

Republic of Yemen

Ministry of Higher Education & Scientific Technology

Emirates International University



**Faculty of Medicine and Health Sciences**

Department of Clinical Pharmacy

**Bachelor of Pharm D**

Course Specification of

Principles of Human Anatomy

**Course No. (ANA 104)**

Prepared by:

Dr. Saleh Al-Dhaheri

Reviewed by:

Dr. Al-Ghorafi  
.M.A.

Head of the Department:



Principles of Human Anatomy

Quality Assurance head

Dean:

## I. Course Identification and General Information:

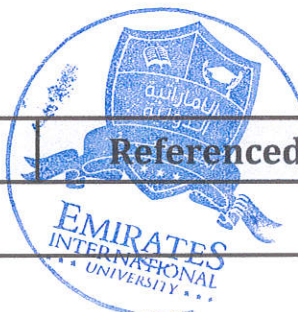
1	<b>Course Title:</b>	Principles of Human Anatomy			
2	<b>Course Code &amp; Number:</b>	ANA 104			
3	<b>Credit Hours:</b>	<b>Credit Hours</b>	<b>Theory Hours</b>		<b>Lab. Hours</b>
			<b>Lecture</b>	<b>Exercise</b>	
		3	2	--	2
4	<b>Study Level/ Semester at which this Course is offered:</b>	1 <sup>st</sup> Level / 2 <sup>nd</sup> Semester			
5	<b>Pre –Requisite (if any):</b>	Biology			
6	<b>Co –Requisite (if any):</b>	None			
7	<b>Program (s) in which the Course is Offered:</b>	Bachelor of Pharm D			
8	<b>Language of Teaching the Course:</b>	English			
9	<b>Study System:</b>	Credit Hour System			
10	<b>Mode of Delivery:</b>	Full Time			
11	<b>Location of Teaching the Course:</b>	Faculty of Medicine and Health Sciences			
12	<b>Prepared by:</b>	Prof .Dr. Saleh Al-Dhaheri			
13	<b>Date of Approval:</b>				

## II. Course Description:

This course is designed to provide the students with the needed knowledge in Principles of Human Anatomy needed to be applied at a later stage during their clinical training. The lecture topics include introduction to anatomy and with study systems consisting human body and some applied comparative clinical anatomy ,in addition to all related structures of each region and its surface anatomy

## III. Course Intended Learning

## Referenced PILOs



Outcomes (CILOs) : (مخرجات تعلم المقرر)		(مخرجات تعلم البرنامج)	
<b>A. Knowledge and Understanding:</b> Upon successful completion of the course, students will be able to:			
a1	Establish medical pharmacy doctor with excellent information and skills of human anatomy able to compete others worldwide.		A1
a2	Describe the normal anatomy and histology of various regions of the human body (different tissues, organs and systems).		A1
<b>B. Intellectual Skills:</b> Upon successful completion of the course, students will be able to:			
b1	Explain the different stages of human development, evolution and growth.		B1
b2	Recognize the structure of anatomical and histological features and organs of different regions of human body.		B1
<b>C. Professional and Practical Skills:</b> Upon successful completion of the course, students will be able to:			
c1	Classify data obtained from anatomical experiments.		C1
c2	Identify practically the gross morphology of different organs of the human body		C1
<b>D. Transferable Skills:</b> Upon successful completion of the course, students will be able to:			
d1	Work effectively in team and independently to perform the required tasks		D3
d2	Use information technology skills in collecting data and information		D2

(A) Alignment of Course Intended Learning Outcomes (Knowledge and Understanding)





<b>to Teaching Strategies and Assessment Methods:</b>			
<b>Course Intended Learning Outcomes</b>	<b>Teaching Strategies</b>	<b>Assessment Strategies</b>	
a1	Establish medical pharmacy doctor with excellent information and skills of human anatomy ,able to compete others worldwide.	<ul style="list-style-type: none"> <li>- Lectures</li> <li>- Seminars</li> <li>- Discussion</li> </ul>	<ul style="list-style-type: none"> <li>- Quizzes</li> <li>- Mid-term Exam</li> <li>- Final Written Exam</li> </ul>
a2	Describe the normal anatomy of various regions of the human body (different tissues, organs and systems).	<ul style="list-style-type: none"> <li>- Lectures</li> <li>- Seminars</li> <li>- Discussion</li> </ul>	<ul style="list-style-type: none"> <li>- Quizzes</li> <li>- Mid-term Exam</li> <li>- Final Written Exam</li> </ul>
<b>(B) Alignment of Course Intended Learning Outcomes (Intellectual Skills) to Teaching Strategies and Assessment Methods:</b>			
<b>Course Intended Learning Outcomes</b>	<b>Teaching Strategies</b>	<b>Assessment Strategies</b>	
b1	Explain the different stages of human development, evolution and growth.	<ul style="list-style-type: none"> <li>Lectures</li> <li>▪ Presentation</li> </ul>	<ul style="list-style-type: none"> <li>-Quizzes</li> <li>-Midterm Exam</li> <li>▪ -Final Written Exam</li> </ul>
b2	Recognize the structure of anatomical and histological features and organs of different regions of human body.	<ul style="list-style-type: none"> <li>Lectures</li> <li>▪ Presentation</li> </ul>	<ul style="list-style-type: none"> <li>-Quizzes</li> <li>-Midterm Exam</li> <li>-Final Written Exam</li> </ul>
<b>(C) Alignment of Course Intended Learning Outcomes (Professional and Practical Skills) to Teaching Strategies and Assessment Methods:</b>			
<b>Course Intended Learning Outcomes</b>	<b>Teaching Strategies</b>	<b>Assessment Strategies</b>	
c1	Classify data obtained from anatomical experiments.	<ul style="list-style-type: none"> <li>- Lectures.</li> <li>- Lab Experiments</li> <li>-Training</li> </ul>	<ul style="list-style-type: none"> <li>- Quizzes</li> <li>- Final Practical Exam</li> <li>laboratory and other written reports</li> <li>-Lab Experiments</li> </ul>
c2	Identify practically the gross morphology of different	<ul style="list-style-type: none"> <li>- Lectures.</li> <li>- Lab Experiments</li> </ul>	<ul style="list-style-type: none"> <li>- Quizzes</li> <li>- Final Practical Exam</li> </ul>

	organs of the human body	-Training	laboratory and other written reports -Lab Experiments
<b>(D) Alignment of Course Intended Learning Outcomes (Transferable Skills) to Teaching Strategies and Assessment Methods:</b>			
	<b>Course Intended Learning Outcomes</b>	<b>Teaching Strategies</b>	<b>Assessment Strategies</b>
d1	Work effectively in team and independently to perform the required tasks	- Discussion - Case Study - Self Learning	- Assignments - -
d2	Use information technology skills in collecting data and information	- Discussion - Case Study - Self Learning	- Assignments - -

#### IV. Course Contents:

##### A. Theoretical Aspect:

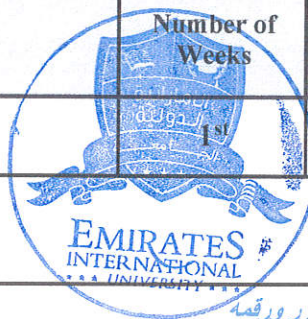
No.	Units/Topics List	Sub Topics List	Number of Weeks	Contact Hours	Learning Outcomes (CILOs)
1	Introduction to anatomy	– Definitions, Anatomical positions, Planes of anatomy	1	2	a1,a2, b1,b2
2	Terminology of movement	– Definitions of movements, anatomical terminology	1	2	a1,a2, b1,b2
3	Osteology	Types of bones Ossification –	1	2	a1,a2, b1,b2
4	Skeleton	Axial Skeleton –	1	2	a1,a2, b1
5	Skeleton	– Appendicular Skeleton	1	2	a1,a2, b1,b2
6	Joints	Classification	1	2	a1,a2,





		Examples (Fibrous, Cartilaginous)			b1,b2
7	Joints	– Synovial ch.ch.,classification	1	2	a1,a2, b1,b2
8	Muscles	Classification – Examples	1	2	a1,a2, b1,b2
9	Fascia	Types – Sites	1	2	a1,a2, b1
10	Cardiovascular system	Heart (external&internal configuration) –	1	2	a1,a2, b1,b2
11	Cardiovascular system	Circulation – Blood Vessels(Arteries& Veins	1	2	a1,a2, b1,b2
12	Respiratory system	Nose Larynx, trachea, Bronchi, bronchioles,alveoli Lungs,pleura,	1	2	a1,a2, b1,b2
13	Digestive system	Mouth, pharynx, esophagus,stomach, small intestine, large intestine,liver, pancreas, spleen	1	2	a1,a2, b1,
14	Nervous system	CNS,ANS,PNS	1	2	a1,a2, b1
15	Urogenital system	Urinary organs, male& female genital organs	1	2	a1,a2, b1
16	Final Theoretical Exam	Exam	1	2	a1,a2, b1
<b>Number of Weeks /and Units Per Semester</b>			<b>16</b>	<b>32</b>	

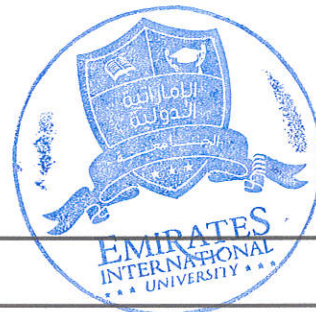
<b>B. Case Studies and Practical Aspect:</b>				
No.	Tasks/ Experiments	Number of Weeks	Contact Hours	Learning Outcomes (CILOs)
1	Introduction& positions		2	c1,c2



2	Movements	2 <sup>nd</sup>	2	c1,c2
3	- Bones	3 <sup>rd</sup>	2	c1,c2
4	- Axial skeleton (skull)	4 <sup>th</sup>	2	c1,c2
5	- Axial skeleton Vertebrae, thorax	5 <sup>th</sup>	2	c1,c2
6	- Appendicular skeleton(upper limb)	6 <sup>th</sup>	2	c1,c2
7	- Appendicular skeleton(lower limb)	7 <sup>th</sup>	2	c1,c2
8	- Joints	8 <sup>th</sup>	2	c1,c2
9	Joints	9 <sup>th</sup>	2	c1,c2
10	- Muscles	10 <sup>th</sup>	2	c1,c2
11	- Cardiovascular	11 <sup>th</sup>	2	c1,c2
12	- respiratory	12 <sup>th</sup>	2	c1,c2
13	- Digestive	13 <sup>th</sup>	2	c1,c2
14	- Nervous	14 <sup>th</sup>	2	c1,c2
15	- Urogenital	15 <sup>th</sup>	2	c1,c2
16				c1,c2
<b>Number of Weeks /and Units Per Semester</b>		<b>15</b>	<b>30</b>	

## V. Teaching Strategies of the Course:

- Lectures
- Seminars
- Discussion
- Case Study
- Self learning
- Presentation



- Lab Experiments
- Training

## VI. Assessment Methods of the Course:

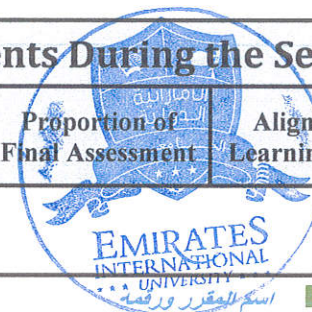
- Quizzes
- Midterm Exam
  - Final Written Exam
  - Home work
  - Final Practical Exam
  - laboratory and other written reports
  - Lab Experiments

## VII. Assignments:

No.	Assignments	Week Due	Mark	Aligned CILOs (symbols)
1	Assignments : Searching about related subjects of anatomy of liver after paracetamol toxicity	10 <sup>th</sup>	5	a1,a2,b1
<b>Total</b>				

## VIII. Schedule of Assessment Tasks for Students During the Semester:

No.	Assessment Method	Week Due	Mark	Proportion of Final Assessment	Aligned Course Learning Outcomes





1	Assignments	10 <sup>th</sup>	5	5 %	a1,a2,b1,b2
2	Quiz	6 <sup>th</sup>	5	5 %	a1,a2,b1,b2
3	Mid-Term Theoretical Exam	8 <sup>th</sup>	20	20 %	a1,a2,b1,b2
4	Final Practical Exam	15 <sup>th</sup>	20	20 %	c1,c2
5	Final Theoretical Exam	16 <sup>th</sup>	50	50 %	a1,a2,b1,b2
Total			100	100%	

### IX. Learning Resources:

- Written in the following order: Author, Year of publication, **Title**, Edition, Place of publication, Publisher.

#### 1- Required Textbook(s) ( maximum two ) : مثال example

- 1- Introduction to Anatomy.Gray`s textbook of anatomy, 2009, 9<sup>th</sup> edition, S. Grey
- 2- Clinical Anatomy by Systems, 8th-Edition, Richard S. Snell, Lippincott Williams & Wilkins.

#### 2- Essential References.

- 1- Hamilton`s textbook of basic anatomy, 2001, 6<sup>th</sup> edition.
- 2- Atlas of Human Anatomy, 5<sup>th</sup> edition, Frank Netter, Elsevier
- 3- Principles of Anatomy and Physiology, 11th Edition by Gerard J. Tortora, Sandra R. Grabowski, Kathleen Schmidt Prezbindowski Publisher: Wiley, I edition ( 2006 )
- 4- di Fiore's Atlas of Histology with Functional Correlations, Eroschenko, Lipponcott Williams ,an Wilkins, 2004

#### 3- Electronic Materials and Web Sites etc.:

www.innerbody.com  
www.getbodysmart.com  
www.anatomyarcade.com

### X. Course Policies: (Based on the Uniform Students' By law (2007) تترك كما هي)

<b>Class Attendance:</b>	
1	Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
<b>Tardiness:</b>	
2	A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
<b>Exam Attendance/Punctuality:</b>	
3	No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not



	leave the hall before half of the exam time has passed.
4	<b>Assignments &amp; Projects:</b> Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	<b>Cheating:</b> Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	<b>Forgery and Impersonation:</b> Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	<b>Other policies:</b> The University official regulations in force will be strictly observed and students shall comply with all rules and regulations of the examination set by the Department, Faculty and University Administration.





# Second Part of Course Specification

## Faculty of Medicine and Health Sciences

Department of Clinical Pharmacy

Bachelor of Pharm D

## Course Plan (Syllabus) of Principles of Human Anatomy

**Course No.** (ANA 104.)

I. Information about Faculty Member Responsible for the Course:							
Name of Faculty Member:	Prof .Dr. Saleh Al-Dhaheri						
Location& Telephone No.:	-----						
E-mail:	--@--						
Office Hours	SAT	SUN	MON	TUE	WED	THU	



## II. Course Identification and General Information:

1	Course Title:	Principles of Human Anatomy			
2	Course Code & Number:	ANA 104			
3	Credit Hours:	Credit Hours	Theory Hours		Lab. Hours
			Lecture	Exercise	
		3	2	--	2
4	Study Level/ Semester at which this Course is offered:	1st Level / 2nd Semester			
5	Pre -Requisite (if any):	Biology			
6	Co -Requisite (if any):	None			
7	Program (s) in which the Course is Offered:	Bachelor of Pharm D			
8	Language of Teaching the Course:	English			
9	Study System:	Credit Hour System			
10	Mode of Delivery:	Full Time			
11	Location of Teaching the Course:	Faculty of Medicine and Health Sciences			
12	Prepared by:	Prof .Dr. Saleh Al-Dhaheri			
13	Date of Approval:				

## III. Course Description:

This course is designed to provide the students with the needed knowledge in Principles of Human Anatomy needed to be applied at a later stage during their clinical training. The lecture topics include introduction to anatomy and with study systems consisting human body and some applied comparative clinical anatomy ,in addition to all related structures of each region and its surface anatomy

## V. Course Intended Learning Outcomes (CILOs) :

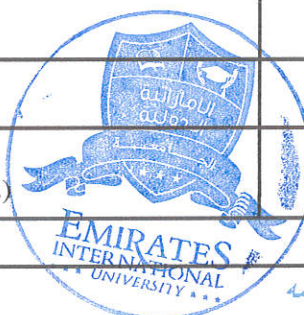
Upon successful completion of the Course, student will be able to:





a1	Establish medical pharmacy doctor with excellent information and skills of human anatomy able to compete others worldwide.
a2	Describe the normal anatomy and histology of various regions of the human body (different tissues, organs and systems).
<b>B. Intellectual Skills:</b> Upon successful completion of the course, students will be able to:	
b1	Explain the different stages of human development, evolution and growth.
b2	Recognize the structure of anatomical and histological features and organs of different regions of human body.
<b>C. Professional and Practical Skills:</b> Upon successful completion of the course, students will be able to:	
c1	Classify data obtained from anatomical experiments.
c2	Identify practically the gross morphology of different organs of the human body
<b>D. Transferable Skills:</b> Upon successful completion of the course, students will be able to:	
d1	Work effectively in team and independently to perform the required tasks
d2	Use information technology skills in collecting data and information

IV. Course Contents:				
A. Theoretical Aspect:				
N o.	Units/Topics List	Sub Topics List	Number of Weeks	Contact Hours
1	Introduction to anatomy	– Definitions, Anatomical positions, Planes of anatomy	1	2
2	Terminology of movement	– Definitions of movements, anatomical terminology	1	2
3	Osteology	Types of bones Ossification –	1	2
4	Skeleton	Axial Skeleton –	1	2
5	Skeleton	– Appendicular Skeleton	1	2
6	Joints	Classification Examples (Fibrous, Cartilaginous)	1	2



7	<b>Joints</b>	– Synovial ch.ch.,classification	1	2	
8	<b>Muscles</b>	Classification – Examples	1	2	
9	<b>Fascia</b>	Types – Sites	1	2	
10	<b>Cardiovascular system</b>	Heart (external&internal configuration) –	1	2	
11	<b>Cardiovascular system</b>	Circulation – Blood Vessels(Arteries& Veins	1	2	
12	<b>Respiratory system</b>	Nose Larynx, trachea, Bronchi, bronchioles,alveoli Lungs,pleura,	1	2	
13	<b>Digestive system</b>	Mouth, pharynx, esophagus,stomach, small intestine, large intestine,liver, pancreas, spleen	1	2	
14	<b>Nervous system</b>	CNS,ANS,PNS	1	2	
15	<b>Urogenital system</b>	Urinary organs, male& female genital organs	1	2	
16	<b>Final Theoretical Exam</b>	Exam	1	2	
<b>Number of Weeks /and Units Per Semester</b>			<b>16</b>	<b>32</b>	

<b>B. Case Studies and Practical Aspect:</b>			
<b>No.</b>	<b>Tasks/ Experiments</b>	<b>Number of Weeks</b>	<b>Contact Hours</b>
1	<b>Introduction&amp; positions</b>	1 <sup>st</sup>	2
2	<b>Movements</b>	2 <sup>nd</sup>	2
3	- <b>Bones</b>	3 <sup>rd</sup>	2
4	- <b>Axial skeleton (skull)</b>	4 <sup>th</sup>	2
5	- <b>Axial skeleton Vertebrae, thorax</b>	5 <sup>th</sup>	2
6	- <b>Appendicular skeleton(upper limb)</b>	6 <sup>th</sup>	2



7	- Appendicular skeleton(lower limb)	7 <sup>th</sup>	2
8	- Joints	8 <sup>th</sup>	2
9	Joints	9 <sup>th</sup>	2
10	- Muscles	10 <sup>th</sup>	2
11	- Cardiovascular	11 <sup>th</sup>	2
12	- respiratory	12 <sup>th</sup>	2
13	- Digestive	13 <sup>th</sup>	2
14	- Nervous	14 <sup>th</sup>	2
15	- Urogenital	15 <sup>th</sup>	2
16			
<b>Number of Weeks /and Units Per Semester</b>		<b>15</b>	<b>30</b>

\* Practical part starts after 2 weeks from theoretical part

### C. Tutorial Aspect:

### VI. Teaching Strategies of the Course:

- Lectures
- Seminars
- Discussion
- Case Study
- Self learning
- Presentation
- Lab Experiments
- Training

### VII. Assessment Methods of the Course:

Quizzes



- Midterm Exam
- Final Written Exam
- Home work
- Final Practical Exam
- laboratory and other written reports
- Lab Experiments

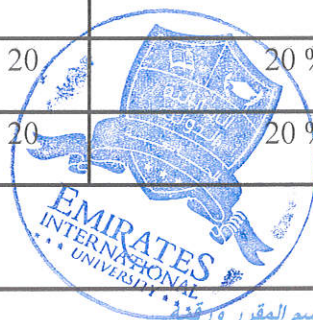
### VIII. Assignments:

No.	Assignments	Week Due	Mark
1	Assignments : Searching about related subjects of anatomy of liver after paracetamol toxicity	10th	5
<b>Total</b>			

### IX. Schedule of Assessment Tasks for Students During the Semester:

No.	Assessment Method	Week Due	Mark	Proportion of Final Assessment
1	Assignments	10th	5	5 %
2	Quiz	6th	5	5 %
3	Mid-Term Theoretical Exam	8th	20	20 %
4	Final Practical Exam	15th	20	20 %
5	Final Theoretical Exam	16th	50	50 %
	<b>Total</b>		100	100%

No.	Assessment Method	Week Due	Mark	Proportion of Final Assessment
1	Assignments	10 <sup>th</sup>	5	5 %
2	Quiz	6 <sup>th</sup>	5	5 %
3	Mid-Term Theoretical Exam	8 <sup>th</sup>	20	20 %
4	Final Practical Exam	15 <sup>th</sup>	20	20 %





No.	Assessment Method	Week Due	Mark	Proportion of Final Assessment
5	Final Theoretical Exam	16 <sup>th</sup>	50	50 %
<b>Total</b>			<b>100</b>	<b>100%</b>

## X. Learning Resources:

- Written in the following order: Author, Year of publication, Title, Edition, Place of publication, Publisher.

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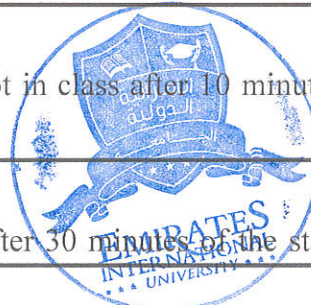
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## XI. Course Policies: (Based on the Uniform Students' Bylaw (2007))

1	<b>Class Attendance:</b> Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
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7	<b>Other policies:</b> The University official regulations in force will be strictly observed and students shall comply with all rules and regulations of the examination set by the Department, Faculty and University Administration.

