

Course Syllabus Typical Format (CSTF)

First: Course Information

1	College: Pharmacy	2	Department: Pharmacy Practice
3	Academic Semester: Fifth Year - First Semester	4	Academic year: 2021-2022 (H1442/H1443)
5	Course Name: Advanced Pharmacy Practice Experience	6	Course code and number: PDPP0524
7	Number of credit hours: 2 Hours (...1... theoretical/lecture, ...1... training)		
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): Successful completion of Fourth year courses and Basic computer skills (Word & PowerPoint soft wares) and internet access.		

Second: Instructor Information

1	Instructor's name: Dr. Vinoth Prabhu Veeramani		
2	Sections of the course that I teach: All (1553 and 1554)		
3	Office phone number: 0144273022-3929	4	Mobile number (optional):
5	Office location and number: First Floor (01-03-01-16)		
6	Office hours: Sunday (10:00 am-11:00 am)		
7	Website: https://www.ut.edu.sa/web/u58409		
8	E-mail: vveeramani@ut.edu.sa		

Third: Lecture and lab timetables

Section	Days	Time	Place (Building/Room)
Division 1 (1553)	Wednesday	08:00 AM – 09:00 AM	Faculty of Pharmacy/ 1st floor/ Lecture room 01-03-1-14
Division 2 (1554)	Wednesday	09:00 AM – 11:00 AM	Faculty of Pharmacy/ 1st floor/ Lecture room 01-03-1-14 and/or Hospital Training

Fourth: Course description

Course description as found in the University Catalogue in English

The main purpose of this course is to allow the students to apply knowledge and develop skills needed to optimize the pharmacist's professional scope of practice in providing effective patient care.

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
<ul style="list-style-type: none"> • Demonstrate a comprehensive knowledge of advanced pharmacy practice experience including evidence based medicine, Good pharmacy practice guidelines, Good clinical practice guidelines, clinical skills for prescribing, essential pharmacology, therapeutics and medicines management for non-medical prescribers. • Demonstrate the concepts and principles of various pharmacy practice settings including long-term care pharmacy, managed care pharmacy, specialty pharmacy, nuclear pharmacy and different types of patient-centered care and population-based care. • Demonstrate the role of pharmacists in long-term care pharmacy, multi-disciplinary prescribing team and pharmacist as non-medical prescriber in improving patient and health system outcomes through advanced pharmacy practice according to legal, ethical and professional issues in relation to prescribing practice. 	<ul style="list-style-type: none"> • Lectures using power points. • Classroom discussions. • Simulated clinical skill lab • Hospital visits.

<p>Cognitive Domain:</p> <ul style="list-style-type: none"> • Integrate therapeutics and advanced pharmacy practice knowledge in assessment of patient therapeutic needs and detection of drug-related problems according to legal, ethical, social, economic and professional guidelines. 	<ul style="list-style-type: none"> • Tutorials. • Hospital training. • Group discussion. • Patient-oriented Problem solving (POPS). • Assignments.
<p>Interpersonal Skills & Responsibility:</p> <ul style="list-style-type: none"> • Demonstrate leadership skills, accountability and acceptance of responsibility within a team in various professional settings. • Plan effective time management schedules, independent thinking during case studies, preparation of pharmaceutical care plans and in other circumstances. 	<ul style="list-style-type: none"> • Management of time during exams and assignment tasks. • Management of time during case studies and care plan preparation. • Participation in group discussions and solving problems individually & in groups.
<p>Communication, Information Technology, Numerical:</p> <ul style="list-style-type: none"> • Communicate clearly and effectively with course instructors, healthcare professionals, patients, caregivers, administrative and supportive personnel and the public in various settings. • Construct patients-centered and evidence-based pharmaceutical care plans in a professional manner for different cases. 	<ul style="list-style-type: none"> • Tutorials. • Hospital training. • Development of Pharmaceutical care plan. • Questionnaire during lecture and training to develop clinical judgement. • Utilization of web resources, pharmacy practice soft wares, E-library & textbooks.

**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
First	-	Introduction to the course and overview	<ol style="list-style-type: none"> 1. Course introduction 2. Course overview 	-	-	-
	1	Professional, Legal and Ethical Issues in Relation to Prescribing Practice	<ol style="list-style-type: none"> 1. Definition for non-medical prescribing 2. Professional Issues 3. Legal Issues 4. Ethical Issues 	1.1 2.7	37-94 5-37	Prescribing Practice, Professional, Legal, Ethical Issues
Second	2	Essential Pharmacology, Therapeutics and Medicines Management for Non-medical Prescribers	<ol style="list-style-type: none"> 1. Pharmacology as part of prescribing practice 2. Management and avoidance of drug interactions 3. Management and avoidance of adverse medicine reactions 	1.1	162-195	Non-medical Prescribers, Management and avoidance, ADR, drug interactions
Third	3	Multi-disciplinary prescribing team and Pharmacist non-medical prescribers	<ol style="list-style-type: none"> 1. The multidisciplinary prescribing team 2. The multidisciplinary non-medical prescribing team 	1.1	198-219	Pharmacist non-medical prescribers
Fourth	4	Clinical skills for prescribing	<ol style="list-style-type: none"> 1. Vital signs 2. Examination of body systems 	1.1	222-259	Vital signs, Additional vital signs
Fifth	5	Long-term care pharmacy	<ol style="list-style-type: none"> 1. Elements of long-Term Care Pharmacy 2. Drug distribution Systems for long-Term Care Pharmacy 3. The Prescription filling Process in a long-Term Care Pharmacy 4. Services of a long-Term Care Pharmacy 	1.2	45-63	Long-Term Care Pharmacy, Services, Drug distribution Systems

Sixth	6	Role of pharmacist in long-term care	<ol style="list-style-type: none"> 1. Consultant Pharmacist Services 2. Pharmaceutical Care Plan 	1.2	99-113	Role of the Pharmacist , Consultant Pharmacist, Pharmaceutical Care Plan
Seventh	7	Managed care pharmacy	<ol style="list-style-type: none"> 1. The Role of the Pharmacist in Managed care pharmacy 2. Legislation and Regulations for Managed care pharmacy 	1.2	165-183	Managed care pharmacy, Legislation and Regulations
Tenth	8	Specialty pharmacy and Nuclear pharmacy	<ol style="list-style-type: none"> 1. Elements of Specialty pharmacy and Nuclear pharmacy 2. The Prescription filling Process in Specialty pharmacy and Nuclear pharmacy 3. The Role of the Pharmacist in Specialty pharmacy and Nuclear pharmacy 	1.2	213-251	Specialty pharmacy, Nuclear pharmacy, Prescription filling Process
Eleventh	9	Evidence based medicine – An overview of decision making in medicine	<ol style="list-style-type: none"> 1. What is Evidence-Based Medicine 2. Steps of Evidence-Based Medicine 3. Applying the evidence to individual patient care 4. Advantages and disadvantages in practicing EBM 	2.1 2.2	1-59 1-25	EBM, Evidence Based Medicine, decision making
Twelfth	10	Good pharmacy practice guidelines	<ol style="list-style-type: none"> 1. Definition of good pharmacy practice 2. Requirements of good pharmacy practice 3. Setting standards for good pharmacy practice 	2.3	310-323	WHO, GPP, good pharmacy practice guidelines
Thirteenth	11	Good clinical practice guidelines	<ol style="list-style-type: none"> 1. Investigator and Sponsor 2. Clinical trial protocol and protocol amendments 3. Investigator's Brochure 4. Essential documents for the conduct of a Clinical trial 	2.4 2.5	1-58 1-35	ICH, GCP, Good clinical practice guidelines
Fifteenth	12	Improving patient and health system outcomes through advanced pharmacy practice	<ol style="list-style-type: none"> 1. Pharmacists Integrated as Health Care Providers 2. Recognition as Health Care Providers. 3. Compensation Mechanisms 4. Evidence Based Alignment with Health Reform. 	2.6	7-46	Improving patient and health system outcomes

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
Mid-term written exam	17/10/2021 - 28/10/2021 (10.00 AM to 12.00 PM)	Lectures 1 to 6	Multiple Choice Questions (or) MCQ's and short answers &/or Match or others	30 marks	Multitask exam measuring all kinds of students talents with model answer from the lecture notes
Final written exam	26/12/2021 - 6/1/2022 (10.00 AM to 12.00 PM)	Lectures 1 to 12	Multiple Choice Questions (or) MCQ's and short answers &/or Match or others	40 marks	Multitask exam measuring all kinds of students talents with model answer from the lecture notes
Evaluation without exam	Description of performance required from student	Due date	Rubrics	Marks	Guidelines & instructions
	Advanced Pharmacy Practice Experience (Tutorial/Training) Continuous evaluation during the course progression	29/8/2021 to 16/12/2021	Case scenario based quiz and/or Preparation and submission of Pharmaceutical care plan (PCP) in a professional manner	20 marks	<ul style="list-style-type: none"> • Individual evaluation • Tutorials/Practical Exam: Students will be divided into suitable number of groups, each group will consist of 5 or more students will collaborate and participate but each student need to submit the answers for the Case Scenarios based Quiz or developing PCP by individual. • Hospital training (if): Each student need to take the 5th year syllabus relevant cases from wards by individual. • Preparation and submission of Patients data entry (Form-I) by Hand written and Pharmaceutical care plan (Form-X) Typed in a professional manner. • Discussion/ Viva-voce exam/ Questionnaire will be based on the case scenarios or submitted PCP or topics of the lectures.
	Other Activities	29/8/2021 to 16/12/2021	My Dispense Exercise (or) Assignment Based on Lectures 1 to12 and/or Quiz or others	10 marks	<ul style="list-style-type: none"> • Individual evaluation • Each or group of student will get one or different topics and need to submit assignment individually in the prescribed typed format. • Each student must follow the guidelines for the preparation and submission of assignments. • If necessary questionnaire will be raised by the instructor based on the submitted assignment.

Eighth: Readings and further References

1. Main Reference (Textbook) (correct citation in accordance to APA or other citation standards specific to discipline) from where student can get the textbook?	
1.	The textbook of non-medical prescribing, Dilyse Nuttall and Jane Rutt-Howard, Wiley-Blackwell. Available at https://www.amazon.com/Textbook-Non-Medical-Prescribing-Dilyse-Nuttall/dp/1119520479
2.	Advanced pharmacy practice, Anita. A. Lambert, Cengage learning. Available at https://www.amazon.com/Advanced-Pharmacy-Practice-Anita-Lambert/dp/1133131417/ref=sr_1_1?dchild=1&keywords=Advanced+Pharmacy+Practice&qid=1598169310&s=books&sr=1-1
2. Extra reading references and citations (books, internet cities, research papers)	
1.	Pharmacotherapy Casebook: A Patient-Focused Approach, Schwinghammer TL, Koehler JM, McGraw-Hill. Available at https://www.amazon.com/Pharmacotherapy-Casebook-Patient-Focused-Approach-Eleventh/dp/1260116670
2.	Highlights on evidence based medicine by Tawfik A.M. Khoja, et al. Executive Board of the Health Ministers Council. Available at https://www.yumpu.com/en/document/view/34555500/evidence-based-medicine
3.	Pharmacotherapeutics for Advanced Practice: A Practical Approach by Arcangelo, Virginia P, Peterson, Andrew M. Available at https://www.amazon.com/Pharmacotherapeutics-Advanced-Practice-Practical-Approach/dp/1496319966/ref=sr_1_4?dchild=1&keywords=Advanced+pharmacy+practice&qid=1598173306&s=books&sr=1-4
4.	Pharmacotherapy: A Pathophysiologic Approach, by Joseph T. DiPiro, Robert L Talbert, et al. McGraw-Hill Education. Available at https://www.amazon.com/Pharmacotherapy-Pathophysiologic-Approach-Joseph-DiPiro-dp-1260116816/dp/1260116816/ref=mt_other?encoding=UTF8&me=&qid=
5.	Joint FIP/WHO guidelines on good pharmacy practice: standards for quality of pharmacy services. WHO Technical Report Series, No.961. Available at http://apps.who.int/medicinedocs/documents/s18676en/s18676en.pdf
6.	ICH Guideline on Integrated Addendum to ICH E6(R1): Guideline for Good Clinical Practice E6(R2). Available at http://www.ich.org/fileadmin/Public_Web_Site/ICH_Products/Guidelines/Efficacy/E6/E6_R2_Step_4.pdf
7.	WHO Guidelines for good clinical practice (GCP) for trials on pharmaceutical products. WHO Technical Report Series, No. 850, Annex 3. Available at http://apps.who.int/medicinedocs/pdf/whozip13e/whozip13e.pdf
8.	Improving patient and health system outcomes through advanced pharmacy practice. Scott giberson et al., A report to the U.S. Surgeon general, Office of the Chief Pharmacist, U.S. Public Health Service. Available at https://www.accp.com/docs/positions/misc/improving_patient_and_health_system_outcomes.pdf
9.	National Treatment Agency for Substance Misuse, NTA, UK, Available at https://file:///C:/Users/058316/Downloads/UK10_nta_non_medical_prescribing.pdf
10.	Applied Therapeutics: The clinical Use of Drugs, Mary Anne Koda-Kimble, Lippincott Williams and Wilkins. Available at https://www.amazon.com/Applied-Therapeutics-Koda-Kimble-Youngs-dp-1496318293/dp/1496318293/ref=dp_ob_title_bk
11.	Practical guide to Contemporary Pharmacy Practice, Thompson JE, Davidow LW, Lippincott Williams & Wilkins. Available at https://www.amazon.com/Practical-Guide-Contemporary-Pharmacy-Practice/dp/0781783968
12.	Pharmaceutical Care Practice: The Patient-Centered Approach to Medication Management, Cipolle RJ, Strand LM, Morley PC, McGraw Hill. Available at https://www.amazon.com/Pharmaceutical-Care-Practice-Patient-Centered-Medication/dp/0071756388
13.	Clinical cases in cardiology, A guide to Learning and Practice, Alessandro Capucci, Springer. Available at https://www.springer.com/gp/book/9783319199252

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