

## Course Syllabus typical Format (CSTF)

### First: Course Information

1	College: Pharmacy	2	Department: Pharmacy Practice
3	Academic Semester: Fourth Year - First Semester	4	Academic year: 1443H
5	Course Name: Introductory pharmacy practice experience 2	6	Course code and number: PDPP0422
7	Number of credit hours: 3 Hours (...2... theoretical/lecture, ...1... training/tutorial )		
8	Course requirement in program: [ <input checked="" type="checkbox"/> ] Required (obligatory) [ <input type="checkbox"/> ] Optional (Elective)		
9	Course type: [ <input type="checkbox"/> ] University Requirement [ <input checked="" type="checkbox"/> ] College Requirement [ <input type="checkbox"/> ] Departmental Requirement		
10	Pre-requisite (code and number) (if applicable): Introductory pharmacy practice experience-1 (PDPP0321)		

### Second: Instructor Information

1	Instructor's name: Dr. Palanisamy Amirthalingam		
2	Sections of the course that I teach – All in male section		
3	Office phone number: 0144273022-3915	4	Mobile number (optional): 0550479314
5	Office location and number: First Floor		
6	Office hours: Monday (10:00am -01:00pm)		
7	Website: <a href="http://www.ut.edu.sa/web/u58316">www.ut.edu.sa/web/u58316</a>		
8	E-mail: pchettiar@ut.edu.sa		

1	Instructor's name: Dr. Kousalya Prabahar		
2	Sections of the course that I teach – All in Female section		
3	Office phone number: 0144273022-3925	4	Mobile number (optional): -
5	Office location and number: second Floor (Female campus)		
6	Office hours: Thursday (09:00am-11:00am )		
7	Website: <a href="http://www.ut.edu.sa/web/u58312">www.ut.edu.sa/web/u58312</a>		
8	E-mail: <a href="mailto:kgopal@ut.edu.sa">kgopal@ut.edu.sa</a>		

### Third: Lecture and lab timetables

Section	Days	Time	Place	Male campus - Building/Room	Female campus - Building/Room
Division 1 (1510)	Wednesday	08:00am – 10:00am	Male	Faculty of Medicine/ 1st floor/ Lecture room 01-03-01-15	
Division 2 (1511)	Wednesday	10:00am – 12:00pm	Male	Faculty of Medicine/ 1st floor/ Lecture room 01-03-01-15	--
Division 1 (70)	Sunday	01:00 – 03:00	Female	-	Faculty of Medicine – Female campus/ 1st floor 01-25-1-049
Division 2 (71)	Monday	10:00am- 12:00pm	Female	-	Faculty of Medicine – Female campus/ 1st floor 01-25-1-049

#### Fourth: Course description

##### Course description as found in the University Catalogue in English

This course offers basics of pharmaceutical care process with special emphasis to assessment of drug related problems, drug interactions, adverse drug reaction monitoring, therapeutic drug monitoring and medication safety management. Pharmaceutical care for the special populations including pediatrics, geriatrics, hepatic and renal failure also included.

#### Fifth: General Objectives and Teaching Strategies

General course objectives (designate the sections and goals that are related to the course content)	Teaching strategies and instructional aids
Knowledge and Understanding: <ul style="list-style-type: none"><li>• Demonstrate a comprehensive knowledge of therapies for the special population including pediatrics, geriatrics, renal and hepatic impairment.</li><li>• Demonstrate the role of pharmacist in systematic patient care process.</li></ul>	<ul style="list-style-type: none"><li>• Lecture</li></ul>
Skills: <ul style="list-style-type: none"><li>• Integrate pharmacy applications according to professional guidelines for the management of special population.</li><li>• Utilize effectively appropriate information technologies to optimize medication use and patient care.</li></ul>	<ul style="list-style-type: none"><li>• Case study</li></ul>
Values: <ul style="list-style-type: none"><li>• Plan effective time management schedules, independent thinking towards the patient care.</li></ul>	<ul style="list-style-type: none"><li>• My Dispense Activity.</li></ul>

Sixth: Course or Curriculum units, subjects, specific objectives, and time schedule in the academic semester (first, second, or third semester (summer))  
(Example)

Week number	Units	Instructional Objectives (Actions that prove the students adoption of specified behavior and achievement, learning outcomes, content)	Readings	Keywords		
	Unit Number	Unit/Chapter/Subject title		Reference Number	Pages	Key words
First	1	Course overview and Drug-Drug interaction & Drug-Food interaction	<ol style="list-style-type: none"> <li>1. Definition and mechanisms of drug interaction.</li> <li>2. Examples of drug food interaction.</li> </ol>	1.3	50-59	Drug, food, interaction
Second	2	Medication safety management	<ol style="list-style-type: none"> <li>1. Introduction.</li> <li>2. Definition and Causes of medication error.</li> <li>3. Types and category of medication errors.</li> <li>4. Preventing medication errors.</li> <li>5. Medication recocillation.</li> </ol>	1.6	31-37	Medicines, safe, risk
Third	3	Adverse drug reaction monitoring (ADR)	<ol style="list-style-type: none"> <li>1. Introduction</li> <li>2. Classification of ADRs</li> <li>3. Factors affecting susceptibility to ADRs</li> <li>4. Pharmacovigilance and epidemiological methods in ADR detection.</li> </ol>	1.3	62-75	Drug, monitoring, pharmacovigilance
Fourth	4	Therapeutic drug monitoring (TDM)	<ol style="list-style-type: none"> <li>1. Definition and introduction</li> <li>2. Drugs require monitoring.</li> <li>3. TDM of individual drugs.</li> </ol>	1.8	1-32	Drug, monitoring
Fifth	5	Prescribing guidelines in the pediatrics.	<ol style="list-style-type: none"> <li>1. Pharmacokinetics of pediatrics.</li> <li>2. Drug therapy in children</li> <li>3. Dosage and Choice of preparations.</li> <li>4. Percentage of adult dose required at various ages and body weights.</li> <li>5. Calculation of standard daily fluid requirements for children.</li> </ol>	1.3	132-148	Prescribing guidelines in the pediatrics.

Sixth	6	Dose adjustment in renal failure	<ol style="list-style-type: none"> <li>1. Dosage calculation based on creatinine clearance.</li> <li>2. Estimation of GFR.</li> <li>3. Case studies on dose adjustment in renal failure.</li> </ol>	1.4	698-704	Dose adjustment in renal failure
Seventh	7	Dose adjustment in hepatic failure	<ol style="list-style-type: none"> <li>1. Dosage considerations in hepatic disease.</li> <li>2. Hepatic blood flow and intrinsic clearance.</li> </ol>	1.7	34-40	Dose, hepatic, blood flow
Tenth	8	Prescribing guidelines in the geriatrics.	<ol style="list-style-type: none"> <li>1. Pharmacokinetics and Pharmacodynamics of geriatrics.</li> <li>2. Principles and goals of drug therapy in the elderly</li> <li>3. Case studies on geriatrics.</li> </ol>	1.3	149-161	Geriatric, Pharmacodynamic, Pharmacokinetic
Eleventh	9	Pharmaceutical care practice	<ol style="list-style-type: none"> <li>1. Definition of Pharmaceutical care.</li> <li>2. Pharmaceutical care practice.</li> <li>3. The patient's drug-related needs.</li> <li>4. Need for pharmaceutical care practice.</li> <li>5. Pharmaceutical care as generalist practice.</li> <li>6. The language of practice</li> <li>7. The practitioner and patient form a practice.</li> </ol>	1.1	1-7	Pharmacy, Care, Practice, patient
Twelfth	10	Drug therapy problem and its classification	<ol style="list-style-type: none"> <li>1. Definition, components and categories of drug therapy problem.</li> <li>2. Identifying drug therapy problem.</li> </ol>	1.2	2-20	Drug, therapy, problem.
Thirteenth	11	Care planning – A component of patient health care process & Steps in pharmaceutical care process	<ol style="list-style-type: none"> <li>1. Assessment of drug related needs.</li> <li>2. Creation of a patient care plan.</li> <li>3. Follow-up evaluation</li> </ol>	1.5	21-27	Care, Drug, Plan
Fourteenth	12		<ol style="list-style-type: none"> <li>4. Example of care plan and documentation.</li> <li>5. Steps in pharmaceutical care process.</li> </ol>	1.9	25-39	Pharmaceutical, plan, Assessment.
Fifteenth	13	Documentation of pharmacotherapy intervention	<ol style="list-style-type: none"> <li>1. Principles of documentation.</li> <li>2. Traditional documentation format (SOAP Note)</li> <li>3. Alternative approach to documenting drug therapy problems and plans.</li> </ol>	1.5	29-35	Documentation, Principle

## Training

<b>Week</b>	<b>Task/Evaluation</b>
ONE	Orientation to the training
TWO	Drug interaction monitoring
THREE	Case studies on medication errors
FOUR	Case studies on medication reconciliation
FIVE	ADR monitoring
SIX	ADR monitoring
<b>SEVEN</b>	<b>Revision</b>
<b>EIGHT</b>	<b>Training exam on case studies (Drug interaction monitoring, Medication errors, and ADR monitoring)</b>
<b>NINE</b>	<b>Midterm exam</b>
TEN	Dose adjustment in pediatrics
ELEVEN	Dose adjustment in renal failure
TWELVE	Dose adjustment in hepatic failure
THIRTEEN	Drug related problems
<b>FOURTEEN</b>	<b>Revision</b>
<b>FIFTEEN</b>	<b>Training exam on case studies (Dose adjustment in pediatrics, renal failure and hepatic failure)</b>

## Seventh: Assessment and evaluation plan

Assessment tools	Date and duration (day/date/ time)	Subject matter covered in the exam	Type of questions	Grades out of 100	Guidelines and instructions
Quiz	19/9/2021 – 23/09/2021	Lectures 1-3	MCQ & short answers.	5 marks	Multitask exam measuring all kinds of the students talents with model answer from the lecture notes
Mid-term exam	19/10/2020- 31/10/2021	Lectures 1-7	MCQ & short answers.	30 marks	Multitask exam measuring all kinds of the students talents with model answer from the lecture notes
Final exam	Starts from 26/12/2021	Lectures 1-13	MCQ & short answers.	40 marks	Multitask exam measuring all kinds of the students talents with model answer from the lecture notes
Evaluation without exam	Description of performance required from student	Due date	Rubrics	Marks	Guidelines & instructions
	Training exam on case studies	29/08 to 16/12/2021	<ul style="list-style-type: none"> <li>• Drug interaction monitoring, Medication errors and ADR monitoring.</li> <li>• Dose adjustment in special cases (Pediatrics, geriatrics, renal and hepatic failure)</li> </ul>	20 marks	Individual evaluation
	Student activity	29/08 to 16/12/2021	<ul style="list-style-type: none"> <li>• Using MyDispense software.</li> </ul>	5 marks	Students will be divided into groups.

## Eighth: Readings and further References

1	<p><b>Main Reference (Textbook) (correct citation in accordance to APA or other citation standards specific to discipline) From where student can get the textbook?</b></p> <ol style="list-style-type: none"> <li>1. Pharmaceutical practice: The Clinician guide by Robert Cipolle, Linda Strand, Peter Morley, Peter C. Morley, Second edition, Mc-Graw Hill Companies.</li> <li>2. Pharmaceutical Care Practice: The Patient-centered Approach to Medication Management Services, by Robert J. Cipolle; Linda M. Strand; Peter C. Morley.</li> <li>3. Clinical Pharmacy and therapeutics, by Roger Walker, Cate Whittlesea, Fifth Edition, Churchill livingstone.</li> <li>4. Medicine update, Muruganathan, Jaypee publications.</li> <li>5. Pharmacotherapy Casebook: A Patient-Focused Approach, Schwinghammer TL, Koehler JM, McGraw-Hill.</li> <li>6. Pharmacotherapy: A Pathophysiologic Approach, Dipiro et al., McGraw Hill.</li> <li>7. Applied Biopharmaceutics and Pharmacokinetics, Pharmacokinetics, Leon Shargel, Andrew Yu, Susanna Wu-Pong, Mc-Graw Hill Companies.</li> <li>8. Handbook of Drug Monitoring Methods, by Amitava Dasgupta, Humana Press.</li> <li>9. Developing Pharmacy Practice: A focus on patient care by Karin Wiedenmayer, Rob S. Summers, Clare A. Mackie, Andries G. S. Gous, Marthe Everard, WHO.</li> </ol>
<p><b>Extra reading references and citations (books, internet cities, research papers)</b></p>	
2	<ul style="list-style-type: none"> <li>• Renal Pharmacotherapy Dosage Adjustment of Medications Eliminated by the Kidneys.</li> </ul>
3	<ul style="list-style-type: none"> <li>• The Renal Drug Handbook, by Caroline Ashley, Aileen Currie.</li> </ul>
4	<ul style="list-style-type: none"> <li>• Handbook of Food-Drug interactions, Beverly J. McCabe, Eric H. Frankel, Jonathan J. Wolfe, Taylor &amp; Francis.</li> </ul>
5	<ul style="list-style-type: none"> <li>• Handbook of Drug-Nutrient interaction, by Joseph, I. Boullata, Vincent T. Armenti, Gil Hardy.</li> </ul>



**Ninth: The instructor's policy of dealing with students within the framework of the university laws, regulations, and guidelines (examples and prototypes).**

1	Late attendance: Over 10 min delays will be considered absent.
2	Cheating and plagiarism: University rules will be applied.
3	Absences: University rules will be applied.
4	Late work policy: 5% of the activity mark will be reduced for each day delay.
5	Exiting during the lecture period: Allowed after permission.
6	Seating and student placement in the classrooms: Allowed any place in the lecture room.
7	Absence from an exam: University rules will be applied.
8	Mobile phone use in the classroom: The student will be considered absent.
9	Eating and drinking: Prohibited
10	Wearing uniform and apron in the class is mandatory
11	<b>All the COVID-19 regulations will be applicable.</b>