

A brief Course Description

Course Name	Thermodynamics Pharmacy		
Course Code	PHS 422		
College	College of Pharmacy		
Department/ Program	Doctor of Pharmacy (Pharm D)		
Year / Level:	9th Level / 5th Year		
Credit Hours	3		
Contact Hours	Lecture: 3	Lab/Tutorial: -----	Training: 1
Language	English		
Track (Select)	<input type="checkbox"/> University Requirement <input type="checkbox"/> College Requirement <input type="checkbox"/> Department Requirement <input checked="" type="checkbox"/> Elective Course		
Pre-requisites Course:	-----		
Co-Requests:	-----		
Course Objectives:	1. Know the basic quantitative concepts of chemical kinetics and thermodynamics of pharmaceutical systems.		

A brief Course Description

Course Name	Advanced Pharmacokinetics and Pharmacodynamics		
Course Code	CPP 212		
College	College of Pharmacy		
Department/ Program	Doctor of Pharmacy (Pharm D)		
Year / Level:	9th Level / 5th Year		
Credit Hours	3		
Contact Hours	Lecture: 3	Lab/Tutorial: ----	Training: 1
Language	English		
Track (Select)	<input type="checkbox"/> University Requirement <input type="checkbox"/> College Requirement <input type="checkbox"/> Department Requirement <input checked="" type="checkbox"/> Elective Course		
Pre-requisites Course:	----		
Co-Requests:	----		
Course Objectives:	<ol style="list-style-type: none"> 1. Understand the basis for the equations used to model PK and PD processes and the assumptions that are made during modeling. 2. Determine when assumptions in modeling may not be correct. 3. Explain all aspects of drug absorption, distribution, metabolism and excretion and the role of passive and active transporters. 4. Explain the role genetic determinants play in pharmacokinetics and pharmacodynamics. 5. Understand population pharmacokinetics, reversible kinetics, stereoselective effects. 		

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| | 6. Fit pharmacokinetic and pharmacodynamic models to data and perform standard and nonstandard compartmental analysis |
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A brief Course Description

Course Name	Introduction to Pharmacy Practice and Health Care Systems (2)		
Course Code	CPP 313M		
College	College of Pharmacy		
Department/ Program	Doctor of Pharmacy (Pharm D)		
Year / Level:	5th Level /3rd Year		
Credit Hours	3		
Contact Hours	Lecture: 3	Lab/Tutorial: -----	Training: -----
Language	English		
Track (Select)	<input type="checkbox"/> University Requirement <input type="checkbox"/> College Requirement <input type="checkbox"/> Department Requirement <input checked="" type="checkbox"/> Elective Course		
Pre-requisites Course:	-----		
Co-Requests:	-----		
Course Objectives:	<p>A. Describe the importance of ethics in pharmacy practice.</p> <p>B. Describe the role of the pharmacist in the following areas: 1) patient-centered care, 2) systems management, and 3) public health.</p> <p>C. Discuss the behaviors that a pharmacist must demonstrate when “caring” for patients.</p> <p>D. Outline what a pharmacist must do in order to provide “patient-centered care.”</p> <p>E. Outline drug use, access, the pharmaceutical industry, and the supply chain in Saudi Arabia.</p>		

	<p>F. Describe the human, physical, medical, informational, and technological resources that are used to assure the safe, accurate, and time-sensitive distribution of medicines and also to improve therapeutic outcomes.</p> <p>G. Identify strategies for improving public health and how a pharmacist can promote wellness.</p> <p>H. Define medication adherence and describe how a pharmacist can improve medication adherence.</p>
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A brief Course Description

Course Name	Pediatrics Pharmacotherapy		
Course Code	CPP 324		
College	College of Pharmacy		
Department/ Program	Doctor of Pharmacy (Pharm D)		
Year / Level:	10th Level /5th Year		
Credit Hours	3		
Contact Hours	Lecture: 3	Lab/Tutorial: ----	Training: ----
Language	English		
Track (Select)	<input type="checkbox"/> University Requirement <input type="checkbox"/> College Requirement <input checked="" type="checkbox"/> Department Requirement <input checked="" type="checkbox"/> Elective Course		
Pre-requisites Course:	-----		
Co-Requests:	CPP 428, CPP 429, CPP 444		
Course Objectives:	<ol style="list-style-type: none"> Discuss the growth and development of neonates, infants, children, and adolescents. Describe the unique pharmaceutical needs of pediatric patients in the following areas: <ol style="list-style-type: none"> Pharmacokinetics. Drug delivery (oral and parenteral). Provision of pharmacy services. Discuss the unique aspects of providing pharmacy services at a pediatric hospital or to a pediatric unit. 		

4. Outline strategies for effectively communicating with parents and pediatric patients about pharmacotherapy.
5. Outline the responsibilities of a pharmacist in providing pediatric advanced life support including recommendations for pharmacotherapy.
6. Outline pharmacotherapy management of the common complications encountered in a critically ill neonate.
7. Given a case study about a pediatric patient who has one of the following disorders, discuss the appropriate pharmacotherapy and management:
 - A. Otitis Media.
 - B. Croup and other respiratory disorders.
 - C. Hematology/Oncology.
 - D. Pain Management.
 - E. Attention Deficit Hyperactivity Disorders.
 - F. Diabetes.
 - G. Juvenile Rheumatoid Arthritis.
 - H. Cystic Fibrosis
8. Discuss the career options in pediatric pharmacy practice and professional organizations which can facilitate career development.
9. Briefly describe any plans for developing and improving the course that are being implemented. (e.g. increased use of IT or web based reference material, changes in content as a result of new research in the field)

Pediatrics Pharmacotherapy. Introduces the unique needs and pharmacotherapy management of pediatric patients and the role of the pharmacist in providing pediatric pharmacy services.

A brief Course Description

Course Name	Geriatric Pharmacotherapy		
Course Code	CPP 326		
College	College of Pharmacy		
Department/ Program	Doctor of Pharmacy (Pharm D)		
Year / Level:	Start from 10th Level /5th Year		
Credit Hours	3		
Contact Hours	Lecture: 3	Lab/Tutorial: -----	Training: -----
Language	English		
Track (Select)	<input type="checkbox"/> University Requirement <input type="checkbox"/> College Requirement <input checked="" type="checkbox"/> Department Requirement <input checked="" type="checkbox"/> Elective Course		
Pre-requisites Course:	All specialized courses in years 3,4, and 5 of the Pharm.D. program		
Co-Requests:	CPP 428, CPP 429, CPP 444		
Course Objectives:	<ol style="list-style-type: none"> 1. Discuss the biomedical principles of aging. 2. Describe how to perform an assessment of a geriatric patient. 3. Discuss the common adverse events encountered in Geriatric patients and how to minimize risk. 4. Discuss the problem of polypharmacy in Geriatric patients and how to minimize risk. 5. Given a case study of a geriatric patient with one of the following complaints/disorders, recommend appropriate pharmacotherapy management: <ol style="list-style-type: none"> A. Cardiovascular disorders. B. Respiratory disorders frequently encountered in the elderly. 		

	<ul style="list-style-type: none">C. Renal and urologic disorders.D. Endocrine disorders.E. GI disorders and nutritional problems.F. CNS disorders.G. Psychiatric disorders.H. Sensory disorders.
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A brief Course Description

Course Name	Women's Health & Pharmacotherapy		
Course Code	CPP 325		
College	College of Pharmacy		
Department/ Program	Doctor of Pharmacy (Pharm D)		
Year / Level:	Start from 10th Level /5th Year		
Credit Hours	3		
Contact Hours	Lecture: 3	Lab/Tutorial: -----	Training: -----
Language	English		
Track (Select)	<input type="checkbox"/> University Requirement <input type="checkbox"/> College Requirement <input checked="" type="checkbox"/> Department Requirement <input checked="" type="checkbox"/> Elective Course		
Pre-requisites Course:	All specialized courses in years 3, 4, and 5 of the Pharm.D. program		
Co-Requests:	CPP 428, CPP 429, CPP 444		
Course Objectives:	<ol style="list-style-type: none"> 1. Discuss the historical and social issues that are relevant to women's health. 2. Describe the female biology and important tenets for wellness. 3. Describe the hormonal control of the menstrual cycle in women and the physiological effects of each hormone. 4. Discuss important considerations in pregnancy planning. 5. Describe what occurs during pregnancy and issues/needs frequently encountered by the patient. 6. Describe the lactation process and recommend how to manage common problems related to lactation. 7. Outline what occurs during labor and delivery and common pharmacotherapeutic needs of the patient. 		

8. Given a case study of a female patient with one of the following disorders/complaints, recommend appropriate pharmacotherapy:

- A. Common menstruation disorders.
- B. Dysmenorrhea.
- C. Premenstrual syndrome.
- D. Endometriosis.
- E. Primary Ovarian Insufficiency.
- F. Polycystic Ovary Syndrome.
- G. Complaints related to Menopause.
- H. Need for Contraceptive methods.
- I. Infertility.
- J. Complaints related to Pregnancy.
- K. Lactation problems.
- L. Labor and delivery problems.
- M. Post-partum Care needs.
- N. Nutrition needs.
- O. Eating disorders.
- P. Overweight/obesity.
- Q. Sexual disorders.
- R. Cancer (breast, ovarian, endometrial, cervical).