Course Specifications
(2015 – 2016)

Course: English Language

Course code: EN 101

Course Specifications
(2015 – 2016)

A. Basic Information

Program(s) on which the course is given:	Clinical
Department offering the course	Pharmacognosy
Faculty offering the program	Arts
Dept. responsible for teaching the course	English department
Academic year / level	1st
Course title	English Language
Course code	EN 101
Contact hours (credit hours)	2
Pre-requisite of the course:	No
Course coordinator	Dr. Hala Rashed
Major or Minor element of program	Minor
Date of specification approval	09/09/2015

B. Professional Information

1. Overall Aims of Course

Training in reading, comprehension, basic grammatical rules, writing and translation. The course adopts a systematic approach to proper essay writing, such as idea development, paragraph structure, introductions, support, and conclusions.

2. Intended Learning Outcomes of Course (ILOs)

a- Knowledge and Understanding:

By the end of the course, the students should be able to:

a1. Read and write scientific and non-scientific articles

a2. Apply basic grammatical rules

b- Intellectual Skills

b1. Adopts a systematic approach to proper essay writing
b2. Integrate basic grammatical rules

By the end of this course, the student should be able to:

c- Professional and Practical Skills

c1. Utilize proper medical and pharmaceutical terms
By the end of the course, the student should be able to

c- General and Transferable Skills
By the end of the course, the student should be able to:

d1. Communicate verbally using idea development, paragraph structure, introductions, support, and conclusions.

3. Contents

Teaching week	TOPIC	No. of lecture hours	No. of Practical hours
1	Training in reading	2	0
2	Training in reading	2	0
3	Training in comprehension	2	0
4	Training in comprehension	2	0
5	Training in basic grammar rules	2	0
6	Training in basic grammar rules	2	0
7	**First periodic exam**	2	0
8	Training in writing and translation	2	0
9	Training in writing and translation	2	0
10	A systematic approach to proper essay writing, such as idea	2	0
11	A systematic approach to proper essay writing, such paragraph structure, introductions, support, and conclusions.	2	0
12	Second periodic exam	2	0
Total no of	24		

hours	
13	FINAL Exam

4. Teaching and Learning Methods

4.1- Lectures (board, data show)

4.2- Assignments

4.3- Class discussion

5. Student Assessment Methods

5.1. Practical exams to assess knowledge and understanding as well as intellectual skills.

5.2. Written exams to assess all types of skills and mainly general and transferrable skills practice.

Assessment Schedule

Quiz 1 — 7th week

Quiz 2 — 12th week

Final exam — 13th week, according to semester schedule

Weighting of Assessments

Periodical — 100%

Final exam — 00%

Total — 100%

6. List of References

6.1- Course Notes: Lecture notes in English language

6.2- Essential Books (Textbooks)

1. **English for Academic Research: Writing Exercises** by Adrian Wallwork

Facilities required for teaching and learning

1. Lecture rooms with data show
2. Procurement of latest edition of the above-mentioned texts and others to update the education process

Course Coordinator: Dr. Hala Rashed

Head of Department: Prof. Mona Hetta

Date: 09 /09/2015

Course Specifications
(2015 – 2016)

Course: Mathematics and Statistics

Course code: MS 101

Course Specifications
(2015 – 2016)

A. Basic Information

Program(s) on which the course is given: Clinical

Department offering the course Organic and pharmaceutical chemistry

Faculty offering the program Pharmacy

Dept. responsible for teaching the course Mathematical sciences

Academic year / level: First level / first semester

Course title: Mathematics and Statistics

Course code: MS 101

Contact hours (credit hours): 1

Pre-requisite of the course: Non

Course coordinator: Dr. Maged Kassab

Major or Minor element of program: Minor

Date of specification approval 09/09/2015

B. Professional Information

The course aim and intended learning outcomes are based on that mentioned in the programme specifications, with more course-related specific details.

1. Overall Aims of Course

The aim of the course is to provide students with a detailed knowledge and understanding of functions and graphs, limits and continuity, differentiation, exponential, logarithmic and trigonometric functions, integration, basic differential equations, function of several variables and problems related to them. The course also provides the students necessary knowledge of the probability, random variables and correlation and regression as well as hypothesis testing.

2. Intended Learning Outcomes of Course (ILOs)

a- Knowledge and Understanding:

By the end of the course, the students should be able to:

a1. Understand the theoretical mathematical principal of functions and graphs

a2. Understand of the differentiation, exponential, logarithmic and trigonometric functions.

a3. Identify the concept of integration, basic differential equations.

a4. Recognize the concept of hypothesis testing.

b- Intellectual Skills

b1. Perform different mathematical and statistical calculations

b2. Distinguish the different type of functions and equation differentiation and integration

b3. Solve some problems encountered in hypothesis testing

By the end of this course, the student should be able to:

c- Professional and Practical Skills

c1. Formulate different mathematical and statistical calculations

c2. Evaluate a successful formula related to different equation differentiation and integration

c3. Design some probability and hypothesis testing

By the end of the course, the student should be able to:

d- General and Transferable Skills

By the end of the course, the student should be able to:

d1. Work independently in different mathematical and statistical calculations software.

d2. Apply problem-solving skills for the mathematical and statistical calculations within the practice of pharmacy fields.

d3- Develop effective communication skills and critical thinking.

The aim of the course is to provide students with a detailed knowledge and understanding of functions and graphs, limits and continuity, differentiation, exponential, logarithmic and trigonometric functions, integration, basic differential equations, function of several variables and problems related to them. The course also provides the students necessary knowledge of the probability and random variables as well as hypothesis testing.

3. Contents

Teaching week	TOPIC	No. of lecture hours	
1	Functions and Graphs 1	1	
2	Functions and Graphs 2	1	
3	limits and continuity	1	
4	Differentiation 1	1	
5	Differentiation 1	1	
6	Quiz 1	1	
7	Integration 1	1	
8	Integration 2	1	
9	Quiz 2	1	
10	Probability	1	
11	Correlation and regression	1	
12	Hypothesis testing 1	1	
13	Hypothesis testing 2	1	
Total no of hours			
14	FINAL Exam		

4. Teaching and Learning Methods

4.1- Lectures (board, data show)

4.2- Assignments

4.3- Class discussion

5. Student Assessment Methods

5.1. Written exams to assess knowledge and understanding as well as intellectual skills.

5.2. Worksheets and assignments to assess all types of skills and mainly general and transferrable skills practice.

Assessment Schedule

Quiz 1	4th or 5th week
Quiz 2	8th or 9th week
Practical exam	----------
Final exam	14th week; according to semester schedule

3. Contents

Teaching week	TOPIC	No. of lecture hours	
1	Functions and Graphs 1	1	
2	Functions and Graphs 2	1	
3	limits and continuity	1	
4	Differentiation 1	1	
5	Differentiation 1	1	
6	Quiz 1	1	
7	Integration 1	1	
8	Integration 2	1	
9	Quiz 2	1	
10	Probability	1	
11	Correlation and regression	1	
12	Hypothesis testing 1	1	
13	Hypothesis testing 2	1	
Total no of hours			
14	FINAL Exam		

4. Teaching and Learning Methods

4.1- Lectures (board, data show)

4.2- Assignments

4.3- Class discussion

5. Student Assessment Methods

5.1. Written exams to assess knowledge and understanding as well as intellectual skills.

5.2. Worksheets and assignments to assess all types of skills and mainly general and transferrable skills practice.

Assessment Schedule

Quiz 1	4th or 5th week
Quiz 2	8th or 9th week
Practical exam	----------
Final exam	14th week; according to semester schedule

Oral exam	----------

Weighting of Assessments

Periodical	10%
Worksheets and assignments	15%
Final exam	75%
Oral exam	----------
Total	100%

6. List of References

Rouaud, Mathieu. (April 2017) [First published July 2013]. Probability, Statistics and Estimation (PDF). p. 10. Archived (PDF) from the original on October 9, 2022. Retrieved February 13, 2024.

6.1- Course Notes: Lecture Notes

6.2- Essential Books (Textbooks)

6.3- Periodicals:

- **6.4- Web Sites:**

Facilities required for teaching and learning

1. Lecture rooms with data show
2. Procurement of the latest edition of the above-mentioned texts and others to update the education process

Course Coordinator: Dr. Maged Kassab

Head of Department: Prof. Mona Hetta

Date: 09 /09/2015

Course Specifications
(2015 – 2016)

Course title: Cell Biology

Course code: MD 102

A. Basic Information:

Course Title:	Cell Biology		
Course Code:	MD 102		
Program on which the course is given:	Clinical		
Department offering the course:	Biochemistry		
Academic year/ level:	1st Semester 2015/2016	Level:1	
Prerequisite:	Organic chemistry		
Credit hours:	Lecture:1	Practical:1	Total:2

B. Professional Information

1. Course Aims:

The course provides the basic principles of cell biology, classification of prokaryotes and eukaryotes with an emphasis on cellular structure. It describes the functions of organelles and regulatory mechanisms in animal cells

2. Intended Learning Outcomes (ILOs):

a. Knowledge and understanding:

At the end of this course, student should be able to:

A1	a1-	Identify the fundamental concepts of biology, with an emphasis on animal cell structure and function.
A4	a2.	Describe the basic characteristics of prokaryotic and eukaryotic cells and extracellular matrix
	a3.	Enumerate the theories of transport across the biological membranes.
	a4.	Recall the basic principles of cellular function including cell communication, ligands and receptors, DNA and RNA structure and function
	a5	Describe gene expression process mechanism and regulation.

b. Intellectual Skills:

At the end of this course, student should be able to:

B18	b1.	Correlate cell structure with its function, including active and passive transport across membrane. Also, nucleic acid role in protein synthesis.
	b2.	Integrate basic biochemical facts with cell cycle, cell division and mechanisms of apoptosis in normal cells and tumor formation.
	b3.	Investigate the characteristics of living things to classify organisms into eukaryotes and prokaryotes.

c. Professional and Practical Skills:

At the end of this course, student should be able to:

C2	c1.	Utilize gained information to communicate with other health care professionals
C11	c2.	Apply biology knowledge to practical scientific activities and relevant applications of biology in society and the environment.
C14	c3.	Conduct research studies including presentation skills and discussion

d. General and Transferable Skills:

At the end of this course, student should be able to:

D3	d1.	Work effectively as a part of a team to perform the required tasks
D4	d2.	Develop the skills required for continued self-professional development and self-learning

3. Contents:

3.1. Lectures:

Study week	Topics	No. of Credit Hours
1.	Prokaryotic and Eukaryotic cell structure and functions	1
2.	Animal cell; structure and functions	1
3.	Biological membranes structure and function	1
4.	ECM and cell movement	1
5.	Cytoskeleton	1
6.	Cell cycle and cell division	1
7.	cellular bioenergetics	1
8.	cell signaling and communication	1
9.	DNA structure and function	1
10.	RNA structure and function	1

11	protein synthesis	1
12	Control of gene expression	1
13.	**Final Exam**	Total: 1 credit hours
14.		

3.2. Practical:

Study week	Topics	No. of Credit Hours
1.	Lab safety and microscope	1
2.	Cell structure	1
3.	Cell membrane	1
4.	Nucleus	1
5.	Golgi apparatus	1
6.	Endoplasmic reticulum	1
7.	Endoplasmic reticulum	1
8.	Vesicles	1
9.	Lysosomes	1
10.	Cell cycle	1
11.	Cell division	
12	Revision	
13.	**Final Exam**	Total: 1 credit hour
14.		

4. Teaching and Learning Methods:

4.1.	Lectures
4.2.	Practical lab
4. 3	Research in library and web (homework & assignments)
4.4	E-learning

5. Student Assessment Methods:

5.1. Assessment methods:

1. Written exam	to assess knowledge, understanding, intellectual and professional skills.
2. Practical exam	to assess professional and practical skills.
3. Course work	to assess knowledge, understanding, intellectual skills, general and transferable skills.
4. Oral exam	to assess knowledge, understanding, intellectual skills, general skills and confidence.
5. Quizzes	to assess knowledge, understanding and intellectual skills.

5.2 Assessment schedule:

Assessment 1	Quiz 1	4th week
Assessment 2	Mid-Term	8th week
Assessment 5	Practical exam	11th week
Assessment 6	Oral exam	12th & 13th weeks
Assessment 7	Written exam	12th & 13th weeks

5.3 Weighing of Assessments:

1. Course work:	
- Quiz 1	5
- Mid-Tern	10
2. Final-Term Exam	50
3. Oral Exam	10
4. Practical Exam	25
Total	100%

6. List of References:

No.	Reference	Type
1.	Lippincott Illustrated Reviews: Cell and Molecular Biology by Nalini Chandar and Susan Viselli 1st Edition (Lippincott Illustrated Reviews Series, 2011)	Textbook
2.	Cell Biology and Histology by Gartner, Leslie P., Hiatt, James L., Strum, Judy, 5th Edition [Lippincott Williams & Wilkins, 2006]	Textbook

Journal of biology (https://jbiol.biomedcentral.com/) - Current Biology (https://www.cell.com/current-biology) - Cell reports (http://www.cell.com/cell-reports)	Periodical

7. Matrix of course contents versus ILOs:

7.1. Lectures:

dy ek	Course Contents	ILOs
.	Prokaryotic and Eukaryotic cell structure and functions	a1 , b1, b3, c1,c2
.	Animal cell; structure and functions	a2,b3, c1
.	Biological membranes structure and function	a1, a3, b1 ,b3, c2, c3, d1 d2
.	ECM and cell movement	a3, b1, c1, c2, d2
5.	Cytoskeleton	a3, b1, c1, c2, d2
6.	Cell cycle and cell division	a5, b2, c2, c3, d1, d2
7.	cellular bioenergetics	a4, b1, c2, d2
8.	cell signaling and communication	a4, b1, c2, d2
9.	DNA structure and function	a4, b1, c2,c3, d2
10.	RNA structure and function	a4, b1, c2,c3, d2
11	protein synthesis	a4, b1, c2,c3, d2
12	Control of gene expression	a4, b1, c2,c3, d2

7.2. Practical:

tudy veek	Course Contents	ILOs
1.	Lab safety and microscope	a1 , b1, b3, c1,c2

Course Specifications
(2015 – 2016)

2.	Cell structure	a2,b3, c1
3.	Cell membrane	a1, a3, b1 ,b3, c2, c3, d1 d2
4.	Nucleus	a3, b1, c1, c2, d2
5.	Golgi apparatus	a3, b1, c1, c2, d2
6.	Endoplasmic reticulum	a5, b2, c2, c3, d1, d2
7.	Endoplasmic reticulum	a4, b1, c2, d2
8.	Vesicles	a4, b1, c2, d2
9.	Lysosomes	a4, b1, c2,c3, d2
10.	Cell cycle	a4, b1, c2,c3, d2
11.	Cell division	a4, b1, c2,c3, d2
	Revision	a4, b1, c2,c3, d2

	Name	Signature
Course Coordinator:	Dr. Nada Osama	
Head of Department:	Prof. Mona Hetta	
Approval Date	09/09/2015	

Course Specifications
(2015 – 2016)

Course: Biophysics

Course code: MD 101

Course Specifications
(2015 – 2016)

A. Basic Information

Program(s) on which the course is given:	Clinical
Department offering the course	Pharmacology and Toxicology
Faculty offering the program	Sciences
Dept. responsible for teaching the course	Biophysics
Academic year/level	1st
Course title	Biophysics
Course code	MD 101
Contact hours (credit hours)	2
Pre-requisite of the course:	No
Course coordinator	Prof. Abdelmohsen pasha
Major or Minor element of program	Minor
Date of specification approval	09/۰۹/2015

B. Professional Information

1. Overall Aims of Course

Cell membrane structure, method of transport, channel types, receptors. Application of action potential, electrocardiogram, and electroencephalogram identification and wave's elucidation

2- Intended Learning Outcomes of Course (ILOs)

a- Knowledge and Understanding:

a1. Identify different cell membrane structures, method of transport, channel types and receptors.

a2. Identify electrocardiogram and electroencephalogram

a3. Discuss different applications of action potential

By the end of the course, the students should be able to:

b- Intellectual Skills

b1. Integrate basic biological and physical sciences to understand different body functions.
b2. Identify different techniques to evaluate different body functions

By the end of this course, the student should be able to:

c- **Professional and Practical Skills**

c1. Utilize different techniques to evaluate several body functions like electroencephalogram and electrocardiogram.

By the end of the course, the student should be able to:

c- General and Transferable Skills
By the end of the course, the student should be able to:

d1. Communicate verbally and problem solving

Contents

Teaching week	TOPIC	No. of lecture hours	No. of Practical hours
1	Introduction to biophysics	1	1
2	Cell membrane structure	1	1
3	Cell membrane structure	1	1
4	Method of transport	1	1
5	Channel types	1	1
6	Receptors	1	1
7	**First periodic exam**	1	1
8	Action potential	1	1
9	Electrocardiogram	1	1
10	Electroencephalogram	1	1
11	Different wave's elucidation.	1	1
12	Second periodic exam	1	1
Total no of	24		

hours	
13	FINAL Exam

2. Teaching and Learning Methods

4.1- Lectures (board, data show)

4.2- Assignments

4.3- Class discussion

3. Student Assessment Methods

5.1. Practical exams to assess knowledge and understanding as well as intellectual skills.

5.2. Written exams to assess all types of skills and mainly general and transferrable skills practice.

Assessment Schedule

Quiz 1 — 7th week

Quiz 2 — 12th week

Final exam — 13th week: according to semester schedule

Weighting of Assessments

Periodical	10%
Practical	25%
Final exam	65%
Total	100%

4. List of References

6.1- Course Notes: Lecture notes in biophysics

6.2- Essential Books (Textbooks)

1- Fundamentals of Biophysics by Andrey B. Rubin: Wiley & Sons, Incorporated, John

Facilities required for teaching and learning

1. Lecture rooms with data show

Course Coordinator: Prof. Abdelmohsen pasha

Head of Department: Prof. Mona Hetta

Date: 09/9/2015

Course Specifications
(2015 – 2016)

Course Specifications
(2015 –2016)

Medicinal plants

PG101

Course Specifications

A- Basic information

Program(s) on which the course is given	Bachelor of clinical pharmacy
Department offering the course	Pharmacognosy department
Faculty offering the program	Faculty of Pharmacy, Fayoum University
Dept. responsible for teaching the course	Pharmacognosy department
Academic year / level	First level, first semester
Course title	Medicinal plants
Course code	PG 101
Contact hours (credit hours)	Lecture 2 (2) + Practical 2 (1): Total 4 (3)
Pre-requisite of the course:	Registration
Course coordinator	Prof. Mona Hetta
Major or Minor element of program	Major
Date of specification approval	09/9/2015

B-Professional Information

1-Overall aims of the course:

Upon successful completion of this course, the students will gain the basic knowledge about the process of commercial production of medicinal plants including; cultivation, drying, packing and authentication. Students will also be able to demonstrate basic concepts of pharmacognosy and relate medicinal actions of some medicinal plants composed of leaves to their content of secondary metabolites.

2-Intended learning outcomes (ILO's):

a-Knowledge and Understanding:

By the end of this course, the student should be able to:

a1.definePharmacognosy and other botanical terms.

a2. Describe herbal drugs according to botanical origin, chemical constituents, medicinal activity, and difference between wild and cultivated plants.

. Mention different methods of cultivation, collection, drying, packing and storage, ulteration of medicinal plants.

. Memorize different classes of secondary metabolites and their chemical identification.

. Identify natural drugs, especially leaves, macro-, micro-morphologically, emically, and animal drugs.**b-Intellectual Skills:**

/ the end of this course, the student should be able to:

. Apply different concepts about plant cultivation, drying, storage, and adulteration..

. Compare between different secondary metabolites.

. Recognize the difference between various morphological characters that able students to recognize medicinal leaves.**c-Professional and Practical ills:**

/ the end of this course, the student should be able to:

. Handle microscope and chemicals.

. Examine different dusting powders microscopically.

.Demonstrate unknown plant leaves microscopically

General Skills:

the end of this course, the student must be able to:

.Work in a team to differeantiate between several types of medicinal plants.

.Deal with internet to collect data and prepare a research project about different natural proroducts.

3. Contents

Teaching week	TOPIC	No. of lecture credit hours	No. of practical credit hours
1	Introduction of medicinal plants (definitions, etc……) ,	2	
	Lab safety		1
2	Cultivation of medicinal plants, environmental condition , soil composition , growth regulators	2	
	Microscopy, how to make a mount (mount in water, iodine)		1
3	Collection, drying of crude drugs, different types of adulteration and their detection	2	
	Starches		1
4	Packing and preservation of drugs, plant growth regulators.	2	
	Dusting powders		1
5	Secondary plants metabolites (simple phenolics, flavonoids, Alkaloids)	2	
	Isolated elements, Introduction to leaves + Senna (Powder)		1
6	Secondary plant metabolites (glycosides)	2	
	Solanaceous Introduction, Belladonna (Powders)		1
7	Taxonomy	2	
	Datura + Hyoscyamus (Powder)		1
8	Plant cytology	2	
	Digitalis (Powder)		1
9	Introductions of drugs composed of leaves (Leaf morphology, lamina)	2	
	Revision (Starch & Dusting)		1
10	Senna leaf	2	
	Revision (Vegetable powder)		1
11	Solanaceous leaves; Belladonna, Stramonium, Hyoscyamus	2	
	Exam		1
12	Digitalis, Henna and other medicinal leaves	2	
Total no of hours		24	**11**

Teaching and Learning Methods (lectures, open discussion, role plays, ..etc):

1 Interactive Lectures

4.2 Presentations, discussions and seminar
4.3 Research in library and web.
4.4 Practical laboratory work

5- Student Assessment:

Assessment Schedule:

Quiz 1 — 4th week
Quiz 2 — 10th week
Final practical exam — 11th week
Final written exam — 13th week

Weighting of Assessments

Assessment method	Weight
Quiz 1	16%
Quiz 2	
Activities	%4
Final practical exam	20%
Final written exam	50%
Oral exam	10%

6-List of References:

6.1 Course notes: on ELS

6.2 Essential books (textbooks):
- Evans, W.C., Trease and Evans Pharmacognosy, Edinburg London, New York, Oxford, Philadelphia, St. Louis a Toronto, 16th edition, Elservier, 2010

6.3 Recommended books:
- Narayana, P.S., Pullaiah, T., Varalakshmi, D., Vol 2 (201 Textbook of Pharmacognosy, CBS Publishers.
- Heinrich, M., Barnes, J., Gibbons S. and E.M. Williamso Fundamentals of Pharmacognosy and Phytotherapy, 2 edition, 2012.
- Egyptian Pharmacopoeia English Text (2005).

6.4 Periodicals, Web sites, Etc:
www. Bestnetcraft.com
www.herbdatanz.com/index.htm
www.who.int/medicines/library/trm/medicinalplants
www.herb.com

7- Facilities required for teaching and learning:

- Lecture halls

- Laboratories, supplied with data show.
- White board.
- Books, library furnished with textbooks.
- Genuine plant drugs.
- Optical microscopes in labs.
- Slides and covers.
- Chemicals and reagents.
- Grinder.

Teaching Staff: Dr. HossamMokhtar – Prof, Mona Hetta

Course Coordinator: **Prof. Dr. Mona H. Hetta**

Head of Department: Prof. Dr. Mona H. Hetta

Date: 09/9/2015

Course specification

ourse code:	PC 103
ourse name:	Pharmaceutical Organic Chemistry I
redit hours of the course:	Lecture: 2 Practical: 1 Total: 3
re-requisite of the course:	None
epartment teaching the ɔurse:	Pharmaceutical Medicinal Chemistry Department
rogram for which the course given:	Clinical Pharmacy Program
ourse Co-ordinator:	Dr Mohammed Ibrahim Abdel_Latif Hamed. Dr/ Mohammed Mahmoud El_Agawany
ead of the Department:	Prof. Dr./ Mohammed Hetta
ate of specifications pproval	٠٩/٢٠١5

مدير وحدة ضمان الجودة

›rofessional information

)verall aims of the course:

on successful completion of this course, the students will develop various competencies based on /ering the Sawing general outlines:
ɔ make student think logically about atomic and molecular properties in addition to their interactions.
ɔ enable students to know how to deal with the reactions of organic compounds. the investigation of ːir properties and the relation between their molecular structure and their reaction mechanism.
ɔ prepare student with a sound understanding of the fundamental principles of organic and armaceutical compounds with respect to related subjects next years.

ntended learning outcomes (ILO's):

owledge and Understanding:

the end of this course, the student should be able to:

Know the basic concepts of aromaticity and chemistry of arenes

-Know the characteristics of chemistry of benzenoids and polynuclear compounds

-Understand The basics of spectroscopy and spectral analysis of organic compounds

tellectual Skills:

the end of this course, the student should be able to:

.- Recognize organic compounds from their physical and chemical properties.

:- Discuss organic problems of different organic classes.

i- Apply suitable methods for synthesis, purification, and identification of chemical substances from fferent origins.

l- Analyze and interpret experimental studies as well as data from published literature using ectroscopy.

Professional and Practical Skills:

the end of this course, the student should be able to:

-Select the appropriate methods for identification and synthesis of organic compounds

- Identify aromatic organic compounds and carbohydrates physically and chemically.

- Analyze spectral data of organic compounds.

General Skills:

y the end of this course, the student should be able to:

1- Use the literature via different information sources including the library, internet ....etc.

2- Care about himself, his colleagues and all the tools and instruments of his lab during dealing with hemical organic compounds

3-course contents

Topics	lecturer	lecture	practical	total
ntroduction to Organic Chemistry-1 .ab safety rules and Policies, systematic dentification of an organic compound	Dr/Mohammed Ibrahim	2	1	1
Alkanes, cycloalkanes, & alicyclic compounds: Preparation & Reactions	Dr/Mohammed Ibrahim	2	1	1
Alkenes & Alkynes Preparation & Reactions	Dr/Mohammed Ibrahim	2	1	1
Isomerism & Stereochemistry, Stereoisomers ChemSketch Drawing Software	Dr/Mohammed Ibrahim	2	1	1
Molecular representation, Numbering & Naming of Stereoisomers	Dr/Mohammed Ibrahim	2	1	1
Compound with 2 or more chiral atoms, chiral cyclic compounds, racemization and resolution	Dr/Mohammed Ibrahim	2	1	1
Conformational Analysis Melting point determination	Dr/Mohammed El Agawany	2	1	1
Aromaticity & Aromatic ions Recrystallization	Dr/Mohammed El Agawany	2	1	1
Aromatic substitution reactions & directing group Recrystallization	Dr/Mohammed El Agawany	2	1	1

Introduction to mass spectro fragmentation and Mc-Lafferty rearangment	Dr/Mohammed El Agawany2	2	1	1
Introduction infrared, Hook low, region of different type of function groups.	Dr/Mohammed El Agawany	2	1	1
Introduction to NMR, type uses in life. H-NMR. Chemical Shift and TMS. Chemical shift of different type of protons. "C-NMR (chemical shift. Problems on C-NMR)	Dr/Mohammed El Agawany	2	1	1
total		24	12	36

4-Teaching and Learning Methods (lectures, open discussion, role plays, etc):

4.1- Lectures (board, overhead projector, molecular models, software chemistry programs and data show)

4.2- Tutorials and discussion sessions

4.3- Practical sessions

5- Student Assessment:

a-Assessment Methods and Weighing:

Quiz to assess the knowledge, understanding and intellectual skills of the course.

Mid-Term written exam to assess the knowledge, understanding and intellectual skills of the previously studied sections of the course.

Practical exam to assess the practical and professional skills gained by the students.

Final written exam to assess all the knowledge and understanding of the different sections of the course.

Oral examination to assess all the intellectual skills and knowledge of the different sections of the course.

1) Class participation: 10%

2) Practical exam:25%

3) Oral exam: 15%

4) Final exam: 50%.

b-Assessment Schedule:

Class participation Quiz 1: Week 4-5

Quiz 2: Week 8-9

Other activities: throughout the semester

Practical exam: Week 13-14

Oral exam: According to semester timetable

Final exam: According to semester timetable

6-list of references

Course Notes	On ELS
Required Books	T.W.Graham Solomons, Organic chemistry, 11th ed., John Wiley and Sons, INC, New York, 2013. Furniss, Hanna Ford, Smith, Tutchell, Vogel's textbook of Practical Organic Chemistry, 5th ed, Longman Group UK Ltd, England, 1989. Finar Organic Chemistry 6th Edition published by Pearson Education (Singapore) Pte. Ltd, Indian Branch, printed in India by A.P. offset Pnt. Ltd. Organic Chemistry 4th Edition by Janice Gorzynski Smith, 2013
Recommended Books	Jerry March, Advanced Organic Chemistry, Reactions, Mechanisms.
Periodicals	Different pharmacopoeias (Egyptian & british)
Web Sites	J. Org. Chem., J. Med. Chem., Tetrahedron letters, J. Am. Chem. Soc., Khan Academy and https://www.educator.com//chemistry/organic-chemistry

Course Coordinator:

Dr/Mohammed Ibrahim Abdel Latif Hamed.

Dr Mohammed Mahmoud El_Agawany

-Head of Department : Prof.Dr/ Mona Hetta

Date: ٠٩/٠٩/٢٠١5

Course Specifications
(2015 –2016)

Physical and inorganic Chemistry

PC 101

Course Specifications
(2015 –2016)

Name of Department: Pharmaceutical Analytical Chemistry

A. Basic Information

Program(s) on which the course is given:	Bachelor of pharmacy
Department offering the course:	Pharmaceutical Analytical Chemistry department
Faculty offering the program:	Faculty of pharmacy, Fayoum University
Dept. responsible for teaching the course:	Pharmaceutical Analytical Chemistry department
Academic year / level:	first level, first semester
Course title:	Physical and inorganic Chemistry
Course code:	PC 101
Contact hours (credit hours):	Lecture 2 (2) + Practical 2 (1): Total 4 (3)
Pre-requisite of the course:	Registration
Course coordinator:	
Major or Minor element of program:	Major
Date of specification approval:	09 / 09 /2015

B. Professional Information

1. Overall Aims of Course

1. Understand the fundamental concepts of thermodynamics, chemical equilibrium, and kinetics.
2. Apply the principles of gas laws, solutions, and colligative properties to pharmaceutical systems.
3. Analyze the thermodynamic properties of chemical reactions and predict spontaneity.
4. Interpret and solve problems related to chemical kinetics and reaction mechanisms.
5. Develop proficiency in understanding the behavior of acids, bases, and buffers in pharmaceutical applications.
6. Apply the concepts of electrochemistry to processes such as corrosion, redox reactions, and electrolysis.

مدير وحدة ضمان الجودة

7. Evaluate molecular structure, bonding theories, and periodic trends and their impact on chemical behavior.
8. Utilize theoretical knowledge to explain physical properties of matter and their application in drug formulation and stability.

2. Intended Learning Outcomes of Course (ILOs)

After successful finishing the course, students should be able to

a- Knowledge and Understanding:

By the end of the course, the students should be able to:

a_1- Understand fundamental concepts of physical and inorganic chemistry and their applications in pharmaceutical sciences.

a_2- Understand chemical kinetics, thermodynamics, and electrochemistry and how they relate to drug formulation and stability.

b- Intellectual Skills:

b_1- Critically evaluate the physical properties of drugs and inorganic compounds for pharmaceutical use.

b_2- Solve problems related to chemical reactions, energy changes, and drug interactions using theoretical concepts.

c- Professional and practical Skills:

c_1- Perform laboratory experiments to synthesize and analyze inorganic compounds used in pharmacy.
c_2- Apply principles of physical chemistry in practical pharmaceutical settings, such as drug formulation and stability testing.

d- General and Transferable Skills:

d_1- Collaborate efficiently in a team to solve chemistry-related problems in pharmaceutical contexts.

d_2- Demonstrate time management skills, especially in conducting experiments and managing lab work.

d_3- Apply critical thinking and independent learning to enhance understanding and skills in chemistry relevant to pharmacy practice.

2. Contents

Teaching week	TOPIC	No. of lecture hours	No. of practical hours	Assessment of ILOs
1	Introduction to Physical and General Chemistry: Importance and Applications in Pharmacy	2		a2, d1, c2, b2
	Lab safety		2	
2	Gaseous State: Gas Laws, Kinetic Molecular Theory, and Ideal vs. Real Gases	2		a1, a2, b1, c1, d2
	Measurement of Gas Laws: Boyle's Law and Charles' Law		2	
3	Thermodynamics I: Basic Concepts of Energy, Work, and Heat	2		a1, a2, b1, c1, d2
	Determination of Enthalpy Changes in Chemical Reactions (Calorimetry)		2	
4	Thermodynamics II: Laws of Thermodynamics and Their Pharmaceutical Applications	2		a1, b1, c1 d1, d2, b2
	Measurement of Equilibrium Constant for a Chemical Reaction		2	
5	Chemical Equilibrium: Principles and Applications in Drug Reactions	2		a1, b1, c1, d2, d3
	Preparation of Solutions: Molarity, Molality, and Percent Solutions		2	
6	Solutions and Their Properties: Concentration, Solubility, and Colligative Properties	2		a1, a2, b1, c1, d1
	Determination of Colligative Properties: Freezing Point Depression		2	
7	Molecular Structure and Bonding: Lewis Structures, VSEPR, and Hybridization	2		a1, a2, b1, c1, c3, d2
	Reaction Rate Studies: Determining the Effect of Concentration on Rate		2	
8	Electrochemistry: Galvanic Cells, Corrosion, and Pharmaceutical Relevance	2		a1, a2, c1, c2, d1
	Construction of a Galvanic Cell and Measurement of Electrode Potentials		2	
9	Chemical Kinetics I: Rate Laws and Factors Affecting Reaction Rates	2		a2, b1, c1, d1, b2
	Investigating the Effect of Temperature on Reaction Rate (Arrhenius Equation)		2	
10	Chemical Kinetics II: Reaction Mechanisms and Catalysis in Pharmaceutical Reactions	2		a1, b1, c1, d2
	Determination of Molecular Structure Using VSEPR Models		2	
11	Intermolecular Forces: Impact on Drug	2		a2, b1, c1, d3, c2

Stability and Properties			
Final practical exam			
	22	20	
FINAL Exam			

Teaching and Learning Methods

1- Lectures (board, data show, power point) √

2- Interactive learning (Discussions, brain storming) √

3- Self-study (Tutorials) -

4- Practical (labs, tools, chemicals, glassware, equipment and instruments) √

5- Other methods (Assignments) √

Student Assessment Methods

1- Mid erm exam to assess ILO's a1, a2

2- Practical exam to assess ILO c1and d2

3- End-term exam to assess ILO's a, c

4- Oral exam to assess ILO's a1, c

ssessment Schedule

uiz 1	4th or 5th week
uiz 2	8th or 9th week
ractical exam	11th week
inal exam	12th week
ral exam	12th week

Veighting of Assessments

eriodical	10%
ractical	25%
inal exam	65%
ral exam	0%
Total	100%

6. List of References

1. Essential Books (Text Books)
2. Principles of Chemistry: A Molecular Approach by Nivaldo J. Tro.
3. General Chemistry: The Essential Concepts by Raymond Chang and Jason Over
4. Physical Chemistry by Peter Atkins and Julio de Paula
5. Quantitative Chemical Analysis by Daniel C. Harris
6. Chemistry: The Central Science by Theodore L. Brown
7. H. Eugene LeMay, Bruce E. Bursten, and Catherine J. Murphy
8. Journal of Chemical Education
9. Analytical Chemistry
10. Royal Society of Chemistry (RSC) Publications

7. Facilities required for teaching and learning

1. Classrooms.
2. Laboratory facilities.
3. white board, smart board, Data show.
4. Library.
5. Computers.
6. Online educational platforms for teaching, discussing research projects and E-exams (Google classrooms, Google drive and Microsoft Teams).

Course Coordinator: Dr. Abobakr Abdel Wahab

Head of Department: Prof./ Mona Hetta

Date: 09/09/2015

Course Specification of Pharmacognosy1

niversity: Fayoum
iculty: Pharmacy

- Course specifications:

ogram (s) on which the course is given: Bachelor of pharmacy (Clinical armacy)

epartment offering the course: Pharmacognosy

ademic year Level: First level /second term

ite of specification approval: 09/ 2015

- Basic information:

tle: Pharmacognosy I **code:** PG.202

edit hours: 3 (2+1)

ctures: 2 hrs/ week

actical: 1 hrs/ week

torials: ---

tal: 3 hrs/ week

- Professional information:

Overall Aims of the Course:

completion of the course, the student will be able to:

- Describe morphological, histological characters and uses of medicinal flowers, barks, wood and herbs as well as identification of different active constituents and adulteration.
- Examine and determine the active constituents of the studied drugs

مدير وحدة الجودة

2- Intended Learning Outcomes (ILOs):

A- Knowledge and Understanding	
a1	Illustrate morphological , Histological characters and uses of medicinal flowers, barks, wood and herbs
a2	Identify adulteration of different medicinal flowers, barks, wood and herbs.
a3	Identify different active constituents of medicinal flowers, barks, wood and herbs.
B- Professional and Practical skills	
b1	Handel and dispose chemicals in a safe way
b2	Handle lab microscopes effectively
b3	Examine drugs of plant origin in entire and powdered form.
C- Intellectual skills	
c1	Adapt GLP and safety guidelines in the lab.
c2	Differentiate between drugs in entire and powdered form
c3	Differentiate the active constituents of different drugs.
D- General and Transferable skills	
d1	Work as a member of a team
d2	Implement writing and presentation skills
d3	Develop critical thinking, decision making and time management skills

D- Contents:

Week No.	Lecture contents (2hrs/lecture)	Practical session (1hrs/lab)
1	• General introduction for what will be taught all over the term • Introduction for the flowers and giving the students the possible references, web sites, text books.	• Laboratory safety measures • Dealing with microscope.
2	• Rest of introduction of flower. • Description of clove flower Including macro- and micro-morphological study for entire drug and for powdered clove.	• Description of clove flower Including macro- and micro-morphological study for entire drug. • Histology of powdered clove.
3	• Chamomile (German and Roman) and calendula flowers macro-and, micro-morphology of the entire and powdered drugs, chemical identification.	• German chamomile flower macro-, and micro-morphology, powders and chemical identification.
4	• Rest of flower drugs, uses, active constituents, pharmaceutical preparations.	• Santonica flowers macro- and, micro-morphology, powder and chemical identification. • **Activity** (Net research on the pharmaceutical products derived from the flowers).
5	• General introduction of bark	• Cinnamon bark macro-and micro-morphology, powder and chemical identification.
6	• Rest of the introduction and cinnamon bark: macro-and; micro-morphology-, powder and chemical identification.	• Cassia barks (Morphology, histology, powder and chemical test, when it is possible.
7	• Cinchona in details: macro-and; micro-morphology, powder and chemical identification. • **Periodic exam.**	• Cinchona barks (Morphology, histology for entire drug powder and chemical test when it is possible. • Morphological demonstration for all barks.

	• Cascarilla, quillaia, and canella bark (Morphology, histology, powder and chemical test when it is possible.	• Revision for powdered barks (Cinnamon, Cassia and cinchona).
	• Cascara and frangula in details: macro-morphology; micro-morphology powder and chemical identification.	• Quassia wood: Macro- and micro-morphology of entire wood. • Galls: Macro-morphology and micro-morphology of entire drug.
	• Rest of the taught barks.	• Hyoscymus muticus herb: Macro- and micro-morphology of entire drug
	• Introduction to wood • Galls: Macro-morphology of entire wood; micro-morphology-, Powder; chemical identification.	• Mentha: Macro- and micro-morphology of Powder and chemical identification
	• Herbs introduction	• Practical exam 1
	• Official and nonofficial herbs	• Practical exam 2
	• Revision.	----------
5	• Final written exam.	----------

	• Cascarilla, quillaia, and canella bark (Morphology, histology, powder and chemical test when it is possible.	• Revision for powdered barks (Cinnamon, Cassia and cinchona).
	• Cascara and frangula in details: macro-morphology; micro-morphology powder and chemical identification.	• Quassia wood: Macro- and micro-morphology of entire wood. • Galls: Macro-morphology and micro-morphology of entire drug.
	• Rest of the taught barks.	• Hyoscymus muticus herb: Macro- and micro-morphology of entire drug
	• Introduction to wood • Galls: Macro-morphology of entire wood; micro-morphology-, Powder; chemical identification.	• Mentha: Macro- and micro-morphology of Powder and chemical identification
	• Herbs introduction	• Practical exam 1
	• Official and nonofficial herbs	• Practical exam 2
	• Revision.	----------
5	• Final written exam.	----------

E- Teaching and Learning Methods:

- Lectures and interactive lectures.
- Practical sessions
- Self learning (group discussion, group assignment)

F- Student Assessment methods:

- Periodic exam to assess: a1, a2, a3, c1,c2 and c3
- Written exams to assess: a1, a2, a3, c1, c2 and c3
- Practical exams to assess: b1, b2, b3 and d1
- Oral exam to assess: a1, a2, a3, c1, c2 and c3
- Activities (group discussion, group assignment, case study) to assess: d1, d2, d3

Assessment schedule

Assessment (1): activity	Week 4
Assessment (2): Periodic exam	Week 7
Assessment (3): Practical exam	Week 12, 13
Assessment (4): Final written exam	Week 15
Assessment (5): Oral exams	Week 15

Weighting of Assessment

Assessment method	Marks	Percentage
Periodic exam	10	10%
Practical exam	25	25%
Final written exam	50	50%
Oral exam	15	15%
TOTAL	100	100%

G- Facilities required for teaching and learning:

- **For lectures:** Black (white) boards and data show.
- **For Labs:** Chemicals, glassware and microscopes.

H- List of References:

1- Course Notes: Student book of Pharmacognosy I approved by Pharmacognosy Department (2019).

2- Essential Books:

- Wallis, T. (1967). "Text Book of Pharmacognosy 5th Edition, London." J and A. Churchhill Ltd: 81-82.
- De Smet, P. A., K. Keller, R. Hänsel and R. F. Chandler (1992). Adverse effects of herbal drugs, Springer.
- Betty, P. and W. Derek (2000). "Atlas of microscopy of medicinal plants, culinary Herbs and species." CBS publisher New Delhi: 17-42.

- Evans, W. (2005). Trease and Evans Pharmacognosy, ed: 15th, Elsevier, a reed Elsevier India pvt ltd.

- Jackson, M. and A. Lowey (2010). Handbook of extemporaneous preparation: a guide to pharmaceutical compounding, Pharmaceutical Press London, UK.

- Upton, R., A. Graff, G. Jolliffe, R. Länger and E. Williamson (2016). American herbal pharmacopoeia: botanical pharmacognosy-microscopic characterization of botanical medicines, CRC Press.

- McCreath, S. B. and R. Delgoda (2017). Pharmacognosy: Fundamentals, applications and strategies, Academic Press.

3- Recommended Books

- Martindale (2007), "The extra pharmacopeia". 31st edn., by James, E.F Reynolds. And Kathleen Parfitt, Royal Pharmaceutical Society, London.

4- Periodicals and websites:

- Aquilina A. (2013), The extemporaneous compounding of paediatric medicines at Mater Dei Hospital. Journal of the Malta College of Pharmacy Practice.Issue 19, 28 – 30.

- http://canadianpharmacistsletter.therapeuticresearch.com/ce/ceCourse.asp

- https://www.google.com/search?safe=active&sxsrf=ACYBGNT1wfCQl6DGxZ5ouZYl1QZZfJSrYg:1568843605556&q=Pharmacognosy4all&tbm=isch&source=univ&sa=X&ved=2ahUKEwiel8TurdvkAhVIrxoKHcTHDMAQ7Al6BAgBECQ&biw=1008&bih=584#imgrc=7NmuWomEPl70WM:

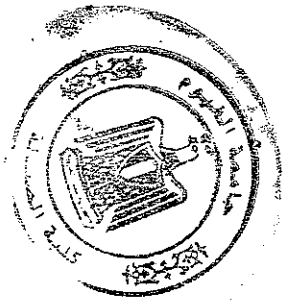
Course Coordinators: Prof. Dr. Mona Hetta

Head of Department: Prof. Dr. Mona Hetta

Date:

Matrix 1 of Pharmacognosy I													
Course Contents		ILOs of Pharmacognosy I											
		knowledge and understanding			professional and practical skills			intellectual skills			Transferable and general skills		
		a1	a2	a3	b1	b2	b3	c1	c2	c3	d1	d2	d3
Lectures													
1	• General introduction for what will be taught all over the term • Introduction for the flowers and giving the students the possible references, web sites, text books.	x	x	X				x	x	X			
2	• Rest of introduction of flower. • Description of clove flower Including Macro- and micro-morphological study for entire drug and for powdered clove.	x	x	X				x	x	X			
3	• Chamomile (German and Roman) and calendula flowers macro-and, Micro-morphology of the entire and powdered drugs, chemical identification.	x	x	X				x	x	X			
4	• Rest of flower drugs-, uses-, active constituents, pharmaceutical preparations.	x	x	X				x	x	X			

5	• General introduction of bark.	x	x	X				x	x	X			



6	• Rest of the introduction and cinnamon bark: macro-and; micro morphology -, powder and chemical identification.	x	x	X				x	x	X			
7	• Cinchona in details: macro-and; micro-morphology - powder and chemical identification.	x	x	X				x	x	X			
8	• Cascarilla, quillaia, and canella bark (Morphology, histology, powder and chemical test when it is possible.	x	x	X				x	x	X			
9	• Cascara and frangula in details: macro-morphology; micro-morphology powder and chemical identification.	x	x	X				x	x	X			
10	• Rest of the taught barks.	x	x	X				x	x	X			
11	• Introduction to wood • Galls: Macro-morphology of entire wood; micro-morphology-, Powder; chemical identification.	x	x	X				x	x	X			
12	• Herbs introduction • Official and nonofficial herbs	x	x	X				x	x	X			
	Practical sessions												
13	• Laboratory safety measures • Dealing with microscope.				X	X							

Course Specifications
(2018 – 2019)

Head of Department: Ass. Prof. Mona El Naa **Date:** /09/2018

14	• Description of clove flower Including Macro- and micro-morphological study for entire				X	X	x				x		

Course Specifications
(٢٠١٦ –٢٠١٥)

Pharmaceutical Analytical Chemistry I
PC 101

Course Specifications
(201٦ –201٥)
Pharmaceutical Analytical Chemistry

asic Information

ogram(s) on which the course is given	Bachelor of clinical pharmacy
epartment offering the course	Pharmaceutical Analytical Chemistry department
aculty offering the program	Faculty of pharmacy, Fayoum University
ept. responsible for teaching the course	Pharmaceutical Analytical Chemistry department
cademic year / level	First level, first semester
ourse title	Pharmaceutical Analytical Chemistry I
ourse code	PC 101
ontact hours (credit hours)	Lecture 2 (2) + Practical 2 (1): Total 4 (3)
e-requisite of the course:	Registration
ourse coordinator	Dr. Hany Mohamed Gamal
ajor or Minor element of program	Major
ate of specification approval	09/09/2014

rofessional Information

verall Aims of Course

The aim of the course is to provide students with the theoretical basis and practical aspects of the different methods of different quantitative (acid-base, preciptimetric) analysis.

Develop the practical skills in analyzing chemical compounds that enable the graduate to communicate efficiently and effectively with health care professionals.

Use educational methods that make graduates be life-long learner, creative researcher and effective participant in healthcare of the community.

Acquire the ability of integration, information evaluation and solving diverse analytical problems in an efficient way.

Intended Learning Outcomes of Course (ILOs)

Knowledge and Understanding:

y the end of the course, the students should be able to:

1- Explain the basic principles of quantification of different chemicals

2- Acquire much information about different quantitative analytical methods.

3- Recognize the suitable analytical methods for identification of different harmaceuticals

4- Understand the basics of some physico chemical specifications as pH, pK_a, K_{sp} of arious materials used in pharmaceutical preparation.

a_5- Recall the basic principles of pharmaceutical science including calculations of concentration, writing chemical formulas, determination of percent purity.

a_6- Define the basic principles of chemical reactions, chemical equilibria and balance chemical equations.

a_7. Recall the basic principles of quanitative (acid-base, preciptimetry) chemical analysis of cations and anions.

b- Intellectual Skills

By the end of this course, the student should be able to:

b_1- . Select appropriate analytical methods required for conformity of specifications of raw material.

b_2. Assess different methods for quanitative chemical analysis of different substance.

b_3- . Describe an analytical scheme for analysis of cations and anions.

b_4 - Write a report on analysis of a chemical substance.

b_5- Demonstrate the principles and limitations of practical techniques.

c- Professional and Practical Skills

By the end of the course, the student should be able to:

c_1. Apply the safe handling and safe disposal of chemicals according to the ethical and legal guidelines.

c_2. Apply the practical methods required for quantification of different compounds.

c_3- Standardize chemical reagents used in acid-base quantitative analysis.

c_4- Analyze different pharmaceutical substances through acid-base, & preciptimetric analysis.

d- General and Transferable Skills

By the end of the course, the student should be able to:

d_1. Interact and communicate by verbal and written means with other health care professionals in their own specialized language.

d_2. Team-working in diverse pharmaceutical & social settings.

d_3. Keep up with the pharmacy profession and pharmaceutical industry as a life -long independent continuing education post-graduation

d_4. Apply proper safety measures according to standard guidelines

d_5- work efficiently in laboratory.

d_6. Analyze, evaluate information and solve problems.

3. Contents

Teaching week	TOPIC	No. of lecture hours	No. of practical hours	Assessment of ILOs
1	Introduction, Rate of the reaction	2		a2, b1, d1
	Lab safety		2	
2	Chemical equilibrium	2		a1, a2,a3,b1,b2, c1, c2, d2
	Standerdization		2	
3	Chemical Kinetics	2		a1, a2,a4,b1,b2, c1, c2, d2
	Assay of HCl		2	
4	Introduction to qualitative & quantitative analysis	2		a1, a5,a3,b1,b3, c1, c3, d1,d2
	Assay of HCl/Acetic mixture		2	
5	Acid-base theory	2		a1, a2,a4,b1,b2, c1, c3, d2, d3
	Assay of formaldyde		2	
6	Acid-base titration curve & buffer. **Quiz 1**	2		a1, a2,a3,b1,b3, c1, c2, d1,d5
	Assay of KOH		2	
7	Application acid-base titrations.	2		a1, a2,a4,b1,b2, c1, c3, d2, d6
	Assay of salts		2	
8	Application acid-base titrations.	2		a1, a2,a3,b2, c1, c2, d1
	Ksp problems I		2	
9	Preciptimetric methods.	2		a2,a3,b1, c1, c2, d1,d6
	Ksp problems II		2	
10	Preciptimetric methods. **Quiz 2**	2		a1, a4,a4, a5, a6, a7 b1,b2, c1, c3, c4 d2
	Revision		2	
11	Preciptimetric methods.	2		a2,a4, a5, a6, a7 b1, c1, c2, c4, d1, d5, d6
	Final practical exam			
Total no of hours		22	20	
11 & 12	**FINAL Exam**			

eaching and Learning Methods

1- Lectures (board, data show, power point)	√
2- Interactive learning (Discussions, brain storming)	√
3- Self-study (Tutorials)	-
4- Practical (labs, tools, chemicals, glassware, equipment and instruments)	√
5- Other methods (Assignments)	√

tudent Assessment Methods

1. Written exams to assess knowledge and understanding as well as intellectual skills.

2. Oral exams to assess all types of skills and mainly general and transferrable skills actice.

3. Practical exams

ssessment Schedule

uiz 1	5th week
uiz 2	9th week
actical exam	11th week
nal exam	12th week
ral exam	12th week

Veighting of Assessments

riodical	15%
actical	25%
nal exam	50%
ral exam	10%
Total	100%

ist of References

1- Course Notes

omplied by the department

6.2- Essential Books (Textbooks)

- J. Mendham, R.C. Denney, J.D. Barnes and M.J.K. Thomas "Vogel's Textbook of quantitative chemical analysis" by Pearson education (6th edition) 2004
- R.de Levie "principles of quantitative chemical analysis" by Mc Graw-HillCompanies.inc.1997.
- G. D. Christin "Analytical chemistry" by John Wiley & sons inc. (5th edition) 1994

6.3- Periodicals

-Analytical letters

-J. pharmaceutical and biomedical analysis
-Analytical chemistry

6.4- Web Sites

https://www.degruyter.com/view/journals/revac/revac-overview.xml

7. Facilities required for teaching and learning

1. Lecture rooms with data show
2. Procurement of latest edition of the above-mentioned texts and others to update the education process

Course Coordinator: Dr. Hany Mohamed Gamal

Head of Department: Pr. Mona Hetta

Date: 09 /09/201٥

Course Specifications

Physical pharmacy (PT201)

Level 1

Semester 2

Course Specification

A-Basic Information	
Course code:	PT201
Course name:	Physical pharmacy
Credit hours of the course:	Lecture: 2 Practical: 1 Total: 3
Pre-requisite of the course:	Registration
Department teaching the course:	Department of Pharmaceutics
Program for which the course is given:	Clinical Pharmacy Program
Course Co-ordinator:	Dr.Eman Ahmed Mazyed
Head of the Department:	Prof Dr. Mona Hetta
Date of specifications approval:	09/09/2014

B-Professional Information
1- Overall aims of the course:
At the end of this course the student must be able to understand: Important pharmacy-related physical principles in areas such as states of matter ,phase equilibrium and phase rule , solutions and disperse systems , adsorption ,solubility ,dissolution rate , buffers , isotonic solutions and rheology .
2-Intended learning outcomes (ILOs):
a-Knowledge and Understanding : By the end of this course , the student should be able :

:

A1. Define basic principles and different terms of physical pharmacy..

A2.Understand physical principles of states of matter and phase rule

A3. Recognize basic understanding of physical properties of solutions, buffers.

Isotoninicity, disperse systems and Rheology..

a4.. Understand physicochemical properties of drugs including solubility, distribution and adsorption.

b-Intellectual Skills:

By the end of this course, the student should be able to

b1 Apply information regarding physical principles in deigning dosage forms.
b2 Solve problems related to states of matter, concentration expression, buffers and isotonic solutions
b3 Recognize basic rules and equations regarding physical principles essential for pharmaceutical applications

.Differentiate between different types of solutions, buffers and surfactants.b4.

.B5.Compare between different types of flow and rheograms

B6.Select suitable calculations necessary for pharmaceutical experimental procedures..

c-Professional and Practical Skills:

By the end of this course, the student should be able to

cl. Use suitable method for calculating solubility, viscosity and surface tension.

C2.Operate different pharmaceutical laboratory instruments used in determining various physical properties such as surface tension, viscosity, adsorption and solubility..

d-General Skills:

By the end of this course, the student should be able to::

d1. Use computer and modern technologies.

d2. Gain the skills of self- learning and presentation..

d3 Work effectively in a team to measure and understand various physical properties of drug solutions.
d4. Calculate and properly express solution concentrations..

D5.Demonstrate critical thinking, problem solving and decision making abilities in a variety of theoretical and practical situations in pharmacy practice.

16.Prepare and discuss scientific reports.

Buffers and buffering agents , isotonic solutions and determination of tonicity	Buffer and buffer capacity.	2+1	2	1
Disperse systems and colloids	Revision	2+1	2	1
Revision	Revision	2+1	2	1
Total		39	26	13

4- Teaching and Learning Methods (lectures, open discussion, role plays,...etc):

- Lectures, PowerPoint presentation
- Tutorial classes
- Open discussion
- Research assignment and interactive discussions.

5- Student Assessment:

a- Assessment Methods and Weighing:

- Class participation: 10%
- Practical Exam: 25%
- Oral Exam: 15%
- Final Exam: 75%

b- Assessment Schedule:

- Class participation: Quiz 1: Week 4
  Quiz 2: Week 8
  Other activities: throughout the semester
- Practical Exam: - Week 13
- Oral Exam: According to semester timetable
- Final Exam: According to semester timetable

6- List of References:	
Course Notes	Course notes, Hand outs
Required Books	Physical Pharmacy, David Attwood and Alexander T. Florence (editors), Pharmaceutical Press, London, UK, 2008
Recommended Books	Agarwal, S.P., and R. Khanna. Physical Pharmacy 1st ed. CBS Publishers and Distributers, 2002. -Alton, Michael E. Pharmaceutics: The Science of Dosage Form Design. 2 nd ed Churchill, 2002. -Cherng-Ju Kim, Advanced pharmaceutics "Physicochemical Principles" CRC press, 2000. -University of the Sciences in Philadelphia, ed. Remington. The Science and Practice of Pharmacy. 21 st ed. Lippincott, 2005. -Alfred N. Martin Physical Pharmacy 4th ed. Lea & Fibiger, 1996.
Periodicals Websites	J. Parma Pharmacology, Ind. Pharm, Pharmazie, Drug Devel. Ind. Pharm, E-book, http://www.nordicrheologysociety.org http://www.rpi.edu/dept/chem-eng/Biotech Environ/Adsorb/adsorb.htm

Course Coordinator: Dr. Eman Ahmed Mazyed

Head of Department: Prof. Mona Hetta

Websites	--

Course Coordinator: Dr. Eman Ahmed Mazyed

Head of Department: Prof. Dr. Mona Hetta

Date: 09/09/2014

Course Specifications

Pharmacy Orientation (PT 202)

Level 1

Semester 2

Course Specification

A-Basic Information	
Course code:	PT202
Course name:	Pharmacy Orientation
Credit hours of the course:	Lecture: 2 Practical: -- Total: 2
Pre-requisite of the course:	Registration
Department teaching the course:	Department of Pharmaceutics
Program for which the course is given:	Clinical Pharmacy Program
Course Co-ordinator:	Dr/Eman Ahmed Mazyed
Head of the Department:	Dean of the Faculty of pharmacy
Date of specifications approval:	09-09-2014

B-Professional Information

1- Overall aims of the course:

At the end of this course the student should be able to understand:
- o The importance of pharmacy and the role of pharmacist.
- o Different routes of drug administrations and different dosage forms.
- o Medical terminology and pharmaceutical terminology.
- o Rational use of drugs.
- o Ethics of pharmacy, Self-care and Self-medications.
- o The history of pharmacy and a focus about Pharmacy in the Pharaonic age, role of Arabs in pharmacy.

2- Intended learning outcomes (ILO's):

a-Knowledge and Understanding:

By the end of this course the student should be able to:

a1. Define pharmacy, drug and classification of drugs.

a2. Recognize pharmacy profession, prescription parts, difference between types of pharmaceutical dosage forms.

a3. Describe the scope of patient services, drug services, and the prescription.

A4.Understand various roles &ethics of pharmacy.

a5. Plain different types of pharmaceutical dosage forms, the routes of drug and factor affecting them.

a6. know the history of pharmacy.

b-Intellectual Skills:

By the end of this course, the student should be able to:

b1. Distinguish between the units of weight, volume and length.

b2. Apply pharmaceutical knowledge in the formulation of safe and effective medicines as well as in dealing with new drug delivery systems.

b3. Apply pharmaceutical knowledge about prescriptions and how to prepare them in proper way.

b4. Control possible physical and/ or chemical incompatibilities that may occur during drug dispensing.

c-Professional and Practical Skills:

By the end of this course, the student should be able to:

c1. Use the proper pharmaceutical and medical terms, abbreviations and symbols.

c2. Advise patient and other health care professionals about safe and proper use of medicines.

c3. Calculate the dose for children, weight, volume and length.

d-General Skills:

By the end of this course, the student should be able to:

d1. Use computer and modern technologies

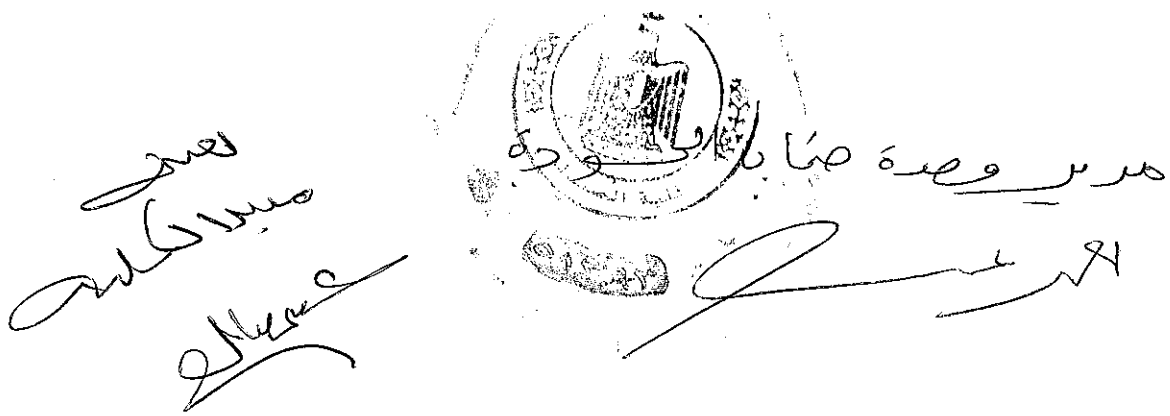
d2. Gain the skills of self- learning and presentation.

3- Course contents:

Topic	No. of hours		
	Lecture	Practical	Total
History of Pharrnacy(in Arabic)	2	--	2
History of pharmacy (cont.)	2	--	2
History of pharmacy (cont.)	2	--	2
Scope of pharmacy, the functions of pharmacist and Drug information resources	2	--	2
Routes of drug administrations	2	--	2
Dosage forms	2	--	2
Examples of medical terminology and pharmacy terminology	2	--	2
Rational use of drugs, Pharmaceutical care, self-care and self-medications	2	--	2
Ethics in pharmacy	2	--	2
Standard of practice	2	--	2
Prescriptions	2	--	2
Different types of incompatibilities, and how can we solve them	2	--	2
Revision	2	--	2
Total	26		26

Course specification

Course code:	PC 203
Course name:	Pharmaceutical Organic Chemistry II
Credit hours of the course:	Lecture: 2 Practical: 1 Total: 3
Pre-requisite of the course:	Pharmaceutical Organic Chemistry I
Department teaching the course:	Pharmaceutical Medicinal Chemistry Department
Program for which the course is given:	Clinical Pharmacy Program
Course Co-ordinator:	Dr Mohammed Ibrahim Abdel_Latif Hamed. Dr/ Mohammed Mahmoud El_Agawany
Head of the Department:	Prof. Dr./ Mona Hetta
Date of specifications approval	09/2015



b-professional information

1-Overall aims of the course:

The aim of this course to ensure that graduates have the necessary knowledge, understanding and skills to apply the basic chemistry of aliphatic organic compounds.

2-Intended learning outcomes (ILO's):

Knowledge and Understanding:

By the end of this course, the student should be able to:

a1-Know the basic concepts of aromaticity and chemistry of arenes

a2-Know the characteristics of chemistry of benzenoids and polynuclear compounds

a3-Understand The basics of spectroscopy and spectral analysis of organic compounds

Intellectual Skills:

By the end of this course, the student should be able to:

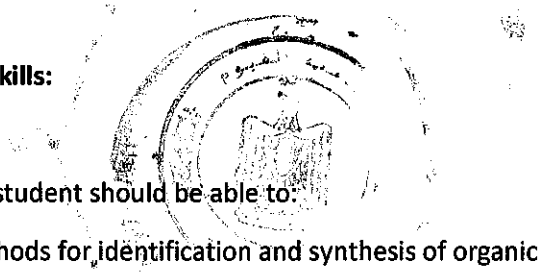
b1- Recognize organic compounds from their physical and chemical properties.

b2- Discuss organic problems of different organic classes.

b3- Apply suitable methods for synthesis, purification, and identification of chemical substances from different origins.

64- Analyze and interpret experimental studies as well as data from published literature using spectroscopy.

c- Professional and Practical Skills:



By the end of this course, the student should be able to:

c1-Select the appropriate methods for identification and synthesis of organic compounds

c2- Identify aromatic organic compounds and carbohydrates physically and chemically.

c3- Analyze spectral data of organic compounds.

d-General Skills:

By the end of this course, the student should be able to:

d1- Use the literature via different information sources including the library, internet ....etc.

d2- Care about himself, his colleagues and all the tools and instruments of his lab during dealing with chemical organic compounds

3-course contents

Topics	lecturer	lecture	practical	total
Introduction to organic chemistry, structure of benzene and its stability, (resonance), and the aromaticity phenomena. Classification and Nomenclature of aromatic compounds. Preparation and addition reactions of benzene	Dr/Mohammed Ibrahim	2	1	1
Electrophilic substitution reactions of benzene. Orientation (o-p-m-directing group) of substituted benzene.	Dr/Mohammed Ibrahim	2	1	1
Arenes and their derivatives. Aryl halides.	Dr/Mohammed Ibrahim	2	1	1
Aromatic alcohols Aryl ether.	Dr/Mohammed Ibrahim	2	1	1
Nomenclature, Synthesis, preparation and chemical reactions of aromatic aldehyde and ketone.	Dr/Mohammed Ibrahim	2	1	1
Aromatic carboxylic acids and their derivatives.	Dr/Mohammed Ibrahim	2	1	1
Identification, Synthesis, preparation and chemical reactions of of aromatic amine and nitro compounds.	Dr/Mohammed El Agawany	2	1	1
Aromatic diazonium compounds. Polynuclear aromatic hydrocarbons (Naphthalene. Anthracene, phenanthrene, and anthrquinone)	Dr/Mohammed El Agawany	2	1	1
Introduction to spectroscopy, relation between light and organic compounds, Ultraviolet-and and visible U.V. Beer Lambert low, type of electronic orientations Calculate of Amax for dienes by using Woodward (Fisher rule)	Dr/Mohammed El Agawany	2	1	1

Introduction to mass spectro fragmentation and Mc-Lafferty rearangment	Dr/Mohammed El Agawany2	2	1	1
Introduction infrared, Hook low, region of different type of function groups.	Dr/Mohammed El Agawany	2	1	1
Introduction to NMR, type uses in life. H-NMR. Chemical Shift and TMS. Chemical shift of different type of protons. "C-NMR (chemical shift. Problems on C-NMR)	Dr/Mohammed El Agawany	2	1	1
total		24	12	36

4-Teaching and Learning Methods (lectures, open discussion, role plays, etc):

4.1- Lectures (board, overhead projector, molecular models, software chemistry programs and data show)

4.2- Tutorials and discussion sessions

4.3- Practical sessions

5- Student Assessment:

a-Assessment Methods and Weighing:

Quiz to assess the knowledge, understanding and intellectual skills of the course.

Mid-Term written exam to assess the knowledge, understanding and intellectual skills of the previously studied sections of the course.

Practical exam to assess the practical and professional skills gained by the students.

Final written exam to assess all the knowledge and understanding of the different sections of the course.

Oral examination to assess all the intellectual skills and knowledge of the different sections of the course.

1) Class participation: 10%

2) Practical exam:25%

3) Oral exam: 15%

4) Final exam: 50%.

b-Assessment Schedule:

Class participation Quiz 1: Week 4-5

Quiz 2: Week 8-9

Other activities: throughout the semester

Practical exam: Week 13-14

Oral exam: According to semester timetable

Final exam: According to semester timetable

6-list of references

Course Notes	On ELS
Required Books	Essential organic chemistry. Paula Yurkanis Bruice
Recommended Books	a. Fundamental of Organic Chemistry, J. McMurry and E. Simanek. 6th Edition Organic Chemistry: R.T. Morrison and R.N. Boyd: 6 Edition Chemistry for Pharmacy Students. Satyajit D. Sarker and LutfunNahar. 2007) Mechanisms in Advanced Organic Chemistry. R.P. Narain; (2008) b. Stereochemistry: V. M. POTAPOV, (1979) c. Organic Stereochemistry, Michael J. T. Robinson (1999) d. VOGEL's "Textbook of practical organic chemistry" Brian S. Fumiss, Antony J. Hannaford, Peter W. G. Smith and Austin R. Tatchell 5 Edition
Periodicals	Different pharmacopoeias (Egyptian & british)
Web Sites	Journal of Organic Chemistry http://www.pubmed.com

Course Coordinator:

Dr/Mohammed Ibrahim Abdel Latif Hamed.

Dr Mohammed Mahmoud El_Agawany

-Head of Department : Prof.Dr/ Mona Hetta

Date: 09/09/2014

Fayoum University

Faculty of Pharmacy

Clinical Pharmacy Program
(2015-2016)

Course Specifications

A-Basic Information	
Course code:	**MD 203**
Course name:	**Histology**
Credit hours of the course:	Lecture: 2 Practical:1 Total:3
Pre-requisite of the course:	No
Department teaching the course:	Faculty of Medicine, Anatomy and Histology Department
Program for which the course is given:	Clinical Pharmacy Program
Course Co-ordinator:	
Head of the Department:	Prof. Mona Hetta
Date of specifications approval:	09/09/2015

B-Professional Information
1-Overall aims of the course:
The course aims to enhance the student's knowledge about various tissues (epithelial, connective, muscular and nervous), heart, blood vessels, lymphatic organs, skin and its appendages, systems (digestive and associated glands, respiratory, urinary, reproductive, central nervous system), endocrine glands and eye histology.
2-Intended learning outcomes (ILO's):
a- Knowledge and Understanding:

By the end of this course, the student should be able to:

a1- Define histology, types of microscopes and the principles of staining with hematoxylin and eosin

a2- Describe light microscopic and electron microscopic features and the function of cell organelles, cell inclusions, and the nucleus

a3- Discuss the general characteristics of epithelium, its types, sites and the structure of each type.

a4. Describe the general characteristics of connective tissue (CT), types of CT cells, the structure and types of CT fibers, and types and sites of CT proper.

a5. Describe the structure and function of red blood corpuscles, white blood cells and platelets.

a6. Discuss the general characteristics of cartilage, types of cartilage cells and the structure and sites of different types of cartilage.

a7. Describe the general characteristics of bone, types of bone cells, the structure and sites of different types of bone, and types of ossification.

a8. Describe the different types of muscle (skeletal, cardiac and smooth muscle)

a9. Describe the neuron , types of nerve fibers & types of ganglia.

a10. Describe the histological structure and function of Gastrointestinal tract.

a.11 Describe the histological structure and function of Endocrine system [suprarenal gland, thyroid gland, pituitary gland]

a.12 Describe the histological structure and function of Respiratory system [trachea, lung].

a13. Describe the structure and function of each type of lymphatic organs (lymph node, spleen and tonsil).

a.14 Describe the structure and function of skin

b-Intellectual Skills:

By the end of this course, the student should be able to:

b1. Analyze the ultrastructural details of the cell & correlate between the predominance of a certain cell organelle & the function of its cell.

b2. Correlate between the structure & function of every organ according to its type of cells.

b3. Compare between the different types of tissues according to their structure, function and distribution in the human body.

c-Professional and Practical Skills:

By the end of this course, the student should be able to:

c1. Differentiate between different tissues and organs in histological slides using light microscope.

c2. Apply different types of stains specific for different types of cells and tissues.

c3. Identify the ultrastructural details of cells through electron microscopic pictures.

d-General Skills:

By the end of this course, the student should be able to:

d1- Apply how to work effectively in a team.

d2- Express himself freely and adequately by improving his descriptive capabilities & enhancing his communication skills

d3- Maintain professional image in manner, dress speech and interpersonal relationships that is consistent with the medical profession's accepted contemporary standards in the community.

3-Course contents:

	No of hours		
	Lecture	**Practical**	**Total**
Introduction to Histology	2	1	3
The cell structure and function [cell membrane- mitochondria- SER- RER- Secretory vesicles]	2	1	3
The cell structure and function [lysosomes- ribosomes- cytoskeleton- nucleus]	2	1	3
Epithelium (general characters- surface epithelium- glandular epithelium. – myoepithelium. – neuroepithelium)	2	1	3

Connective tissue [general characters- free and fixed CT cells - fibers and matrix & types of C.T]	2	1	3
Blood (Erythrocytes leukocytes, blood platelets)	2	1	3
Cartilage [General characters of cartilage – structure of cartilage - types and sites of cartilage] and Bone [General characters of bone – structure of bone - types and sites of bone – bone ossification]	2	1	3
Lymphatic organs (structure & function of thymus, lymph nodes, spleen and tonsils)	2	1	3
Muscular tissue [general characters, structural details of skeletal, cardiac, and smooth muscles]	2	1	3
Nervous tissue [structural details of the neuron, types of neurons, myelination, structure and function of neuroglial cells]	2	1	3
Gastrointestinal tract [oral cavity, salivary gland, liver, pancreas] and Skin	2	1	3
Endocrine system [suprarenal gland, thyroid gland, pituitary gland] and Respiratory system [trachea, lung]	2	1	3
Total	**24**		**36**

4-Teaching and Learning Methods (lectures, open discussion, role plays, ..etc):

- Lectures.
- Practical sections mainly using light microscope.
- Open discussion.
- Assignments.
- Role plays.

5- Student Assessment:

a-Assessment Methods and Weighing:

- Written exams evaluate the levels of knowledge and understanding and Intellectual Skills.
- Periodic exams evaluate the levels knowledge and understanding and Intellectual Skills.
- Practical exams evaluate the levels of the practical Skills.
- Class participation: 10. %
- Practical exam: 25 %
- Final exam: 65. %

b-Assessment Schedule:
- Class participation: Quiz 1: Week 4-5 Quiz 2: Week 8-9 Other activities: throughout the semester - Practical exam: Week 12 - Final exam: According to semester timetable

6-List of References:	
Course Notes	- Human Anatomy and Histology department Book - Practical book of Histology for medical students' course
Recommended Books	- Histology: the Big Picture by John F. Ash; David A. Morton; Sheryl A. Scott
Web Sites	- https://www.ncbi.com

Course Coordinator:

Head of Department: Prof. Mona Hetta

Date: 09/09/2015

Course Specifications
(2015 – 2016)

Course: Human Rights

Course code: HU201

Course Specifications
(2015 – 2016)

asic Information

·ogram(s) on which the course is given:	Clinical
ıculty offering the program	Pharmacy
ept. responsible for teaching the course	Sociology faculty of arts
cademic year/level	Second semester
ɔurse title	Human rights
ɔurse code	HU201
ɔntact hours (credit hours)	2
'e-requisite of the course:	No
ɔurse coordinator	
ajor or Minor element of program	Minor
ate of specification approval	09/09/2015

rofessional Information

verall Aims of Course

يغطي هذا المقرر حقوق الانسان في القانون الجنائي، حق الانسان في تغيير جنسته او التخلي عن احدي جنسياته، المواثيق الدوا المتعلقة بحماية حقوق الامسان، علاقة العولمة و التنمية بالحقوق الاقتصادية و الاجتماعية و الثقافية، الحقوق الاقتصادية الاجتماعية و الثقافية للانسان، حقوق الانسان في الشريعة الاسلامية، حقوق المرأ في قانوني العمل و التأمين الاجتماعي، حقو الانسان في التقاضي، الحقوق المدنية و السياسية للانسان

Intended Learning Outcomes of Course (ILOs)

Knowledge and Understanding:

y the end of the course, the students should be able to:

.. ذكر حقوق الانسان في القانون الجنائي

:. تعديد الحقوق الاقتصادية و الاجتماعية و الثقافية

:. فهم حقوق الانسان في الشريعة الاسلامية

Intellectual Skills

مدير وحدة ضمان الجودة

مدير الكلية

b.١ مناقشة حقوق الانسان في القانون الجنائي.

b2 . مناقشة حقوق المرأة في قانوني العمل و التأمين الاجتماعي

By the end of this course, the student should be able to:

b3. مناقشة علاقة العولمة و التنمية بالحقوق الاقتصادية و الاجتماعية و الثقافية، الحقوق الاقتصادية و الاجتماعية و الثقافية للانسان

c- Professional and Practical Skills

c1. تطبيق مبادئ حقوق النسان المتعلقة بالقانون الجنائي

c2. تطبيق حقوق المرأة في قانوني العمل و التأمين الاجتماعي

By the end of the course, the student should be able to:

d- General and Transferable Skills

By the end of the course, the student should be able to:

d1. المشاركة و التعبير عن الراي بحرية

3. Contents

Teaching week	TOPIC	No. of lecture hours	No. of Practical hours
1	حقوق الانسان في القانون الجنائي	2	0
2	حق الانسان في تغيير جنسته او التخلي عن احدي جنسياته	2	0
3	المواثيق الدولية المتعلقة بحماية حقوق الإنسان،	2	0
4	المواثيق الدولية المتعلقة بحماية حقوق الإنسان،	2	0
5	علاقة العولمة و التنمية بالحقوق الاقتصادية و الاجتماعية و الثقافية	2	0
6	علاقة العولمة و التنمية بالحقوق الاقتصادية و الاجتماعية و الثقافية	2	0
7	الاختبار الدوري الاول	2	0
8	الحقوق الاقتصادية و الاجتماعية و الثقافية للانسان	2	0

9	حقوق الانسان في الشريعة الاسلامية	2	0
10	حقوق المرأ في قانوني العمل و التأمين الاجتماعي	2	0
١١	حقوق الانسان في التقاضي، الحقوق المدنية و السياسية للانسان	2	0
١٢	الاختبار الدوري الثاني	2	0
Total no of hours	24		
13	FINAL Exam		

Teaching and Learning Methods

4.1- Lectures (board, data show)

4.2- Assignments

4.3- Class discussion

Student Assessment Methods

5.1. Periodic exams to assess knowledge and understanding as well as intellectual skills.

5.2. Written exams to assess all types of skills and mainly general and transferrable skills practice.

Assessment Schedule

Quiz 1 — 5th week

Quiz 2 — 12th week

Final exam — 12th week; according to semester schedule

Weighting of Assessments

Periodical — 10%

Final exam — 90%

Total — 100%

List of References

5.1- Course Notes: Lecture notes in human rights

5.2- Essential Books (Textbooks):

National human rights strategy the Arab Republic of Egypt

Facilities required for teaching and learning

1. Lecture rooms with data show
2. Procurement of latest edition of the above-mentioned texts and others to update the education process

Course Coordinator:

Head of Department: Mona Hetta

Date: /09/2015