sciences.

**College/School:** College Of Pharmacy/Hlth Sci.**Department:** Phar Praticce/Clinical Hlth Sci**PHAR 633 Pharmacotherapeutics II (3 Credits)****Lecture:** 3

Pharmacotherapeutics II (3) Organized lectures on rational drug therapy in acute and chronic disease states. Three hours of lecture per week.

Prerequisite: Completion of all 500-level courses in the College of Pharmacy and Health Sciences.

**College/School:** College Of Pharmacy/Hlth Sci.**Department:** Phar Praticce/Clinical Hlth Sci**PHAR 634 Pharmaceutics V (3 Credits)****Lecture:** 3

Pharmaceutics V - Basic Pharmacokinetics (3) Study of factors affecting bioavailability and time course of action of drugs in humans. Three hours of lecture per week. Prerequisites: PHAR 514 and PHAR 534. Corequisite: Concurrent enrollment in PHAR 614.

**Prerequisite(s):** (PHAR 534 and PHAR 514) and PHAR 614 (may be taken concurrently)

**College/School:** College Of Pharmacy/Hlth Sci.**Department:** Dpt of Pharmaceu Sc& Env HS**PHAR 635 Prescription Practice (3 Credits)****Lecture:** 3

Prescription Practice (3) Study of professional patient-focused services provided by pharmacists, including appropriate dispensing procedures. Three hours of lecture per week. Prerequisite: Completion of all 500-level courses in the College of Pharmacy and Health Sciences.

**College/School:** College Of Pharmacy/Hlth Sci.**Department:** Phar Praticce/Clinical Hlth Sci**PHAR 636 Pharmaceutics VI (3 Credits)****Lecture:** 3

Pharmaceutics VI - Applied Pharmacokinetics (3) Application of pharmacokinetic principles in selection, dosing, dosage adjustments, and evaluation of drug therapy in the institutionalized patient. Three hours of lecture per week. Prerequisites: PHAR 614 and PHAR 634. Corequisite: Concurrent enrollment in PHAR 616.

**Prerequisite(s):** (PHAR 614 and PHAR 634) and PHAR 616 (may be taken concurrently)

**College/School:** College Of Pharmacy/Hlth Sci.**Department:** Phar Praticce/Clinical Hlth Sci**PHAR 637 Pharmacotherapy IIIA : Infectious Diseases and Immune Disorders (4 Credits)****Lecture:** 4

An integrated organ based approach to pharmacotherapy that combine knowledge of pathophysiology, medicinal chemistry, pharmacology, applied pharmacokinetics and therapeutics to develop pharmaceutical care plans for patients with disorders of the endocrine system.

**College/School:** College Of Pharmacy/Hlth Sci.**Department:** Dpt of Pharmaceu Sc& Env HS**PHAR 638 Pharmacotherapy IIIB: Respiratory System Disorders (2 Credits)****Lecture:** 2

An integrated organ based approach to pharmacotherapy that combine knowledge of pathophysiology, medicinal chemistry, pharmacology, applied pharmacokinetics and therapeutics to develop pharmaceutical care plans for patients with disorders of the endocrine system.

**College/School:** College Of Pharmacy/Hlth Sci.**Department:** Dpt of Pharmaceu Sc& Env HS**PHAR 639 Pharmacotherapy IV: Gastrointestinal System Disorders (3 Credits)****Lecture:** 3

An integrated organ based approach to pharmacotherapy that combine knowledge of pathophysiology, medicinal chemistry, pharmacology, applied pharmacokinetics and therapeutics to develop pharmaceutical care plans for patients with disorders of the Gastrointestinal system.

**College/School:** College Of Pharmacy/Hlth Sci.**Department:** Dpt of Pharmaceu Sc& Env HS**PHAR 640 Pharmacotherapy III (4 Credits)****Lecture:** 4

Pharmacotherapy III - Immune System Disorders and Infectious Diseases (4) Practice-based outcomes from pathophysiology, medicinal pharmacology, chemistry, pharmacokinetics, and clinical sciences used to develop care plans for disorders of the immune system and infectious diseases. Prerequisite/Corequisite: Completion of all 500-level courses in the professional pharmacy program.

**Prerequisite(s):** (PHAR 512 and PHAR 517 and PHAR 532 and PHAR 542 and PHAR 543 and PHAR 510)

**College/School:** College Of Pharmacy/Hlth Sci.**Department:** Phar Praticce/Clinical Hlth Sci**PHAR 641 Pharmacotherapy IV (4 Credits)****Lecture:** 4

Pharmacotherapy IV - Respiratory System Disorders (4) Practice-based outcomes from pathophysiology, pharmacology medicinal chemistry, pharmacokinetics, and clinical sciences used to develop care plans for disorders of the respiratory system. Prerequisite/ Corequisite: Completion of all 500-level courses in the professional pharmacy program.

**College/School:** College Of Pharmacy/Hlth Sci.**Department:** Phar Praticce/Clinical Hlth Sci**PHAR 642 Pharmacotherapy V (4 Credits)****Lecture:** 4

Pharmacotherapy V- Gastrointestinal System Disorders (4) Practice-based outcomes from pathophysiology, pharmacology, medicinal chemistry, pharmacokinetics, and clinical sciences used to develop care plans for disorders of the gastrointestinal system. Prerequisite/ Corequisite: Completion of all 500 level and fall semester P3 courses in the professional pharmacy program.

**College/School:** College Of Pharmacy/Hlth Sci.**Department:** Phar Praticce/Clinical Hlth Sci**PHAR 643 Pharmacotherapy VI (4 Credits)****Lecture:** 4

Pharmacotherapy VI- Endocrine System Disorders (4) Practice-based outcomes from pathophysiology, pharmacology, medicinal chemistry, pharmacokinetics, and clinical sciences used to develop care plans for disorders of the endocrine system. Prerequisite/Corequisite: Completion of all 500 level and fall semester P3 courses in the professional pharmacy program.

**College/School:** College Of Pharmacy/Hlth Sci.**Department:** Phar Praticce/Clinical Hlth Sci

**PHAR 644 Pharmacotherapy VII (4 Credits)****Lecture: 4**

Pharmacotherapy VII- Integumentary System, Eye and Ear Disorders (4) Practice-based outcomes from pathophysiology, pharmacology, medicinal chemistry, pharmacokinetics, and clinical sciences used to develop care plans for disorders of the eyes, ears, and integumentary system. Prerequisite/Corequisite: Completion of all 500 level and fall semester P3 courses in the professional pharmacy program.

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Phar Praticce/Clinical Hlth Sci

**PHAR 648 Principles of Drug Action III (4 Credits)****Lecture: 4**

An integrated course incorporating pathophysiology, pharmacology, and pharmaceutical/medicinal chemistry concepts to understand the basis of drug use in infectious diseases, immune/respiratory systems disorders. Core concepts include mechanism of drug action and the chemical basis of pharmacology.

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Dpt of Pharmaceu Sc& Env HS

**PHAR 649 Principles of Drug Action IV (2 Credits)****Lecture: 2**

An integrated course incorporating pathophysiology, pharmacology, and pharmaceutical/medicinal chemistry concepts to understanding the basis of drug use in diseases of the gastrointestinal system. Core concepts include mechanism of drug action and the chemical basis of pharmacology . 2 credit hours per week.

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Dpt of Pharmaceu Sc& Env HS

**PHAR 711 Biotechnology in Pharmacy (6 Credits)****Lecture: 6**

Biotechnology in Pharmacy (3) Basic principles and practical applications of molecular biological techniques in pharmaceutical development. Experimental, analytical, and production technologies discussed along with ethical implications. Three hours of lecture per week. Prerequisite: Completion of all 600-level courses in the College of Pharmacy and Health Sciences or consent of the instructor.

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Phar Praticce/Clinical Hlth Sci

**PHAR 716 Research Seminar I (1 Credits)****Lecture: 1**

Research experience in social and administrative sciences or pharmacy practice and enhancement of student presentation skills on topics relevant to pharmacy practice.

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Phar Praticce/Clinical Hlth Sci

**PHAR 717 Research Seminar II (1 Credits)****Lecture: 1**

Research experience in social and administrative sciences or pharmacy practice and enhancement of student presentation skills on topics relevant to pharmacy practice.

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Phar Praticce/Clinical Hlth Sci

**PHAR 718 Research Seminar III (3 Credits)****Lecture: 3**

Research experience in social and administrative sciences or pharmacy practice and enhancement of student presentation skills on topics relevant to pharmacy practice.

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Phar Adm and Adm Health Scienc

**PHAR 725 Adverse Drug Reaction (6 Credits)****Lecture: 6**

Adverse Drug Reaction (3) Designed to emphasize Adverse Drug Reaction (ADR) knowledge and competencies necessary in patient evaluation, literature evaluation, and implementation of effective ADR avoidance programs. Two hours of lecture per week. Prerequisite: Completion of all 600-level courses in the College of Pharmacy and Health Sciences.

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Phar Praticce/Clinical Hlth Sci

**PHAR 741 Ambulatory Care Pract Exp (6 Credits)****Lecture: 6**

Ambulatory Care Practice (4) Provision of pharmaceutical care to ambulatory patients and the pharmacist's role as a primary care provider.

Prerequisite: Completion of all 600-level courses in the College of Pharmacy and Health Sciences.

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Phar Praticce/Clinical Hlth Sci

**PHAR 742 Applied Pharmacokinetics Ex Pr (6 Credits)****Lecture: 6**

Applied Pharmacokinetics Practice (4) Provision of pharmacokinetics consultation to hospitalized patients and other members of the health care team. Prerequisite: Completion of all 600-level courses in the College of Pharmacy and Health Sciences.

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Phar Praticce/Clinical Hlth Sci

**PHAR 744 Clinical Toxicology Pract Exp (6 Credits)****Lecture: 6**

Clinical Toxicology Practice (4) Participation in clinical toxicology programs, poison control centers, and related programs. Prerequisite: Completion of all 600-level courses in the College of Pharmacy and Health Sciences.

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Phar Praticce/Clinical Hlth Sci

**PHAR 745 Community Pharmacy Pract Exp (6 Credits)****Lecture: 6**

Community Pharmacy Practice (4) Participation in the delivery of pharmaceutical care services in a community pharmacy under the supervision of a licensed pharmacist/preceptor. Prerequisite: Completion of all 600-level courses in the College of Pharmacy and Health Sciences.

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Phar Praticce/Clinical Hlth Sci

**PHAR 746 Acute /Emergency Med Pract Exp (6 Credits)****Lecture: 6**

Acute/Emergency Medicine (4) Provision of pharmaceutical care to critically ill patients admitted to organized health care settings. Prerequisite: Completion of all 600-level courses in the College of Pharmacy and Health Sciences.

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Phar Praticce/Clinical Hlth Sci

**PHAR 747 Drug Information Practice Exp (6 Credits)****Lecture: 6**

Information Systems Management (4) Provision of drug information and consultation services to health services, to health care professionals, and to patients. Prerequisite: Completion of all 600-level courses in the College of Pharmacy and Health Sciences.

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Phar Praticce/Clinical Hlth Sci

**PHAR 748 Geriatrics Practice Exp (6 Credits)****Lecture:** 6

Geriatrics Practice (4) Provision of pharmaceutical care to patients admitted to geriatric services. Prerequisite: Completion of all 600-level courses in the College of Pharmacy and Health.

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Phar Praticce/Clinical Hlth Sci

**PHAR 749 Home Health Care Pract Exp (6 Credits)****Lecture:** 6

Home Health Care Practice (4) Provision of pharmaceutical care to patients receiving home health care. Prerequisite: Completion of all 600-level courses in the College of Pharmacy and Health Sciences.

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Phar Praticce/Clinical Hlth Sci

**PHAR 751 Hospital Pharmacy Pract Exp (6 Credits)****Lecture:** 6

Hospital Pharmacy Practice (4) Participation in the delivery of pharmaceutical care in an institutional setting. Prerequisite: Completion of all 600-level courses in the College of Pharmacy and Health Sciences or consent of the instructor.

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Phar Praticce/Clinical Hlth Sci

**PHAR 752 Infectious Disease Pract Exp (6 Credits)****Lecture:** 6

Immune Pharmacology Practice (4) Provision of pharmaceutical care to patients admitted to the infectious diseases care service. Prerequisite: Completion of all 600-level courses in the College of Pharmacy and Health Sciences.

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Phar Praticce/Clinical Hlth Sci

**PHAR 753 Family Medicine Practice Exp (6 Credits)****Lecture:** 6

Family Medicine (4) Provision of pharmaceutical care to patients admitted to the internal medicine, general medicine, and practice setting services. Prerequisite: Completion of all 600-level courses in the College of Pharmacy and Health Sciences.

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Phar Praticce/Clinical Hlth Sci

**PHAR 754 Oncology Practice Experience (6 Credits)****Lecture:** 6

Oncology Practice (4) Provision of pharmaceutical care to hospitalized and/or ambulatory oncology patients. Prerequisite: Completion of all 600-level courses in the College of Pharmacy and Health Sciences.

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Phar Praticce/Clinical Hlth Sci

**PHAR 755 Parenteral Nut Practice Exp (6 Credits)****Lecture:** 6

Parenteral Nutrition (4) Provision of pharmaceutical care to patients receiving parenteral nutrition with some emphasis on enteral supplemental therapy. Prerequisite: Completion of all 600-level courses in the College of Pharmacy and Health Sciences.

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Phar Praticce/Clinical Hlth Sci

**PHAR 756 Pediatrics/Neo Practice Exp (6 Credits)****Lecture:** 6

Pediatrics/Neonatology Practice (4) Provision of pharmaceutical care to patients admitted to pediatric and neonatal services or ambulatory care practice settings. Prerequisite: Completion of all 600-level courses in the College of Pharmacy and Health Sciences.

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Phar Praticce/Clinical Hlth Sci

**PHAR 757 Pharmacy Administration Pra Ex (6 Credits)****Lecture:** 6

Pharmacy Administration (4) Participation in the administrative aspects of institutional pharmacy practice and pharmacoeconomics. Prerequisite: Completion of all 600-level courses in the College of Pharmacy and Health Sciences.

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Phar Praticce/Clinical Hlth Sci

**PHAR 758 Psychiatry Practice Experience (6 Credits)****Lecture:** 6

Psychiatry Practice (4) Provision of pharmaceutical care to patients admitted to psychiatry services or ambulatory care practice settings. Prerequisite: Completion of all 600-level courses in the College of Pharmacy and Health Sciences.

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Phar Praticce/Clinical Hlth Sci

**PHAR 759 Surgery Practice Experience (6 Credits)****Lecture:** 6

Surgery Practice (4) Provision of pharmaceutical care to patients admitted to surgical intensive care units. Prerequisite: Completion of all 600-level courses in the College of Pharmacy and Health Sciences.

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Phar Praticce/Clinical Hlth Sci

**PHAR 760 Cardiology Practice Experience (6 Credits)****Lecture:** 6

Cardiology (4) Structured pharmacy experience in an institutional setting dealing with surgery patients having cardiovascular diseases and disorders in acute and ambulatory care practice settings. Prerequisite: Completion of all 600-level courses in the College of Pharmacy and Health Sciences.

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Phar Praticce/Clinical Hlth Sci

**PHAR 761 Consulting Phar Practice Exp (6 Credits)****Lecture:** 6

Consulting Pharmacy Practice (4) Clinical pharmaceutical health care experience with a consultant pharmacist or in practice settings that provide consultant services. Prerequisite: Completion of all 600-level courses in the College of Pharmacy and Health Sciences.

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Phar Praticce/Clinical Hlth Sci

**PHAR 762 Managed Care Pharm Pract Exp (6 Credits)****Lecture:** 6

Managed Care Pharmacy Practice (4) Enhancement of student involvement in the managed care setting., including hospitals, community, and the pharmaceutical industry. Prerequisite: Completion of all 600-level courses in the College of Pharmacy and Health Sciences.

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Phar Praticce/Clinical Hlth Sci

**PHAR 763 Nuclear Pharmacy Pract Exp (6 Credits)****Lecture:** 6

Nuclear Pharmacy Practice (4) Clinical pharmaceutical health care experience with patients undergoing nuclear pharmacy treatment.

Prerequisite: Completion of all 600-level courses in the College of Pharmacy and Health Sciences.

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Phar Praticce/Clinical Hlth Sci

**PHAR 764 Pharmaecono Practice Exp (6 Credits)****Lecture:** 6

Pharmacoeconomic Practice (4) Principles for evaluating and conducting pharmacoeconomic studies, including cost effectiveness, cost utilization, cost minimization, and cost benefit ratios. Prerequisite: Completion of all 600-level courses in the College of Pharmacy and Health Sciences.

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Phar Praticce/Clinical Hlth Sci

**PHAR 765 Infusion Therapy (6 Credits)****Lecture:** 6

Infusion Therapy (4) Provision of patient-centered care to patients receiving infusion therapy. Prerequisite/Corequisite: Completion of all P1, P2 and P3 courses in the professional pharmacy program ; and passage of P3 summative examination.

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Phar Praticce/Clinical Hlth Sci

**PHAR 766 Clinical Pharmacy (6 Credits)****Lecture:** 6

Clinical Pharmacy (4) Participation in the delivery of patient-centered care services in an ambulatory clinic setting under the supervision of a licensed pharmacist/ preceptor. Prerequisite/Corequisite: Completion of all P1, P2 and P3 courses in the professional pharmacy program; and passage of P3 summative examination.

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Phar Praticce/Clinical Hlth Sci

**PHAR 767 Compounding Pharmacy (6 Credits)****Lecture:** 6

Compounding Pharmacy (4) Participation in compounding non-commercially available dosage forms for patients in the community setting. Prerequisite/Corequisite: Completion of all P1, P2 and P3 courses in the professional pharmacy program ; and passage of P3 summative examination.

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Phar Praticce/Clinical Hlth Sci

**PHAR 768 Nephrology (6 Credits)****Lecture:** 6

Nephrology (4) Structured pharmacy experiences in an institutional setting focusing on patients with documented potential renal insufficiency. Prerequisite/Corequisite: Completion of all P1, P2 and P3 courses in the professional pharmacy program ; and passage of P3 summative examination.

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Phar Praticce/Clinical Hlth Sci

**PHAR 769 Neurology (6 Credits)****Lecture:** 6

Neurology (4) Provision of patient-centered care to patients with clinical presentation and common diseases/disorders of the neurological system and sensory organs. Prerequisite/Corequisite: Completion of all P1, P2 and P3 courses in the professional pharmacy program ; and passage of P3 summative examination.

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Phar Praticce/Clinical Hlth Sci

**PHAR 770 Pharmacy Community Management (6 Credits)****Lecture:** 6

Pharmacy Community Management (4) Participation in the administrative aspects of community pharmacy practice. Prerequisite/ Corequisite: Completion of all P1, P2 and P3 courses in the professional pharmacy program; and passage of P3 summative examination.

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Phar Praticce/Clinical Hlth Sci

**PHAR 771 Seminar (6 Credits)****Lecture:** 6

Seminar (4) Enhancement of student presentation skills on topics relevant to pharmacy practice. Prerequisite/ Corequisite: Completion of all P1, P2 and P3 courses in the professional pharmacy program ; and passage of P3 summative examination.

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Phar Praticce/Clinical Hlth Sci

**PHAR 772 Research (6 Credits)****Lecture:** 6

Research (4) Research experience in social and administrative sciences or pharmacy practice. Prerequisite/ Corequisite: Completion of all P1, P2 and P3 courses in the professional pharmacy program ; and passage of P3 summative examination.

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Phar Praticce/Clinical Hlth Sci

**PHAR 773 Organ Transplantation (6 Credits)****Lecture:** 6

Organ Transplantation (4) Provision of patient-centered care to patients undergoing organ and/or tissue transplantation. Prerequisite/Corequisite: Completion of all P1, P2 and P3 courses in the professional pharmacy program; and passage of P3 summative examination.

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Phar Praticce/Clinical Hlth Sci

**PHAR 774 Women's Health (6 Credits)****Lecture:** 6

Women's Health (4) Provision of patient-centered care to female patients in an institutional setting, including post partum, labor and delivery. Prerequisite/Corequisite: Completion of all P1, P2 and P3 courses in the professional pharmacy program; and passage of P3 summative examination.

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Phar Praticce/Clinical Hlth Sci

**PHAR 775 Governmental Regulatory Agency (6 Credits)****Lecture:** 6

Government/ Regulatory Agency (4) Structured experience in government/regulatory agencies affecting the practice of pharmacy. Prerequisite/Corequisite: Completion of all P1, P2 and P3 courses in the professional pharmacy program; and passage of P3 summative examination.

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Phar Praticce/Clinical Hlth Sci



**PHAR 776 Disease State Formulary Mgmt (6 Credits)****Lecture:** 6

Disease State/ Formulary Management (4) Structured experiences in policy development, formulary management, and disease state management. Prerequisite/Corequisite: Completion of all P1, P2 and P3 courses in the professional pharmacy program; and passage of P3 summative examination.

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Phar Praticce/Clinical Hlth Sci

**PHAR 777 Endocrinology (6 Credits)****Lecture:** 6

Endocrinology (4) Structured pharmacy experience in an institutional setting focusing on patients with documented disorders of the endocrine system. Prerequisite/Corequisite: Completion of all P1, P2 and P3 courses in the professional pharmacy program; and passage of P3 summative examination.

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** (R)Pharmacy Practice

**PHAR 778 Pharmacy Benefit Management (6 Credits)****Lecture:** 6

Pharmacy Benefit Management (PBM) (6) Structured pharmacy experience in the management of pharmacy networks, drug utilization review outcomes management and disease management. Prerequisite/Corequisite: Completion of all P1, P2 and P3 courses in the professional pharmacy program ; and passage of P3 summative examination.

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Phar Praticce/Clinical Hlth Sci

**PHAR 779 Academic Pharmacy (6 Credits)****Lecture:** 6

Academic Pharmacy (4) Structured experience in activities pertaining to administration and instruction in pharmacy education. Prerequisite/Corequisite: Completion of all P1, P2 and P3 courses in the professional pharmacy program; and passage of P3 summative examination.

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Phar Praticce/Clinical Hlth Sci

**PHAR 780 Veterinary Pharmacy (6 Credits)****Lecture:** 6

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Phar Praticce/Clinical Hlth Sci

**PHAR 781 International Pharmacy Practice Experience (6 Credits)****Lecture:** 6

An advanced elective experiential course that will engage the student in the provision of pharmaceutical care by providing preventive health education and care to disadvantaged patients abroad.

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Dpt of Pharmaceu Sc& Env HS

**PHAR 782 Internal Medicine (6 Credits)****Lecture:** 6

This course is a required Advanced Pharmacy Practice Experience (AAPE) in internal medicine. This experience is devoted to the comprehensive care of adult hospital inpatients. The student will be involved in all aspects of pharmaceutical care ranging from patient admission to patient discharge. During this rotation, the student will be exposed to numerous disease and conditions.

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Phar Praticce/Clinical Hlth Sci

**PHAR 783 Critical Care (6 Credits)****Lecture:** 6

This course is an advanced pharmacy practice experience (AAPE) designed to expand the students knowledge and skills in delivering pharmaceutical care to patients in critical care pharmacy practice setting and improve skills in the provision of clinical pharmacotherapy services.

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Phar Praticce/Clinical Hlth Sci

**PHAR 784 Drug Policy (6 Credits)****Lecture:** 6

This Advanced Pharmacy Practice experience will help students understand the classification of legal and illicit drugs and gain an understanding of legal punishment for drug activity and treatment and rehabilitative services. Students will also gain insight on the process for developing policies surrounding drug use.

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Dpt of Pharmaceu Sc& Env HS

**PHAR 785 Pharmaceutical Industry (6 Credits)****Lecture:** 6

This course is an advanced pharmacy practice experience (AAPE) in Pharmaceutical Industry rotation designed to help students understand the fundamental principles of pharmaceutical industry and the primary departments in a pharmaceutical company of biotech firm.

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Phar Praticce/Clinical Hlth Sci

**PHAR 786 Pharmacy Informatics (6 Credits)****Lecture:** 6

This course is an elective advanced pharmacy practice experience (APPE) designed for students to understand medication-related data and knowledge within the continuum of healthcare systems—including its acquisition, storage, analysis, use and dissemination.

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Phar Praticce/Clinical Hlth Sci

**PHAR 817 Respiratory-IPPAP (1 Credits)****Lecture:** 1

**College/School:** College Of Pharmacy/Hlth Sci.

**Department:** Phar Praticce/Clinical Hlth Sci