

Republic of Iraq
Ministry of Higher Education & Scientific Research
Supervision and Scientific Evaluation Directorate
Quality Assurance and Academic Accreditation
International Accreditation Dept.

Academic Program Specification Form for the
Academic Year 2015-2016

University: AL-Mustansaria
College: Pharmacy College
Number of Departments in the College: 6
Date of Form Completion: 15-5-2016

Dean's Name

Assist. Prof. Monther F.
Mahdi

Date: 15 / 5 / 2016

Signature

Dean's Assistant

for Scientific Affairs
Lect. Dr. Inam S. Arif

Date: 15 / 5 / 2016

Signature

Head of department

Lect. Dr. Kadhim A. Kadhim

Date: 15 / 5 / 2016

Signature

The College Quality Assurance and University Performance
Manager

TEMPLATE FOR PROGRAMME SPECIFICATION

HIGHER EDUCATION PERFORMANCE REVIEW: PROGRAMME REVIEW

PROGRAMME SPECIFICATION

This Program Specification provides a concise summary of the main features of the program and the learning outcomes that a typical student might reasonably be expected to achieve and demonstrate if he/she takes full advantage of the learning opportunities that are provided. It is supported by a specification for each course that contributes to the program.

1. Teaching Institution	AL-Mustansaria University
2. University Department/Centre	College of pharmacy
3. Program Title	Part of Bachelor in pharmacy science
4. Title of Final Award	Bachelor in pharmacy science
5. Modes of Attendance offered	Semester
6. Accreditation	ACPE
7. Other external influences	Laboratory teaching+ hospital training+ Theoretical study
8. Date of production/revision of this specification	15/ 5/ 2016
9. Aims of the Program	
1-make the graduated students able be familiar with reading and processing the medical prescription	
2- make the graduated students able to communicate with the patients	
3- make the graduated students able to educate the patients about their medications	
4- make the graduated students able to dispense medications in prescriptions in hospitals and community pharmacy safely	
5-Doses specifications by therapeutic drug monitoring	

10. Learning Outcomes, Teaching, Learning and Assessment Methods

A. Knowledge and Understanding

- A1. familiar with reading and processing the medicine prescription
- A2. communicate with the patient
- A3. educate the patients about their medications
- A4. to dispense medications in hospitals safely
- A5. to monitor drug level in blood to design new dosage regimen
- A6.

B. Subject-specific skills

- B1. Communication skills with patients
- B2. Education skills to patients
- B3. Pharmacoeconomic skills

Teaching and Learning Methods

- 1-Seminars
- 2-Teaching lab
- 3-Hospital training
- 4-lectures
- 5-case presentations

Assessment methods

- 1-Queses
- 2-Oral exam
- 3- midterm exam
- 4- Final exam

C. Thinking Skills

- C1. Not found

Teaching and Learning Methods

Use of white board ,Data show ,Seminars and direct patient education in hospitals

Assessment methods

- 1-Queses
- 2-Oral exam
- 2- midterm exam
- 3- Final exam

D. General and Transferable Skills (other skills relevant to employability and personal development)
 D1. Able to work in community pharmacy
 D2. Able to work in hospital pharmacy

Teaching and Learning Methods

Use of white board ,Data show ,Seminars and direct patient education in hospitals

Assessment Methods

2-Oral exam
 2- midterm exam
 3- Final exam

11. Programmed Structure

11. Programmed Structure				12. Awards and Credits
Level/ Year	Course or Module Code	Course or Module Title	Credit rating	
Second	50305210	Communication skills	2	Bachelor Degree Requires (x) credits
Third	50305310	Pharmacy ethics	1	
Forth	50305405	Clinical pharmacy1	2+1lab	17
Forth	50305410	Clinical pharmacy2	2+1lab	
Fifth	50305506	Applied therapeutics	3	
Fifth	50305511	Applied therapeutics 2	2	
Fifth	50305514	Hospital training	2	
Fifth	50305513	Pharmacoeconomy	2	
Fifth	50305512	Therapeutic drug monitoring	2+1 lab	

13. Personal Development Planning

Not found

14. Admission criteria.

15. Key sources of information about the program

1-Robert S. Beardsley, (ed.); Communication Skills in Pharmacy Practice, 5th edition.

-1Robert J. Cipolle, Linda M. Strand, Peter C. Morley. Pharmaceutical Care Practice: The Clinician's Guide, 2nd Edition.

2- Robert m. Veatch and Amy Haddad. Case Studies in Pharmacy Ethics. second edition. Copyright © 2008 by Oxford University Press, Inc.

3-ALISON BLENKINSOPP, PAUL PAXTON(eds), Symptoms in the Pharmacy. A Guide to the Management of Common Illness, 6th edition.

4- Roger Walker, Clive Edwards (eds), Clinical Pharmacy & Therapeutics

5-Reference Text: Roger Walker, Clive Edwards (eds), Clinical Pharmacy & Therapeutics.2012

Barbara G.Wells & Joseph T. Diriro, Pharmacotherapy hand book 7th Edittion.

6-Drummond MF, O'Brien B, Stoddart GL, Torrance GW. Methods for the economic evaluation of health care programmes. 3rd ed. Oxford: Oxford University Press, 2005.

7-Applied Clinical Pharmacokinetics, Second Edition, 2008 by Larry A. Bauer.

Curriculum Skills Map

please tick in the relevant boxes where individual Program Learning Outcomes are being assessed

			Program Learning Outcomes																	
Year / Level	Course Code	Course Title	Core (C) Title or Option (O)	Knowledge and understanding				Subject-specific skills				Thinking Skills				General and Transferable Skills (or) Other skills relevant to employability and personal development				
				A1	A2	A3	A4	B1	B2	B3	B4	C1	C2	C3	C4	D1	D2	D3	D4	
Seco	50305210	Communic																	√	+
	503053101	Pharmacy	C	√															√	+
Forth	50305405	Clinical	C			√	√	√	√										√	+
	50305410	Clinical	C			√	√	√	√							√	√		√	+
Fifth	50305506	Applied	+			√	√	√	√							√	√		√	+
	50305511	Applied	C			√	√	√	√											
	50305512	Therapeuti	C				√									√√	√			+
	50305513	Pharmacoe	C				√									√	√			+

TEMPLATE FOR COURSE SPECIFICATION

HIGHER EDUCATION PERFORMANCE REVIEW: PROGRAMME REVIEW

COURSE SPECIFICATION

This Course Specification provides a concise summary of the main features of the course and the learning outcomes that a typical student might reasonably be expected to achieve and demonstrate if he/she takes full advantage of the learning opportunities that are provided. It should be cross-referenced with the programme specification.

1. Teaching Institution	AL-Mustansaria University
2. University Department/Centre	College of pharmacy
3. Course number:	50305210
4. Modes of Attendance offered	Semester
5. year / Semester	Semester system
6. Total no. of hours	30hrs.
8. Date of production/revision of this specification	15/ 5 /2016
9. Aims of the Programme	
1-make the graduated students able be familiar with reading and processing the medicine prescription	
2- make the graduated students able to communicate with the patient	
3- make the graduated students able to educate the patients about their medications	
4- make the graduated students able to dispense medications in prescriptions in	

hospitals and community pharmacy safely

5-Doses specifications by therapeutic drug monitoring

10. Learning Outcomes, Teaching, Learning and Assessment Methods

A. Knowledge and Understanding

- A1. familiar with reading and processing the medicine prescription
- A2. communicate with the patient
- A3. educate the patients about their medications
- A4. to dispense medications in hospitals safely
- A5. to monitor drug level in blood to design new dosage regimen

B. Subject-specific skills

- B1. Communication skills with patients
- B2. Education skills to patients
- B3. Pharmacoeconomic skills

Teaching and Learning Methods

- Power Points.. Whit board ,
- Simulators
- Guidelines
- Seminars
- Skill lab.
- Lecture/ questions and answer
- Demonstration,
- Small groups assignment
- Procedures
- Power point slide
- Case study

Assessment methods

- Theory exam.
- Practical exam.
- Class activities
- Lab. Exam
- Practical evaluation
- Oral exam
- midterm exam
- Final exam

C. Thinking Skills

- C1. Interpretation
- C2. Analysis
- C3. Evaluation
- C4. Explanation

Teaching and Learning Methods

- PowerPoints.. Whit board ,
- Simulators
- Guidelines
- Seminars
- Skill lab.
- Lecture/ questions and answer
- Demonstration,
- Small groups assignment
- Power point slide
- Case study

Assessment methods

- Theory exam.
- Practical exam.
- Class activities
- Lab. Exam
- Practical evaluation
- Oral exam
- mid term exam
- Final exam

11. Course Structure: Title of the course: Communication Skills
 Course number: 50305210 Level: 2nd Class, 2st Semester

Week	Hours	ILOs	Unit/Module or Topic Title	Teaching Method	Assessment Method
1	2	Patient-Centered Communication in Pharmacy Practice	Patient-Centered Communication in Pharmacy Practice	Power Points. White board. Lecture	.Theory exam Class activities
2	2	Principles and Elements of Interpersonal Communication	Principles and Elements of Interpersonal Communication	Power Points. White board, Lecture	.Theory exam Class activities
3	2	Nonverbal type of communication.	Nonverbal type of communication.	Power Points. White board, Lecture	.Theory exam Class activities
4	2	Barriers to communication.	Barriers to communication.	Power Points. White board. Lecture	.Theory exam Class activities
5	2	Listening and empathic responding during communication.	Listening and empathic responding during communication.	Power Points. White board. Lecture	.Theory exam Class activities
6	2	Assertiveness.	Assertiveness.	Power Points. White board. Lecture	.Theory exam Class activities
7	2	Interviewing and assessment.	Interviewing and assessment.	Power Points. White board. Lecture	.Theory exam Class activities
8	2	Helping patients	Helping patients to manage therapeutic	Power Points.	.Theory exam Class activities

		to manage therapeutic regimens.	regimens.	White board. Lecture	
9	2	Patient counseling; counseling check list; point-by-point discussion; counseling scenario.	Patient counseling; counseling check list; point-by-point discussion; counseling scenario.	Power Points. White board. Lecture	.Theory exam Class activities
10	2	Medication safety and communication skills.	Medication safety and communication skills.	Power Points. White board. Lecture	.Theory exam Class activities
11	2	Strategies to meet specific needs.	Strategies to meet specific needs.	Power Points. White board. Lecture	.Theory exam Class activities
12	2	Communicating with children and elderly about medications.	Communicating with children and elderly about medications.	Power Points. White board. Lecture	.Theory exam Class activities
13	2	Communication skills and inter-professional collaboration.	Communication skills and inter-professional collaboration.	Power Points. White board. Lecture	.Theory exam Class activities
14	2	Electronic	Electronic communication in	Power Points.	.Theory exam Class activities

		communication in healthcare.	healthcare.	White board, Lecture, Theory exam, Class activities	
15	2	Ethical behavior when communicating with patients.	Ethical behavior when communicating with patients.	Power Points, White board, Lecture	.Theory exam, Class activities

12. Infrastructure

Required reading: · CORE TEXTS · COURSE MATERIALS · OTHER	1-Robert S. Beardsley, (ed.); Communication Skills in Pharmacy Practice, 5th edition.
Special requirements (include for example workshops, periodicals, IT software, websites)	-PowerPoints. -Internet
Community-based facilities (include for example, guest Lectures , internship, field studies)	Not found

13. Admissions

Pre-requisites	Not found
Minimum number of students	60
Maximum number of students	110

HIGHER EDUCATION PERFORMANCE REVIEW: PROGRAMME REVIEW

COURSE SPECIFICATION

This Course Specification provides a concise summary of the main features of the course and the learning outcomes that a typical student might reasonably be expected to achieve and demonstrate if he/she takes full advantage of the learning opportunities that are provided. It should be cross-referenced with the programme specification.

1. Teaching Institution	AL-Mustansaria University
2. University Department/Centre	College of pharmacy
3. Course number:	50305310
4. Modes of Attendance offered	Semester
5. year / Semester	Semester system
6. Total no. of hours	6 hrs
8. Date of production/revision of this specification	15 /5 /2016
9. Aims of the Programme	
1-make the graduated students able be familiar with reading and processing the medicine prescription	
2- make the graduated students able to communicate with the patient	
3- make the graduated students able to educate the patients about their medications	
4- make the graduated students able to dispense medications in prescriptions in hospitals and community pharmacy safely	

5-Doses specifications by therapeutic drug monitoring

10. Learning Outcomes, Teaching, Learning and Assessment Methods

B. Knowledge and Understanding

- A1. familiar with reading and processing the medicine prescription
- A2. communicate with the patient
- A3. educate the patients about their medications
- A4. to dispense medications in hospitals safely
- A5. to monitor drug level in blood to design new dosage regimen

B. Subject-specific skills

- B1. Communication skills with patients
- B2. Education skills to patients
- B3. Pharmacoeconomic skills

Teaching and Learning Methods

- Power Points.. Whit board ,
- Simulators
- Guidelines
- Seminars
- Skill lab.
- Lecture/ questions and answer
- Demonstration,
- Small groups assignment
- Procedures
- Power point slide
- Case study

Assessment methods

- Theory exam.
- Practical exam.
- Class activities
- Lab. Exam
- Practical evaluation
- Oral exam
- midterm exam
- Final exam

C. Thinking Skills

- C1. Interpretation
- C2. Analysis
- C3. Evaluation
- C4. Explanation

Teaching and Learning Methods

- PowerPoints.. Whit board ,
- Simulators
- Guidelines
- Seminars
- Skill lab.
- Lecture/ questions and answer
- Demonstration,
- Small groups assignment
- Power point slide
- Case study

Assessment methods

- Theory exam.
- Practical exam.
- Class activities
- Lab. Exam
- Practical evaluation
- Oral exam
- mid term exam
- Final exam

11. Course Structure

Title of the course: *Medical ethics* Course number: (50305310)

Level: 3rd Class, 2nd Semester

Week	Hours	ILOs	Unit/Module or TopicTitle	Teaching Method	Assessment Method
1	2	Introduction to Pharmacy Ethics (Introduction to Pharmacy Ethics (Theoretical considerations).	PowerPoints. White board, Lecture	.Theory exam Class activities
2	1	Code of Ethics for Pharmacists.	Code of Ethics for Pharmacists.	Power Points. White board, Lecture	.Theory exam Class activities
3	3	Common Ethical Considerations in Pharmaceutical Care Practice (Beneficence, Autonomy, Honesty, Informed Consent, Confidentiality, Fidelity).	Common Ethical Considerations in Pharmaceutical Care Practice (Beneficence, Autonomy, Honesty, Informed Consent, Confidentiality, Fidelity).	Power Points. White board, Lecture	.Theory exam Class activities
4	2	Interprofessional Relations.	Interprofessional Relations.	Power Points. White board, Lecture	.Theory exam Class activities
5	1	Making ethical decisions.	Making ethical decisions.	Power Points. White board, Lecture	.Theory exam Class activities
6	1	Ethical issues related to clinical pharmacy	Ethical issues related to clinical pharmacy research.	Power Points. White board, Lecture	.Theory exam Class activities

		research.			
7	1	Ethical problems in the pharmacist's clinical practice.	Ethical problems in the pharmacist's clinical practice.	Power Points. White board, Lecture	.Theory exam Class activities
8	1	Preventing misuse of medicines.	Preventing misuse of medicines.	Power Points. White board, Lecture	.Theory exam Class activities
9	3	Case studies in pharmacy ethics.	Case studies in pharmacy ethics.	Power Points. White board, Lecture	.Theory exam Class activities

12. Infrastructure

Required reading: · CORE TEXTS · COURSE MATERIALS · OTHER	Robert J. Cipolle, Linda M. Strand, Peter C. -1 Morley. Pharmaceutical Care Practice: The Clinician's Guide, 2nd Edition Robert m. Veatch and Amy Haddad. Case -2 Studies in Pharmacy Ethics. second edition. Copyright © 2008 by Oxford University Press, Inc
Special requirements (include for example workshops, periodicals, IT software, websites)	.PowerPoints Internet-
Community-based facilities (include for example, guest Lectures , internship,field studies)	Not needed

13. Admissions

Pre-requisites	Not needed
Minimum number of students	50
Maximum number of students	100

COURSE SPECIFICATION

This Course Specification provides a concise summary of the main features of the course and the learning outcomes that a typical student might reasonably be expected to achieve and demonstrate if he/she takes full advantage of the learning opportunities that are provided. It should be cross-referenced with the programme specification.

1. Teaching Institution	AL-Mustansaria University
2. University Department/Centre	College of pharmacy
3. Course number:	50305405
4. Modes of Attendance offered	Semester
5. year / Semester	Semester system
6. Total no. of hours	32 hrs
8. Date of production/revision of this specification	15 /5 /2016
9. Aims of the Programme	
1-make the graduated students able be familiar with reading and processing the medicine prescription	
2- make the graduated students able to communicate with the patient	
3- make the graduated students able to educate the patients about their medications	
4- make the graduated students able to dispense medications in prescriptions in hospitals and community pharmacy safely	
5-Doses specifications by therapeutic drug monitoring	
10. Learning Outcomes, Teaching, Learning and Assessment Methods	

C. Knowledge and Understanding

- A1. familiar with reading and processing the medicine prescription
- A2. communicate with the patient
- A3. educate the patients about their medications
- A4. to dispense medications in hospitals safely
- A5. to monitor drug level in blood to design new dosage regimen

B. Subject-specific skills

- B1. Communication skills with patients
- B2. Education skills to patients
- B3. Pharmacoeconomic skills

Teaching and Learning Methods

- Power Points.. Whit board ,
- Simulators
- Guidelines
- Seminars
- Skill lab.
- Lecture/ questions and answer
- Demonstration,
- Small groups assignment
- Procedures
- Power point slide
- Case study

Assessment methods

- Theory exam.
- Practical exam.
- Class activities
- Lab. Exam
- Practical evaluation
- Oral exam
- midterm exam
- Final exam

C. Thinking Skills

- C1. Interpretation
- C2. Analysis
- C3. Evaluation
- C4. Explanation

Teaching and Learning Methods

- PowerPoints.. Whit board ,
- Simulators
- Guidelines
- Seminars
- Skill lab.

- Lecture/ questions and answer
- Demonstration,
- Small groups assignment
- Power point slide
- Case study

Assessment methods

- Theory exam.
- Practical exam.
- Class activities
- Lab. Exam
- Practical evaluation
- Oral exam
- mid term exam
- Final exam

11. Course Structure

Title of the course: clinical pharmacy I Course number: (50305405)

Level: 4rd Class, 1st Semester

Week	Hours	ILOs	Unit/Module or TopicTitle	Teaching Method	Assessment Method
1	2	Introduction	Introduction to community pharmacy.	Teaching Method	.Theory exam Class activities
2	2	Respiratory problems:	Respiratory problems: Cough, Common cold, allergic rhinitis, Otitis media, Laryngitis & Pharyngitis	Power Points. White board, Lecture	.Theory exam Class activities
3	2	G.I.T problem se	G.I.T problem se: Diarrhea, Constipation, Heart burn and indigestion, IBS and Hemorrhoids	Power Points. White board, Lecture	.Theory exam Class activities
4	2	Pediatric care	Pediatric care practice : Oral thrush, pinworms and head lice	Power Points. White board, Lecture	.Theory exam Class activities
5	2	Skin conditions	Skin conditions: Acne, Scabies, Psoriasis, Hair loss, Fungal infection, Eczema and Dermatitis , Dandruff, Cold sore, Corns and Callus.	Power Points. White board, Lecture	.Theory exam Class activities
6	2	Women's health	Women's health care: Cystitis and vaginal thrush, primary dysmenorrhea and Premenstrual syndrome.	Power Points. White board, Lecture	.Theory exam Class activities
7	2	CNS related	CNS related problems: Headache, Insomnia, Motion sickness, Nausea and vomiting	Power Points. White board, Lecture	.Theory exam Class activities
8	2	- Eye problems	- Eye problems	Power Points. White board, Lecture	.Theory exam Class activities
9	2		ENT problems	Power Points.	.Theory exam

				White board, Lecture	Class activities
10	2		Oral hygiene, mouth ulcer	Power Points. White board, Lecture	.Theory exam Class activities
12	2		Obesity and body weight control.	Power Points. White board, Lecture	.Theory exam Class activities
13	2		- Pain and musculoskeletal disorders	Power Points. White board, Lecture	.Theory exam Class activities
14	2		Nicotine replacement therapy (NRT).	Power Points. White board, Lecture	.Theory exam Class activities
15	2		Dietary supplements	Power Points. White board, Lecture	.Theory exam Class activities
16	2		An update in reclassification of OTC drugs (simvastatin, Tamusotisin & azithromycin).	Power Points. White board, Lecture	.Theory exam Class activities

12. Infrastructure

Required reading: · CORE TEXTS · COURSE MATERIALS · OTHER	Reference Text: ALISON BLENKINSOPP, PAUL PAXTON(eds), Symptoms in the Pharmacy. A Guide to .the Management of Common Illness, 6th edition Lor waterfield, Community Pharmacy Hand Book, 5th edition
Special requirements (include for example workshops, periodicals, IT software, websites)	◆ PowerPoints. Internet
Community-based facilities (include for example, guest Lectures , internship , field studies)	

3. Admissions

Pre-requisites	Preparation the subjects before entering the classroom
Minimum number of students	70
Maximum number of students	110

COURSE SPECIFICATION

This Course Specification provides a concise summary of the main features of the course and the learning outcomes that a typical student might reasonably be expected to achieve and demonstrate if he/she takes full advantage of the learning opportunities that are provided. It should be cross-referenced with the programme specification.

1. Teaching Institution	AL-Mustansaria University
2. University Department/Centre	College of pharmacy
3. Course number:	50305405
4. Modes of Attendance offered	Semester
5. year / Semester	Semester system
6. Total no. of hours	30 hrs
8. Date of production/revision of this specification	15 /5 /2016
9. Aims of the Programme	
1-make the graduated students able be familiar with reading and processing the medicine prescription	
2- make the graduated students able to communicate with the patient	
3- make the graduated students able to educate the patients about their medications	
4- make the graduated students able to dispense medications in prescriptions in hospitals and community pharmacy safely	
5-Doses specifications by therapeutic drug monitoring	
10. Learning Outcomes, Teaching, Learning and Assessment Methods	

D. Knowledge and Understanding

- A1. familiar with reading and processing the medicine prescription
- A2. communicate with the patient
- A3. educate the patients about their medications
- A4. to dispense medications in hospitals safely
- A5. to monitor drug level in blood to design new dosage regimen

B. Subject-specific skills

- B1. Communication skills with patients
- B2. Education skills to patients
- B3. Pharmacoeconomic skills

Teaching and Learning Methods

- Power Points.. Whit board ,
- Simulators
- Guidelines
- Seminars
- Skill lab.
- Lecture/ questions and answer
- Demonstration,
- Small groups assignment
- Procedures
- Power point slide
- Case study

Assessment methods

- Theory exam.
- Practical exam.
- Class activities
- Lab. Exam
- Practical evaluation
- Oral exam
- midterm exam
- Final exam

C. Thinking Skills

- C1. Interpretation
- C2. Analysis
- C3. Evaluation
- C4. Explanation

Teaching and Learning Methods

- PowerPoints.. Whit board ,
- Simulators
- Guidelines
- Seminars
- Skill lab.

- Lecture/ questions and answer
- Demonstration,
- Small groups assignment
- Power point slide
- Case study

Assessment methods

- Theory exam.
- Practical exam.
- Class activities
- Lab. Exam
- Practical evaluation
- Oral exam
- mid term exam
- Final exam

11. Course Structure: Title of the course: practical Clinical Pharmacy I
Level: 4th Class, 1st Semester

Week	Hours	ILOs	Unit/Module or TopicTitle	Teaching Method	Assessment Method
1	2		Communication with patients.	Small group teaching and dialogue	Oral and written exam
2	2		Respiratory system in practice (part I): Cough.	Small group teaching and dialogue	Oral and written exam
3	2		Respiratory system in practice (part II): Common cold.	Small group teaching and dialogue	Oral and written exam
4	2		G.I.T system in practice (part I): Constipation.	Small group teaching and dialogue	Oral and written exam
5	2		G.I.T system in practice (part II): Diarrhea and IBS.	Small group teaching and dialogue	Oral and written exam
6	2		GIT system in practice (part III): GERD& indigestion.	Small group teaching and dialogue	Oral and written exam
7	2		Skin conditions in practice (part I): Hair loss; cold sore and athlete's foot.	Small group teaching and dialogue	Oral and written exam
8	2		Skin conditions in practice (part II): Dandruff, Eczema and mouth ulcer.	Small group teaching and dialogue	Oral and written exam
9	2		Skin conditions in practice (part III): warts and scabies.	Small group teaching and dialogue	Oral and written exam
10	2		Pediatrics in practice: Oral thrush; colic; pinworm and napkin rash.	Small group teaching and dialogue	Oral and written exam
11	2		Minor eye	Small group	Oral and written

			disorders in practice.	teaching and dialogue	exam
12	2		CNS system: Insomnia, motion sickness, obesity and nicotine replacement therapy (NRT).	Small group teaching and dialogue	Oral and written exam
13	2		Drug Information sources for pharmacist.	Small group teaching and dialogue	Oral and written exam
14	2		An update in reclassification of OTC drugs.	Small group teaching and dialogue	Oral and written exam
15	2		Collective practice.	Small group teaching and dialogue	Oral and written exam

12. Infrastructure

Required reading: · CORE TEXTS · COURSE MATERIALS · OTHER	BNF
Special requirements (include for example workshops, periodicals, IT software, websites)	Some medication to learn the student the trade name
Community-based facilities (include for example, guest Lectures , internship,field studies)	Not needed

13. Admissions

Pre-requisites	Preparation the subjects before entering the classroom
Minimum number of students	10
Maximum number of students	30

COURSE SPECIFICATION

This Course Specification provides a concise summary of the main features of the course and the learning outcomes that a typical student might reasonably be expected to achieve and demonstrate if he/she takes full advantage of the learning opportunities that are provided. It should be cross-referenced with the programme specification.

1. Teaching Institution	AL-Mustansaria University
2. University Department/Centre	College of pharmacy
3. Course number:	50305410
4. Modes of Attendance offered	Semester
5. year / Semester	Semester system
6. Total no. of hours	32 hrs
8. Date of production/revision of this specification	15 /5 /2016
9. Aims of the Programme	
1-make the graduated students able be familiar with reading and processing the medicine prescription	
2- make the graduated students able to communicate with the patient	
3- make the graduated students able to educate the patients about their medications	
4- make the graduated students able to dispense medications in prescriptions in hospitals and community pharmacy safely	
5-Doses specifications by therapeutic drug monitoring	
10. Learning Outcomes, Teaching, Learning and Assessment Methods	

E. Knowledge and Understanding

- A1. familiar with reading and processing the medicine prescription
- A2. communicate with the patient
- A3. educate the patients about their medications
- A4. to dispense medications in hospitals safely
- A5. to monitor drug level in blood to design new dosage regimen

B. Subject-specific skills

- B1. Communication skills with patients
- B2. Education skills to patients
- B3. Pharmacoeconomic skills

Teaching and Learning Methods

- Power Points.. Whit board ,
- Simulators
- Guidelines
- Seminars
- Skill lab.
- Lecture/ questions and answer
- Demonstration,
- Small groups assignment
- Procedures
- Power point slide
- Case study

Assessment methods

- Theory exam.
- Practical exam.
- Class activities
- Lab. Exam
- Practical evaluation
- Oral exam
- midterm exam
- Final exam

C. Thinking Skills

- C1. Interpretation
- C2. Analysis
- C3. Evaluation
- C4. Explanation

Teaching and Learning Methods

- PowerPoints.. Whit board ,
- Simulators
- Guidelines
- Seminars
- Skill lab.

- Lecture/ questions and answer
- Demonstration,
- Small groups assignment
- Power point slide
- Case study

Assessment methods

- Theory exam.
- Practical exam.
- Class activities
- Lab. Exam
- Practical evaluation
- Oral exam
- mid term exam
- Final exam

11. Course Structure : Title of the course: Clinical Pharmacy IICourse number (50305410)Level: 4th Class, 2nd Semester

Week	Hours	ILOs	Unit/Module or TopicTitle	Teaching Method	Assessment Method
1	2		Introduction to the concept of clinical pharmacy- its activities and professional responsibilities.(including current state of clinical pharmacy in Iraq) .	Whit board, Lecture	.Theory exam Class activities
2	2		overview of pharmaceutical care practice (the patient care process).	PowerPoints Whit board, Lecture	.Theory exam Class activities
3	2		Hematologic disorders: Anemia and sickle cell disease.	PowerPoints Whit board, Lecture	.Theory exam Class activities
4	2		Hypertension. Heart failure.	PowerPoints. Whit board, Lecture	.Theory exam Class activities
5	2		Ischemic heart diseases. Peripheral vascular diseases.	Whit board, Lecture	.Theory exam Class activities
6	2		- Asthma. Chronic obstructive pulmonary disease (COPD).	Whit board, Lecture	.Theory exam Class activities
7	2		Diabetes mellitus & Diabetic ketoacidosis (DKA) .	Whit board, Lecture	.Theory exam Class activities
8	2		Peptic ulcer disease.	Whit board, Lecture	.Theory exam Class activities
9	2		Tuberculosis . Infective meningitis	Whit board, Lecture	.Theory exam Class activities
10	2		Respiratory tract infections. GIT infections	Whit board, Lecture	.Theory exam Class activities
11	2		Gout and hyperuricemia	Whit board, Lecture	.Theory exam Class activities
12	2		Rheumatoid arthritis (RA) and osteoarthritis (OA)	Whit board, Lecture	.Theory exam Class activities
13	2		Osteoporosis and other metabolic bone disease.	Whit board, Lecture	.Theory exam Class activities

14	2		Infectious Endocarditis	Whit board, Lecture	.Theory exam Class activities
15	2		Surgical antibiotic prophylaxis	Whit board, Lecture	.Theory exam Class activities
16	2		Review before final exam		

12. Infrastructure

Required reading: · CORE TEXTS · COURSE MATERIALS · OTHER	Roger Walker, Clive Edwards (eds), Clinical Pharmacy & Therapeutics
Special requirements (include for example workshops, periodicals, IT software, websites)	No need
Community-based facilities (include for example, guest Lectures , internship,field studies)	No need

13. Admissions

Pre-requisites	Preparation the subjects before entering the classroom
Minimum number of students	50
Maximum number of students	100

COURSE SPECIFICATION

This Course Specification provides a concise summary of the main features of the course and the learning outcomes that a typical student might reasonably be expected to achieve and demonstrate if he/she takes full advantage of the learning opportunities that are provided. It should be cross-referenced with the programme specification.

1. Teaching Institution	AL-Mustansaria University
2. University Department/Centre	College of pharmacy
3. Course number:	50305506
4. Modes of Attendance offered	Semester
5. year / Semester	Semester system
6. Total no. of hours	42 hrs
8. Date of production/revision of this specification	15 /5 /2016
9. Aims of the Programme	
1-make the graduated students able be familiar with reading and processing the medicine prescription	
2- make the graduated students able to communicate with the patient	
3- make the graduated students able to educate the patients about their medications	
4- make the graduated students able to dispense medications in prescriptions in hospitals and community pharmacy safely	
5-Doses specifications by therapeutic drug monitoring	
10. Learning Outcomes, Teaching, Learning and Assessment Methods	

F. Knowledge and Understanding

- A1. familiar with reading and processing the medicine prescription
- A2. communicate with the patient
- A3. educate the patients about their medications
- A4. to dispense medications in hospitals safely
- A5. to monitor drug level in blood to design new dosage regimen

B. Subject-specific skills

- B1. Communication skills with patients
- B2. Education skills to patients
- B3. Pharmacoeconomic skills

Teaching and Learning Methods

- Power Points.. Whit board ,
- Simulators
- Guidelines
- Seminars
- Skill lab.
- Lecture/ questions and answer
- Demonstration,
- Small groups assignment
- Procedures
- Power point slide
- Case study

Assessment methods

- Theory exam.
- Practical exam.
- Class activities
- Lab. Exam
- Practical evaluation
- Oral exam
- midterm exam
- Final exam

C. Thinking Skills

- C1. Interpretation
- C2. Analysis
- C3. Evaluation
- C4. Explanation

Teaching and Learning Methods

- PowerPoints.. Whit board ,
- Simulators
- Guidelines
- Seminars
- Skill lab.
- Lecture/ questions and answer

- Demonstration,
- Small groups assignment
- Power point slide
- Case study

Assessment methods

- Theory exam.
- Practical exam.
- Class activities
- Lab. Exam
- Practical evaluation
- Oral exam
- mid term exam
- Final exam

11. Course Structure: Title of the course: Therapeutic I Course number (50305506)Level: 5th Class, 1st Semester					
Week	Hours	ILOs	Unit/Module or Topic Title	Teaching Method	Assessment Method
1	3		Acute coronary syndrome.	Lecture	.Theory exam
2	3		Arrhythmias	Whit board,	.Theory exam
3	3		Thrombosis. Stroke	Lecture	.Theory exam
4	3		Dyslipidemia. Shock	Whit board,	.Theory exam
5	3		Parkinson's disease. Epilepsy and status epilepticus	Lecture	.Theory exam
6	3		Viral hepatitis. Liver cirrhosis	Lecture	.Theory exam
7	3		Glaucoma. multiple sclerosis.	Whit board,	.Theory exam
8	3		Acute renal failure (ARF)	Whit board,	.Theory exam
9	3		Chronic renal failure (CRF). Hemodialysis and peritoneal dialysis	Lecture	.Theory exam
10	3		Parenteral nutrition. Enteral nutrition	Whit board,	.Theory exam
11	3		Urinary incontinence and pediatric enuresis	Whit board,	.Theory exam
12	3		Interpretation of Lab. data.	Lecture	.Theory exam
13	3		Disorders of fluid and electrolytes. Acid – base disorders	Whit board,	.Theory exam
14	3		Systemic lupus erythematosus (SLE). Inflammatory bowel diseases	Lecture	.Theory exam

12. Infrastructure

Required reading:

- CORE TEXTS
- COURSE MATERIALS
- OTHER

Reference Text: Roger Walker, Clive Edwards (eds), Clinical Pharmacy & Therapeutics.2012
Barbara G.Wells & Joseph T. Diriro, Pharmacotherapy hand book 7th Edition.

Special requirements (include for example workshops, periodicals, IT software, websites)

No need

Community-based facilities (include for example, guest Lectures , internship , field studies)	No need
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13. Admissions	
Pre-requisites	Preparation the subjects before entering the classroom
Minimum number of students	50
Maximum number of students	100

COURSE SPECIFICATION

This Course Specification provides a concise summary of the main features of the course and the learning outcomes that a typical student might reasonably be expected to achieve and demonstrate if he/she takes full advantage of the learning opportunities that are provided. It should be cross-referenced with the programme specification.

1. Teaching Institution	AL-Mustansaria University
2. University Department/Centre	College of pharmacy
3. Course number:	50305512
4. Modes of Attendance offered	Semester
5. year / Semester	Semester system
6. Total no. of hours	30 hrs
8. Date of production/revision of this specification	15 /5 /2016

9. Aims of the Programme

1-make the graduated students able be familiar with reading and processing the medicine prescription

2- make the graduated students able to communicate with the patient

3- make the graduated students able to educate the patients about their medications

4- make the graduated students able to dispense medications in prescriptions in hospitals and community pharmacy safely

5-Doses specifications by therapeutic drug monitoring

10. Learning Outcomes, Teaching, Learning and Assessment Methods

G. Knowledge and Understanding

A1. familiar with reading and processing the medicine prescription

A2. communicate with the patient

A3. educate the patients about their medications

A4. to dispense medications in hospitals safely

A5.to monitor drug level in blood to design new dosage regimen

B. Subject-specific skills

B1.Communication skills with patients

B2.Education skills to patients

B3. Pharmacoeconomic skills

Teaching and Learning Methods

- Power Points.. Whit board ,
- Simulators
- Guidelines
- Seminars
- Skill lab.
- Lecture/ questions and answer
- Demonstration,
- Small groups assignment
- Procedures
- Power point slide
- Case study

Assessment methods

- Theory exam.
- Practical exam.
- Class activities
- Lab. Exam
- Practical evaluation
- Oral exam
- midterm exam
- Final exam

- C. Thinking Skills
 - C1. Interpretation
 - C2. Analysis
 - C3. Evaluation
 - C4. Explanation

Teaching and Learning Methods

- Power Points.. Whit board
- Simulators
- Guidelines
- Seminars
- Skill lab.
- Lecture/ questions and answer
- Demonstration,
- Small groups assignment
- Power point slide
- Case study

Assessment methods

- Theory exam.
- Practical exam.
- Class activities
- Lab. Exam
- Practical evaluation
- Oral exam
- mid term exam
- Final exam

11. Course Structure : Title of the course: Therapeutic II					
Course number (50305512)			Level: 5th Class, 2nd Semester		
Week	Hours	ILOs	Unit/Module or TopicTitle	Teaching Method	Assessment Method
1	2		Thyroid and parathyroid disorders	Whit board,	.Theory exam
2	2		Endometriosis	Lecture	.Theory exam
3	2		Contraception	Whit board,	.Theory exam
4	2		Menstruation related disorders. Hormonal replacement therapy (HRT)	Lecture	.Theory exam
5	2		Cancer treatment and chemotherapy	Lecture	.Theory exam
6	2		Leukemias	Whit board,	.Theory exam
7	2		Lymphomas and Multiple myeloma	Lecture	.Theory exam
8	2		Breast and prostate cancers	Whit board,	.Theory exam
9	2		colorectal cancer		
10	2		Alzheimer's disease	Lecture	.Theory exam
11	2		Depressive disorders	Lecture	.Theory exam
12	2		Anxiety disorders. Sleep disorders	Whit board,	.Theory exam
13	2		Bipolar disorders	Whit board,	.Theory exam
14	2		Adrenal gland disorders	Lecture	
15	2		Schizophrenia	Lecture	.Theory exam

12. Infrastructure

Required reading: · CORE TEXTS · COURSE MATERIALS · OTHER	Reference Text: Roger Walker, Clive Edwards (eds), Clinical Pharmacy & Therapeutics.2012 Barbara G.Wells & Joseph T. Diriro, Pharmacotherapy hand book 7th Edition
Special requirements (include for example workshops, periodicals, IT software, websites)	No need
Community-based facilities (include for example, guest Lectures , internship , field studies)	No need
13. Admissions	
Pre-requisites	Preparation the subjects before entering the classroom
Minimum number of students	50

COURSE SPECIFICATION

This Course Specification provides a concise summary of the main features of the course and the learning outcomes that a typical student might reasonably be expected to achieve and demonstrate if he/she takes full advantage of the learning opportunities that are provided. It should be cross-referenced with the programme specification.

1. Teaching Institution	AL-Mustansaria University
2. University Department/Centre	College of pharmacy
3. Course number:	50305514
4. Modes of Attendance offered	Semester
5. year / Semester	Semester system
6. Total no. of hours	116 hrs
8. Date of production/revision of this specification	15 /5 /2016
9. Aims of the Programme	
1-make the graduated students able be familiar with reading and processing the medicine prescription	
2- make the graduated students able to communicate with the patient	
3- make the graduated students able to educate the patients about their medications	
4- make the graduated students able to dispense medications in prescriptions in hospitals and community pharmacy safely	
5-Doses specifications by therapeutic drug monitoring	
10. Learning Outcomes, Teaching, Learning and Assessment Methods	

H. Knowledge and Understanding

- A1. familiar with reading and processing the medicine prescription
- A2. communicate with the patient
- A3. educate the patients about their medications
- A4. to dispense medications in hospitals safely
- A5. to monitor drug level in blood to design new dosage regimen

B. Subject-specific skills

- B1. Communication skills with patients
- B2. Education skills to patients
- B3. Pharmacoeconomic skills

Teaching and Learning Methods

- Power Points.. Whit board ,
- Simulators
- Guidelines
- Seminars
- Skill lab.
- Lecture/ questions and answer
- Demonstration,
- Small groups assignment
- Procedures
- Power point slide
- Case study

Assessment methods

- Theory exam.
- Practical exam.
- Class activities
- Lab. Exam
- Practical evaluation
- Oral exam
- midterm exam
- Final exam

C. Thinking Skills

- C1. Interpretation
- C2. Analysis
- C3. Evaluation
- C4. Explanation

Teaching and Learning Methods

- Power Points.. Whit board
- Simulators
- Guidelines
- Seminars
- Skill lab.
- Lecture/ questions and answer

- Demonstration,
- Small groups assignment
- Power point slide
- Case study

Assessment methods

- Theory exam.
- Practical exam.
- Class activities
- Lab. Exam
- Practical evaluation
- Oral exam
- mid term exam
- Final exam

11. Course Structure: Title of the course: Hospital Training Course number: (50305514) Level: 5th Class, annual					
Week	Hou rs	ILOs	Unit/Module or Topic Title	Teaching Method	Assessment Method
Surgical ward					
1	4		Pre-operative Care	Case presentation ,lectures ,	Oral exam, case exam ,theory exam
2	4		Post-operative Care	Case presentation ,lectures ,	Oral exam, case exam ,theory exam
3	4		I.V fluids, Anesthesia	Case presentation ,lectures ,	Oral exam, case exam ,theory exam
4	4		Hernia	Case presentation ,lectures ,	Oral exam, case exam ,theory exam
5	4		Diabetic foot	Case presentation ,lectures ,	Oral exam, case exam ,theory exam
6	4		Cholelithiasis		Oral exam, case exam ,theory exam
7	4		Breast Cancer	Case presentation ,lectures ,	Oral exam, case exam ,theory exam
8	4		Acute Appendicitis	Case presentation ,lectures ,	Oral exam, case exam ,theory exam
9	4		DVT	Case presentation ,lectures ,	Oral exam, case exam ,theory exam
10	4		Nephrolithiasis	Case presentation ,lectures ,	Oral exam, case exam ,theory exam
			Exam and case presentation		
Internal Medicine Ward					
1	4		Hypertension	Case presentation ,lectures ,	Oral exam, case exam ,theory exam
2	4		Ischemic Heart Disease	Case presentation ,lectures ,	Oral exam, case exam ,theory exam
3	4		Asthma		Oral exam, case exam ,theory exam
4	4		Peptic Ulcer	Case presentatin 4,lectures ,	Oral exam, case exam ,theory exam
5	4		Acute Renal Failure	Case presentation ,lectures ,	Oral exam, case exam ,theory exam
6	4		Diabetes mellitus	Case presentation ,lectures ,	Oral exam, case exam ,theory exam
7	4		Anemia	Case presentation ,lectures ,	Oral exam, case exam ,theory exam
8	4		Heart Failure		Oral exam, case exam ,theory exam
9	4		COPD	Case presentation ,lectures ,	Oral exam, case exam ,theory exam
10	4		Chronic Renal Failure	Case presentation ,lectures ,	Oral exam, case exam ,theory exam
	4		Exam and case presentation		

Gynecological and pediatric ward					
1	4		Abortion	Case presentation ,lectures ,	Oral exam, case exam ,theory exam
2	4		Gestational diabetes	Case presentation ,lectures ,	Oral exam, case exam ,theory exam
3	4		Thyroid, seizure, anemia, UTI in pregnancy	Case presentation ,lectures ,	Oral exam, case exam ,theory exam
4	4		Preterm labour and Cesarian section	Case presentation ,lectures ,	Oral exam, case exam ,theory exam
5	4		Ovarian cysts, Endometeriosis. Some gynecologic drugs		Oral exam, case exam ,theory exam
6	4		Pediatrics: Febrile convulsion, hyperbilirubinemia,	Case presentation ,lectures ,	Oral exam, case exam ,theory exam
7	4		Hypertensive disorder	Case presentation ,lectures ,	Oral exam, case exam ,theory exam
8	4		Ectopic pregnancy & H-mole	Case presentation ,lectures ,	Oral exam, case exam ,theory exam
9	4		acute respiratory distress syndrome, GI disorders	Case presentation ,lectures ,	Oral exam, case exam ,theory exam
			Exam and case presentation		
			Final Exam		

13. Admissions	
Pre-requisites	Not need
Minimum number of students	10
Maximum number of students	20

COURSE SPECIFICATION

This Course Specification provides a concise summary of the main features of the course and the learning outcomes that a typical student might reasonably be expected to achieve and demonstrate if he/she takes full advantage of the learning opportunities that are provided. It should be cross-referenced with the programme specification.

1. Teaching Institution	AL-Mustansaria University
2. University Department/Centre	College of pharmacy
3. Course number:	50305513
4. Modes of Attendance offered	Semester
5. year / Semester	Semester system
6. Total no. of hours	26 hrs
8. Date of production/revision of this specification	23 /6 /2016
9. Aims of the Programme	
1-make the graduated students able be familiar with reading and processing the medicine prescription	
2- make the graduated students able to communicate with the patient	
3- make the graduated students able to educate the patients about their medications	
4- make the graduated students able to dispense medications in prescriptions in hospitals and community pharmacy safely	
5-Doses specifications by therapeutic drug monitoring	
10. Learning Outcomes, Teaching, Learning and Assessment Methods	

I. Knowledge and Understanding

- A1. familiar with reading and processing the medicine prescription
- A2. communicate with the patient
- A3. educate the patients about their medications
- A4. to dispense medications in hospitals safely
- A5. to monitor drug level in blood to design new dosage regimen

B. Subject-specific skills

- B1. Communication skills with patients
- B2. Education skills to patients
- B3. Pharmacoeconomic skills

Teaching and Learning Methods

- Power Points.. Whit board ,
- Simulators
- Guidelines
- Seminars
- Skill lab.
- Lecture/ questions and answer
- Demonstration,
- Small groups assignment
- Procedures
- Power point slide
- Case study

Assessment methods

- Theory exam.
- Practical exam.
- Class activities
- Lab. Exam
- Practical evaluation
- Oral exam
- midterm exam
- Final exam

C. Thinking Skills

- C1. Interpretation
- C2. Analysis
- C3. Evaluation
- C4. Explanation

Teaching and Learning Methods

- PowerPoints.. Whit board ,
- Simulators
- Guidelines
- Seminars
- Skill lab.
- Lecture/ questions and answer

- Demonstration,
- Small groups assignment
- Power point slide
- Case study

Assessment methods

- Theory exam.
- Practical exam.
- Class activities
- Lab. Exam
- Practical evaluation
- Oral exam
- mid term exam
- Final exam

11. Course Structure: Title of the course: Pharmacoeconomy Course number: 50305513
 Level: 5th Class, 2nd Semester

Week	Hours	ILOs	Unit/Module or TopicTitle	Teaching Method	Assessment Method
1	2		Course overview & basic principle of pharmacoeconomics	White board lecture, PowerPoints	.Theory exam
2	2		Cost analysis	White board lecture, PowerPoints	.Theory exam
3	2		Cost effectiveness analyses (CEA).	White board lecture, PowerPoints	.Theory exam
4	2		1 st mid-term examination.	White board lecture, PowerPoints	.Theory exam
5	2		Cost utility analyses (CUA).	White board lecture, PowerPoints	.Theory exam
6	2		Cost-benefit analysis (CBA)	White board lecture, PowerPoints	.Theory exam
7	4		Critical assessment of economic evaluation	White board lecture, PowerPoints	.Theory exam
8	2		2 nd mid-term examination.	White board lecture, PowerPoints	.Theory exam
9	2		Drug-focused versus disease-focused frame work for conducting pharmacoeconomic analyses.	White board lecture, PowerPoints	.Theory exam
10	2		Introduction to epidemiology.	White board lecture, PowerPoints	.Theory exam
11	2		Project presentation.	White board lecture, PowerPoints	.Theory exam
12	2		Project presentation.	White board lecture, PowerPoints	.Theory exam

12. Infrastructure	
Required reading: · CORE TEXTS · COURSE MATERIALS · OTHER	Drummond MF, O'Brien B, Stoddart GL, Torrance GW. Methods for the economic evaluation of health care programmes. 3rd ed. Oxford: Oxford University Press, 2005. Bootman JL, Townsend RJ, McGhan WF, (Eds.), Principles of Pharmacoeconomics, 2nd ed., Harvey Whitney Books Company, Cincinnati, Oh, latest edition
Special requirements (include for example workshops, periodicals, IT software, websites)	Not needed
Community-based facilities (include for example, guest Lectures , internship,field studies)	

13. Admissions	
Pre-requisites	Not needed
Minimum number of students	50
Maximum number of students	100

COURSE SPECIFICATION

This Course Specification provides a concise summary of the main features of the course and the learning outcomes that a typical student might reasonably be expected to achieve and demonstrate if he/she takes full advantage of the learning opportunities that are provided. It should be cross-referenced with the programme specification.

1. Teaching Institution	AL-Mustansaria University
2. University Department/Centre	College of pharmacy
3. Course number:	50305512
4. Modes of Attendance offered	Semester
5. year / Semester	Semester system
6. Total no. of hours	24 hrs
8. Date of production/revision of this specification	23 /6 /2016
9. Aims of the Programme	
1-make the graduated students able be familiar with reading and processing the medicine prescription	
2- make the graduated students able to communicate with the patient	
3- make the graduated students able to educate the patients about their medications	
4- make the graduated students able to dispense medications in prescriptions in hospitals and community pharmacy safely	
5-Doses specifications by therapeutic drug monitoring	
10. Learning Outcomes, Teaching, Learning and Assessment Methods	

J. Knowledge and Understanding

- A1. familiar with reading and processing the medicine prescription
- A2. communicate with the patient
- A3. educate the patients about their medications
- A4. to dispense medications in hospitals safely
- A5. to monitor drug level in blood to design new dosage regimen

B. Subject-specific skills

- B1. Communication skills with patients
- B2. Education skills to patients
- B3. Pharmacoeconomic skills

Teaching and Learning Methods

- Power Points.. Whit board ,
- Simulators
- Guidelines
- Seminars
- Skill lab.
- Lecture/ questions and answer
- Demonstration,
- Small groups assignment
- Procedures
- Power point slide
- Case study

Assessment methods

- Theory exam.
- Practical exam.
- Class activities
- Lab. Exam
- Practical evaluation
- Oral exam
- midterm exam
- Final exam

C. Thinking Skills

- C1. Interpretation
- C2. Analysis
- C3. Evaluation
- C4. Explanation

Teaching and Learning Methods

- PowerPoints.. Whit board ,
- Simulators
- Guidelines
- Seminars
- Skill lab.
- Lecture/ questions and answer

- Demonstration,
- Small groups assignment
- Power point slide
- Case study

Assessment methods

- Theory exam.
- Practical exam.
- Class activities
- Lab. Exam
- Practical evaluation
- Oral exam
- mid term exam
- Final exam

11. Course Structure: Title of the course: TDM

Course number: 50305512

Level: 5th Class, 2nd Semester

Week	Hours	ILOs	Unit/Module or TopicTitle	Teaching Method	Assessment Method
1	2		Review of basic pharmacokinetic (PK) and pharmacodynamic (PD)	White board lecture, PowerPoints	Theory exam
2	2		Clinical PK equations and calculations	White board lecture, PowerPoints	Theory exam
3	2		Clinical PK in special population and cases	White board lecture, PowerPoints	Theory exam
4	2		Clinical PK/PD for Aminoglycosides	White board lecture, PowerPoints	Theory exam
5	2		Clinical PK/PD for Vancomycin	White board lecture, PowerPoints	Theory exam
6	2		Clinical PK/PD for Digoxin	White board lecture, PowerPoints	Theory exam
7	2		Clinical PK/PD for Phenytoin	White board lecture, PowerPoints	Theory exam
8	2		Clinical PK/PD for other Anticonvulsants (e.g., Carbamazepine, Valproic Acid, Phenobarbitone/Primidone, Ethosuximide)	White board lecture, PowerPoints	Theory exam
9	2		Clinical PK/PD for Theophylline	White board lecture, PowerPoints	Theory exam
10	2		Clinical PK/PD for Immunosuppressants (e.g., Cyclosporine, Tacrolimus)	White board lecture, PowerPoints	Theory exam
11	2		Clinical PK/PD for other Cardiovascular agents (e.g., Lidocaine, Procainamide/N-Acetyl Procainamide)	White board lecture, PowerPoints	Theory exam
12	2		Clinical PK/PD of other drugs (e.g., Lithium), Anticancer	White board lecture, PowerPoints	Theory exam

12. Infrastructure	
Required reading: · CORE TEXTS · COURSE MATERIALS · OTHER	Applied Clinical Pharmacokinetics, Second .Edition, 2008 by Larry A. Bauer
Special requirements (include for example workshops, periodicals, IT software, websites)	Not needed
Community-based facilities (include for example, guest Lectures , internship,field studies)	Not needed

13. Admissions	
Pre-requisites	Not needed
Minimum number of students	50
Maximum number of students	100