Academic Description Form For The Branch Of Human Anatomy

This course description provides a summary of the most important characteristics of the course and the learning objectives that the student is expected to achieve, demonstrating whether he has made maximum use of the available learning opportunities. It must be linked to the description of the program.

1- educational institution

University of Diyala \college of medicine

2-Scientific Department / Center

Human anatomy, histology, embryology and biology

3-Academic or professional program name

Human medicine

4-Final certificate name

Bachelor of Medicine and General Surgery

5-Academic system (annual / courses / semesters)

semesters

6- Semester/year

First course + second course / 2021

7-Available forms of attendance

Actual mandatory attendance

8-The number of study hours

Anatomy... 60 hours theoretical // 120 hours of practice

Histology ... 60 hours of theory // 60 hours of practice

Embryology .... 30 hours theoretical // There is no practical

Biology...60 hours theoretical // 60 hours practical // 15 hours tutorial

9-Accredited Accreditation Program

Theoretical and practical study and discussions of blended learning, attendance, and electronic (via the Classroom platform)

10-Other external influences

A teaching hospital, library, internet, community, doctors' syndicate

11-Description creation date

15/6/2021

12-Academic Program Objectives

1 -Identify the different parts of the body.

2 -Describe the relationship of the different body systems and determine the functions of the different body systems.

3 -Estimation of the normal values of vital activities about different biological conditions.

4 -Distinguishing between the normal and abnormal functions of the different body systems.

5 -Studying the sequence of biological events in the human body.

6- Studying the cell structure microscopically.

7 -Apply the basic scientific building blocks he has acquired to conduct scientific research and medical
studies.

8 -Studying the different organs in the body and the mechanism of their formation.

9 -Studying tissues microscopically, classifying cells and distinguishing them from each other.

10 -A review of placenta formation and physiology.

11- Teaching the formation of gametes and the formation of the two-layered and triple-lamellar germ disk and describing the growth of the fetus.

13-Required program outcomes and methods of teaching, learning and assessment

➢ Cognitive goals

1 -Learning the basics of human physiology and its various vocabulary.

2 -Developing mental abilities through various modern academic and practical education methods

3 -Linking basic sciences with applied sciences in the future

4 -Giving lectures, tutorials and laboratory sessions.

5 -Enabling the student to use his full strength in observation and interpretation.

6 -Encouraging the student to constantly share and evaluate learning outcomes throughout the study period.

5 -Learn the method of scientific
discussion. 6- Acquisition of laboratory
skills.

➢ Skills objectives of the program

1- Methods of dealing with laboratory animals and scientific equipment.
2- Teaching plastic models (models) similar to the human body.
3- Acquisition of laboratory examination skills.
4- The ability to dissect the human body using a natural body and to identify the components of the body in detail.

- **Teaching and learning methods**

1 - Lectures - computers - plasma screens - modern scientific equipment - clinical tours - educational seminars, audio-visual equipment - discussions.

2 -The use of plastic models and human corpses.

3 -Use of optical microscopes.

4 -In-person and electronic blended learning (via the Classroom
platform). 5- Illustrations using tissue slides

- **Evaluation Methods**

1- Discussion in lectures.

2 -Mid-course exams and end-of-course exams.

3 -Periodic evaluation.

4 -Small education groups.

5 -Practical exams.

6- Oral exams.

Behavioral and value objectives

1- Ethical and professional discipline.
2- Good interaction of students with each other.
3- Develop a spirit of help.
4- Eliminate class differences.
5- Teaching medical and professional ethics and how to deal with laboratory animals.

- **Teaching and learning methods**

1-Small scientific circles
2- Discussions and seminars
3- Scientific reports
4- In-person and electronic blended education (via the Classroom platform).
5- Use the graphic to facilitate the description of the member histologically.

Transferred general and qualification skills (other skills related to employability and personal development)

1-The student should cooperate with his colleagues and teachers in an atmosphere of cordiality and understanding
2 -To work with his peers as a team
3- To interact with them on scientific trips and the media.

- **Teaching and learning methods**

-1Linking the presentation of the main material to the clinical benefit
-2Use the time perfectly for discussions with students -3E-learning via e-learning platforms (Classroom).

- **Evaluation Methods**

1- Follow up on attendance and reasons for non-attendance.
2- Follow-up educational supervision concerning the subject.
3-Evaluate students' answers to exam questions related to this aspect.
4-End and mid-course exam

Academic description of anatomy for the first academic level

This summary provides a summary of the most important characteristics of the scheduled and expected learning outcomes from student achievement that show whether or not he or she has made the most out of learning opportunities is correlated with the program description.

1- symbol

Ana10**1**

2-Scientific Department / Center

Human anatomy

3-The number of study hours

Anatomy... 60 hours theoretical // 120 hours of practice

4-Academic Program Objectives

1 -Differentiate between the upper, lower, and thoracic nerves

2 -Differentiate between the upper, lower and thoracic veins.

3 -Differentiate between the upper, lower and thoracic arteries.

4 -Differentiate between the muscles of the upper and lower extremities and the chest.

5- Differentiate between the bones of the upper and lower extremities and the chest.

5-Required program outcomes and methods of teaching, learning and assessment

➢ Cognitive goals

1 -Learning the basics of human physiology and its various vocabulary.

2 -Developing mental abilities through various modern academic and practical education methods

3 -Linking basic sciences with applied sciences in the future

4 -Giving lectures, tutorials and laboratory sessions.

5 -Enabling the student to use his full strength in observation and interpretation.

6 -Encouraging the student to constantly share and evaluate learning outcomes throughout the study period.

5 -Learn the method of scientific discussion.

6- Acquisition of laboratory skills.

➢ Skills objectives of the program

1 -Promote the student to research problems and find solutions to them.

2 -Analyzing the results for use in learning.

3 -Analysis and plans to deal with problems in the field of human medicine.

4- Supporting the continuous updating of his information by accessing the latest research.

- **Teaching and learning methods**

1 -Scientific and weekly surprise tests.

2 -In-class exercises and activities

3- Guide students to some websites.

- **Evaluation Methods**

1-Daily theory exams

2 -Daily practical laboratory exams

3 -Theoretical and practical exam for half of the course and the end of the course

4- Oral exam 5 -Practical exams.
6- Oral exams.

➢ Behavioral and value objectives

1 -Doctors can understand others and understand and treat pain
2 -Doctors who can maintain an ethical standard and maintain medical information at a high level are considered.
3 -Preparations enable doctors to give priority to the patient.
4 -Preparing doctors who can take into account the human aspect of the patient.
5 -General skills, employing special motivation and personal development:
6 -Develop students' ability to deal with technical means
7 -Develop the student's ability to deal with the Internet.
8 -Develop the student's ability to deal with multimedia.
9- To develop the student's ability to dialogue and debate

6-The structure of the course for theoretical and practice anatomy /first academic level / the first course

Week	Hours	**Unit name and/or topic**	**education method**	**evaluation method**
1	2 theoretical 4 practical	Introduction (Terms of position & movement of Human body	Lecture+ lab	General question discussion + exam
2	4 practica 2 theoretical l	-The human body Structure	Lecture+ lab	General question discussion + exam
3	4 practical 2 theoretical	Skin, fasciae Blood vessels	Lecture+ lab	General question discussion + exam
4	2 theoretical 4 practical	Muscles, Bones, Joints Nervous System	Lecture+ lab	General question discussion + +exam
5	4 practical 2 theoretical	Upper limb: Osteology of upper limb	Lecture+ lab	General question discussion + exam
6	2 theoretical 4 practical	Surface Anatomy Fasciae of upper limb Cutaneous nerves and Vessels	Lecture+ lab	General question discussion + exam
7	4 practical 2 theoretical	Pectoral region Axilla,	Lecture+ lab	General question

		Axilla, Back, Back Lymphatic drainage Lymphatic drainage		discussion + exam
8	2 theoretical 4practical	Identify the Brachial plexus, Brachial plexus Nerve injuries, Nerve injuries	Lecture+ lab	General question discussion + +exam
9	4 practical 2 theoretical	Identify the Arm (anterior & Arm(anterior & Posterior)	Lecture+ lab	General question discussion + exam
10	2 theoretical 4 practical	Identify the Forearm Anterior & Anterior & posterior compartment	Lecture+ lab	General question discussion + exam
11	4 practical 2 theoretical	Identify the Hand.	Lecture+ lab	General question discussion + exam
12	2 theoretical 4practical	Identify the Radiological Anatomy.	Lecture+ lab	General question discussion + exam
13	4 practical 2 theoretical	Identify the Lower Limb Osteology of lower limb	Lecture+ lab	General question discussion + exam
14	2 theoretical 4 practical	Identify the Surface Anatomy The fascia of the lower limb Cutaneous vessels, nerves& lymphatic's	Lecture+ lab	General question discussion + exam
15	4 practical 2 theoretical	Identify the Surface Anatomy Cutaneous vessels, nerves & lymphatic's	Lecture+ lab	General question discussion + exam

7-The structure of the course for theoretical and practice anatomy /first academic level / the second course

Week	Hours	Required educational goals	Unit name and/or topic	education method	evaluation method
1	2 theoretical 4 practical	Identify the Gluteal region	Gluteal region Post compartment thigh	Lecture+ lab	General question

		Post compartment thigh Popliteal fossa	Popliteal fossa		discussion + exam
2	4 practica 2 theoretical	Identify the Ant. compartment thigh Med. compartment thigh Lumbar plexus	Ant. compartment thigh Med. compartment thigh Lumbar plexus	Lecture+ lab	General question discussion + exam
3	4 practical 2 theoretical	Identify the Leg	Leg	Lecture+ lab	General question discussion + exam
4	2 theoretical 4 practical	Identify the Foot Arches of foot	Foot Arches of foot	Lecture+ lab	General question discussion + +exam
5	4 practical 2 theoretical	Identify the Radiological Anatomy	Radiological Anatomy	Lecture+ lab	General question discussion + exam
6	2 theoretical 4 practical	Identify the Thorax Thoracic walls Osteology	Thorax Thoracic walls Osteology	Lecture+ lab	General question discussion + exam
7	4 practical 2 theoretical	Identify the Muscles Nerves & vessels	Muscles Nerves & vessels	Lecture+ lab	General question discussion + exam
8	2 theoretical 4practical	Identify the Thoracic cavity Pleura, lungs	Thoracic cavity Pleura, lungs	Lecture+ lab	General question discussion + +exam
9	4 practical 2 theoretical	Identify the Mediastinum Superior mediastinum	Mediastinum Superior mediastinum	Lecture+ lab	General question discussion + exam
10	2 theoretical 4 practical	Identify the Heart Pericardium	Heart Pericardium	Lecture+ lab	General question discussion + exam
11	4 practical 2 theoretical	Identify the Heart chambers Conducting system	Heart chambers Conducting system	Lecture+ lab	General question discussion + exam
12	2 theoretical 4practical	Identify the Post. Mediastinum Joints, Movements	Post. Mediastinum Joints, Movements	Lecture+ lab	General question discussion + exam
13	4 practical	Identify the	Radiological Anatomy	Lecture+ lab	General

	2 theoretical	Radiological Anatomy			question discussion + exam
14	2 theoretical 4 practical	Identify the Gluteal region	Gluteal region	Lecture+ lab	General question discussion + exam
15	4 practical 2 theoretical	Identify Post compartment thigh Popliteal fossa	Post compartment thigh Popliteal fossa	Lecture+ lab	General question discussion + exam

8-Infrastructure of anatomy for the first academic level	
1-Required course books	Clinical Anatomy For Medical Students, by Richard S. Snell, Williams and Wilkins Cunningham"s Manual Of Practical Anatomy, Three Volumes, By G.J.Romanes: Oxford.Medical.Publications
2- main references (sources)	All human anatomy books and magazines
3- Recommended books and references (scientific journals, reports)	All human anatomy books and magazines
4- Electronic references, websites	https://themdjourney.com/20-best-anatomy-and-physiology-books-for-medical-students/#The_Anatomy_Coloring_Book

Academic Description Of Anatomy For The Second Academic Level

This summary provides a summary of the most important characteristics of the scheduled and expected learning outcomes of student achievement that show whether or not he or she has made maximum use of learning opportunities is correlated with the program description.

1-symbol

Ana212

2-Scientific Department / Center

Human anatomy

3-The number of study hours

Anatomy... 60 hours theoretical // 120 hours of practice

4-Academic Program Objectives

1-Differentiate between the abdominal component.

2 -Differentiate between the components of the aquarium

3 -Differentiate between the component of the head.

4 -Differentiate between the components of the neck

5- Differentiate between the components of the brain and spinal cord.

5-Required program outcomes and methods of teaching, learning and assessment

➢ Cognitive goals

.Promote the student to research problems and find solutions to them -1

.Analyzing the results for use in learning -2

.Analysis and plans to deal with problems in the field of human medicine -

3 4- Supporting the continuous updating of his information by accessing the latest research.

➢ Skills objectives of the program

1 -Promote the student to research problems and find solutions to them.

2 -Analyzing the results for use in learning.

3 -Analysis and plans to deal with problems in the field of human medicine.

4- Supporting the continuous updating of his information by accessing the latest research.

- **Teaching and learning methods**

1 -Scientific and weekly surprise tests.

2 -In-class exercises and activities

3- Guide students to some websites.

- **Evaluation Methods**

1-Daily theory exams

2 -Daily practical laboratory exams

3 -Theoretical and practical exam for half of the course and the end of the course

4- Oral exam

➢ Behavioral and value objectives

Physicians can understand others, recognize the extent of pain, and treat it 2 -Doctors who can maintain an ethical standard and maintain medical information at a high level are considered.

3 -Preparations enable doctors to give priority to the patient.
4 -Preparing doctors who can take into account the human aspect of the patient.
5 -General skills, employing special motivation and personal development:
6 -Develop students' ability to deal with technical means
7 -Develop the student's ability to deal with the Internet.
8 -Develop the student's ability to deal with multimedia.
9 - Develop the student's ability to dialogue and debate.

6-The structure of the course for theoretical and practice anatomy /second academic level / the first course

Week	Hours	**Required educational goals**	**Unit name and/or topic**	**education method**	**evaluation method**
1	2 theoretical 4 practical	Teaching the student what is the meaning of Anterior abdominal wall Male external genitalia	Anterior abdominal wall Male external genitalia	Lecture+ lab	General question discussion + exam
2	4 practica 2 theoretical l	Identify the Abdominal cavity Peritoneum	Abdominal cavity Peritoneum	Lecture+ lab	General question discussion + exam
3	4 practical 2 theoretical	Identify the Abdominal viscera	Abdominal viscera	Lecture+ lab	General question discussion + exam
4	2 theoretical 4 practical	Identify Diaphragm Post. Abdominal wall	Diaphragm Post. Abdominal wall	Lecture+ lab	General question discussion + +exam
5	4 practical 2 theoretical	Identify the Blood supply of the abdomen & Pelvis Autonomic supply Lymphatic drainage	Blood supply of abdomen & Pelvis Autonomic supply Lymphatic drainage	Lecture+ lab	General question discussion + exam
6	2 theoretical 4 practical	Identify the Bony pelvis Pelvic walls Female external genitalia	Bony pelvis Pelvic walls Female external genitalia	Lecture+ lab	General question discussion + exam
7	4 practical 2 theoretical	Identify the Pelvic viscera	Pelvic viscera	Lecture+ lab	General question discussion +

					exam
8	2 thioretical 4practical	Identify the Perineum	Perineum	Lecture+ lab	General question discussion + +exam
9	4 practical 2 theoretical	Identify the Vessels, nerves of the pelvis & perineum.	Vessels, nerves of pelvis & perineum	Lecture+ lab	General question discussion + exam
10	2 thioretical 4 practical	Identify the Head & neck skull.	Head & neck skull	Lecture+ lab	General question discussion + exam
11	4 practical 2 theoretical	Identify the Vertebral column Cervical vertebrae	Vertebral column Cervical vertebrae	Lecture+ lab	General question discussion + exam
12	2 theoretical 4practical	Identify the Face, Muscles Blood & Nerve supply Lymphatic drainage scalp	Face, Muscles Blood & Nerve supply Lymphatic drainage scalp	Lecture+ lab	General question discussion + exam
13	4 practical 2 theoretical	Identify the Neck, surface anatomy Structural organization Fasciae of Neck Triangles & contents	Neck, surface anatomy Structural organization Fasciae of Neck Triangles & contents	Lecture+ lab	General question discussion + exam
14	2 theoretical 4 practical	Identify the Cranial Meninges Folds of dura mater venous sinuses	Cranial Meninges Folds of dura mater venous sinuses	Lecture+ lab	General question discussion + exam
15	4 practical 2 theoretical	Identify the Orbit Lacrimal apparatus	Orbit Lacrimal apparatus	Lecture+ lab	General question discussion + exam

7-The structure of the course for theoretical and practice anatomy /second academic level / the second course

Week	Hours	Required educational goals	Unit name and/or topic	education method	evaluation method
1	2 theoretical 4 practical	Identify the Temporal & infra temporal fossae Tempromandibular joint	Temporal & infra temporal fossae Tempromandibular joint	Lecture+ lab	General question discussion + exam
2	4 practica	Identify the Root	The root of Neck	Lecture+ lab	General

	2 theoretical l	of Neck Thyroid & Parathyroid	Thyroid & Parathyroid		question discussion + exam
3	4 practical 2 theoretical	Identify the Cranial nerves Examination injuries	Cranial nerves Examination injuries	Lecture+ lab	General question discussion + exam
4	2 theoretical 4 practical	Identify the Lymphatic drainage Oral cavity, pharynx Larynx	Lymphatic drainage Oral cavity, pharynx Larynx	Lecture+ lab	General question discussion + +exam
5	4 practical 2 theoretical	Identify the Nose, Pterygopalatine fossa ear	Nose, Pterygopalatine fossa ear	Lecture+ lab	General question discussion + exam
6	2 theoretical 4 practical	Identify the Cervical plexus Autonomic nerve supply head & neck	Cervical plexus Autonomic nerve supply head & neck	Lecture+ lab	General question discussion + exam
7	4 practical 2 theoretical	Identify the Introduction-CNS parts, Divisions, Components Functional	Introduction-CNS parts, Divisions, Components Functional	Lecture+ lab	General question discussion + exam
8	2 theoretical 4practical	Identify the Blood supply of the brain & spinal cord Spinal cord	Blood supply of brain & spinal cord Spinal cord	Lecture+ lab	General question discussion + +exam
9	4 practical 2 theoretical	Identify the Brain stem Cranial nerve nuclei	Brain stem Cranial nerve nuclei	Lecture+ lab	General question discussion + exam
10	2 thioretical 4 practical	Identify the Cerebellum Diencephalon	Cerebellum Diencephalon	Lecture+ lab	General question discussion + exam
11	4 practical 2 thioretical	Identify the Cerebral hemispheres Cortex White mater Lateral ventricle	Cerebral hemispheres Cortex White mater Lateral ventricle	Lecture+ lab	General question discussion + exam
12	2 thioretical 4practical	Identify the Extropyramidal system Limbic system	Extropyramidal system Limbic system	Lecture+ lab	General question discussion + exam
13	4 practical	Identify the Major	Major pathways	Lecture+ lab	General

	2 theoretical	pathways			question discussion + exam
14	2 thioretical 4 practical	Identify the C.S.F circulation, hydrocephalus	C.S.F circulation, hydrocephalus	Lecture+ lab	General question discussion + exam
15	4 practical 2 theoretical	Intracranial hemorrhages	Intracranial hemorrhages	Lecture+ lab	General question discussion + exam

8-Infrastructure of anatomy for the second academic level	
1-Required course books	Clinical Anatomy For Medical Students, by Richard S. Snell, Williams and Wilkins Cunningham"s Manual Of Practical Anatomy, Three Volumes, By G.J.Romanes: Oxford.Medical.Publications
2- main references (sources)	All human anatomy books and magazines
3- Recommended books and references (scientific journals, reports)	All human anatomy books and magazines
4- Electronic references, websites	https://themdjourney.com/20-best-anatomy-and-physiology-books-for-medical-students/#The_Anatomy_Coloring_Book

Academic Description Of Histology For The Second Academic Level

This summary provides a summary of the most important characteristics of the scheduled and expected learning outcomes of student achievement that show whether or not he or she has made maximum use of learning opportunities is correlated with the program description.

1-symbol

HIS205

2-Scientific Department / Center

Human anatomy

3-The number of study hours

Histology... 60 hours theoretical // 60 hours of practice

4-Academic Program Objectives

1-Distinguish the cell component using light microscopy.

2 -Differentiation between different body tissues using a light microscope.

3 -Connecting cell structure, structure and tissues.

4 -The student participates in scientific discussions and presents them with confidence and consistency.

5 -Students gain experience in examining samples with different magnifications by drawing illustrations for each type of cell.

6- Keeping pace with scientific developments in the field of cells, tissues, and others.

- **Teaching and learning methods**

-1 Scientific and weekly surprise tests fixed.

2 -In-class exercises and activities

3- Guide students to some websites.

- **Evaluation Methods**

1 -Daily theory exams

2 -Daily practical laboratory exams

3 -Theoretical and practical exam for half of the course and the end of the course 4- Oral exam

➢ Behavioral and value objectives

1 -Doctors can understand others and understand and treat pain

2 -Doctors who can maintain an ethical standard and maintain medical information at a high level are considered.

3 -Preparations enable doctors to give priority to the patient.

4 -Preparing doctors who can take into account the human aspect of the patient.

5 -General skills, employing special motivation and personal development:

6 -Develop students' ability to deal with technical means

7 -Develop the student's ability to deal with the Internet.

8 -Develop the student's ability to deal with multimedia.

9 - Develop the student's ability to dialogue and debate.

5-The structure of the course for theoretical and practice histology /second academic level / the first course					
Week	**Hours**	**Required educational goals**	**Unit name and/or topic**	**education method**	**evaluation method**
1	2 theoretical 2 practical	Microscopy & their types. Primary tissue & their role in formation of tissue.	Introduction to the histology	Lecture+ lab	General question discussion + exam
2	2 practica 2 theoretical l	Teaching the student what is the meaning of tissue and its forms ,the cells which covered the body from outside and lining from inside .	Epithelial tissue	Lecture+ lab	General question discussion + exam
3	2 practical 2 theoretical	Modification unit for epithelial tissue. Exocrine glands & their classification.	Epithelial gland.	Lecture+ lab	General question discussion + exam
4	2 theoretical 2 practical	Identify the tissue which connect the tissue together and its types .	Connective tissue	Lecture+ lab	General question discussion + +exam
5	2 practical 2 theoretical	Identify the cells & fibers and its types	Cells of connective tissue	Lecture+ lab	General question discussion + exam
6	2 theoretical 2 practical	Identify the adipose cell and recognize it from other cell types	Adipose tissue	Lecture+ lab	General question discussion + exam
7	2 practical 2 theoretical	Identify the types of cartilage and its distribution in the body	Cartilage	Lecture+ lab	General question discussion + exam
8	2 thioretical 2 practical	Identify the bone tissue and its types	Bone	Lecture+ lab	General question discussion + +exam
9	2 practical 2 theoretical	The central & peripheral nerves system	Nervous system	Lecture+ lab	General question discussion + exam

10	2 theoretical 2 practical	Identify the nervous tissue and its types and explains the nervous impulse reach to rest body	Nerve tissue	Lecture+ lab	General question discussion + exam
11	2practical 2 theoretical	Identify the types of muscles and differences between them as longitudinal and transverse section	Muscle tissue	Lecture+ lab	General question discussion + exam
12	2 theoretical 2 practical	Identify the blood vascular system and its main function and	Circulatory system I	Lecture+ lab	General question discussion + exam
13	2practical 2 theoretical	The types of artery and vein.	Circulatory system II	Lecture+ lab	General question discussion + exam
14	2 theoretical 2 practical	Identify the types, shape and function of blood cells and the number of each type.	Blood cell	Lecture+ lab	General question discussion + exam
15	2practical 2 theoretical	Identify the way of derived of the blood cell from stem cell and differentiate of a blood cell .	hematopoiesis	Lecture+ lab	General question discussion + exam

6-The structure of the course for theoretical and practice histology /second academic level / the second course

Week	Hours	Required educational goals	Unit name and/or topic	education method	evaluation method
1	2 theoretical 2 practical	Identify the lymphoid organ and tissue responsible for immunity of the body	Lymphoid organ	Lecture+ lab	General question discussion + exam
2	2 practica 2 theoretical l	Identify the digestive system and explain the digest and absorb in the organ of this system	Digestive system I	Lecture+ lab	General question discussion + exam
3	2 practical 2 theoretical	Digestive Tract; General structure,	Digestive system II	Lecture+ lab	General question

		the oral cavity and tongue. Pharynx and esophagus.			discussion + exam
4	2 theoretical 2 practical	Stomach and Small intestine Large intestine & appendix	Digestive system III	Lecture+ lab	General question discussion + +exam
5	2 practical 2 theoretical	Identify the organs which associated with digestive tract	Organs associated with digestive tract	Lecture+ lab	General question discussion + exam
6	2 theoretical 2 practical	Identify the parts of the respiratory system	The respiratory system I	Lecture+ lab	General question discussion + exam
7	2 practical 2 theoretical	Respiratory System; Nasal cavity, larynx and trachea.	The respiratory system II	Lecture+ lab	General question discussion + exam
8	2 theoretical 2 practical	Respiratory System The Lung Bronchial tree.	The respiratory system III	Lecture+ lab	General question discussion + +exam
9	2practical 2 theoretical	Identify the layers of the skin and the glands, hair and , nail	Skin	Lecture+ lab	General question discussion + exam
10	2 theoretical 2 practical	Identify The Urinary System The Kidney and blood supply.	The Urinary System I	Lecture+ lab	General question discussion + exam
11	2practical 2 thioretical	Identify nephrons Ureter, urinary bladder, urethra	The Urinary System II	Lecture+ lab	General question discussion + exam
12	2 thioretical 2 practical	Identify the glands and its structure	Endocrine glands	Lecture+ lab	General question discussion + exam
13	2practical 2 theoretical	Identify the parts of the male reproductive and their structure	Male reproduction	Lecture+ lab	General question discussion + exam
14	2 theoretical 2 practical	Identify the parts of the female reproductive and its structure	Female reproductive	Lecture+ lab	General question discussion + exam
15	2practical	Identify the ear	Photoreceptors and	Lecture+ lab	General

	theoretical	and the eye	audio receptors		question discussion + exam

7-Infrastructure of histology for the second academic level

1-Required course books	-Human Anatomy and cell physiology by Mcgraw hill 17th ed
2- main references (sources)	All human histology books and magazines
3- Recommended books and references (scientific journals, reports)	All human histology books and magazines
4- Electronic references, websites	https://themdjourney.com/20-best-histology-and-physiology-books-for-medical-students/#The_Anatomy_Coloring_Book

Academic description of embryology for the second academic level

This summary provides a summary of the most important characteristics of the scheduled and expected learning outcomes from student achievement that show whether or not he or she has made the most out of learning opportunities is correlated with the program description.

1-symbol
EMB206
2-Scientific Department / Center
Human anatomy
3-The number of study hours
embryology... 60 hours theoretical // there is no practical
4-Academic Program Objectives
1 -Introduction to the regulation of molecular signals. 2 -Converting the gynogenesis of germ cells to males and females. 3 -The first week of development: from ovulation to implantation. 4 -The second week of the development of the bacterial disc B laminar 5 -The third week of development: a triple germinal disc. 6- Gastrointestinal tube and body cavities.
4-Acquired skills
1 -Promote the student to research problems and find solutions to them. 2 -Analyzing the results for use in learning. 3 -Analysis and plans to deal with problems in the field of human medicine. 4- Supporting the continuous updating of his information by accessing the latest research.
• **Teaching and learning methods**
-1 Scientific and weekly surprise tests fixed. 2 -In-class exercises and activities 3- Guide students to some websites.
• **Evaluation Methods**
1 -Daily theory exams 2 -Daily practical laboratory exams 3 -Theoretical and practical exam for half of the course and the end of the course 4- Oral exam
Behavioral and value objectives
1 -Doctors can understand others and understand and treat pain 2 -Doctors who can maintain an ethical standard and maintain medical information at a high level are considered. 3 -Preparations enable doctors to give priority to the patient.

4 -Preparing doctors who can take into account the human aspect of the patient.
5 -General skills, employing special motivation and personal development:
6 -Develop students' ability to deal with technical means
7 -Develop the student's ability to deal with the Internet.
8 -Develop the student's ability to deal with multimedia.
9 - Develop the student's ability to dialogue and debate.

5-The structure of the course for theoretical embryology /second academic level / the first course					
Week	**Hours**	**Required educational goals**	**Unit name and/or topic**	**education method**	**evaluation method**
1	1	Teaching the student what is the meaning of embryology	Introduction to embryology	Lecture	General question discussion + exam
2	1	Teaching the student what is the meaning of molecular regulation signaling.	molecular regulation signaling	Lecture	General question discussion + exam
3	1	Identify Gametogenesis	Gametogenesis	Lecture	General question discussion + exam
4	1	Identify Gametogenesis conversion of germ cell into male	conversion of germ cell into male	Lecture	General question discussion + +exam
5	1	Identify male gametes	male gametes	Lecture	General question discussion + exam
6	1	Identify Gametogenesis conversion of germ cell into female	conversion of germ cell into female	Lecture	General question discussion + exam
7	1	Identify female gametes	female gametes	Lecture	General question discussion + exam
8	1	Identify the First week to development: Ovulation	First week to development to Ovulation	Lecture	General question discussion + +exam
9	1	Identify Fertilization	Fertilization	Lecture	General question discussion + exam

10	1	Identify implantation	Implantation	Lecture	General question discussion + exam
11	1	Identify Cleavage zygote	Cleavage zygote	Lecture	General question discussion + exam
12	1	Identify First week to development :Ovulation to implantation	First week to development: Ovulation to implantation	Lecture	General question discussion + exam
13	1	Identify Second week of development Bilaminar germ disc	The second week of development Bilaminar germ disc	Lecture	General question discussion + exam
14	1	Identify Third week of development :Trilaminar germ disc	Third week of development: Trilaminar germ disc	Lecture	General question discussion + exam
15	1	Identify the Third to eighth week the embryonic period	Third to eighth week the embryonic period	Lecture	General question discussion + exam

** there is no practice

6-The structure of the course for theoretical embryology /second academic level / the second course

Week	Hours	Required educational goals	Unit name and/or topic	education method	evaluation method
1	1	Identify embryo from the 4^{th}-8^{th} weeks.	embryo from the 4^{th}-8^{th} weeks.	Lecture	General question discussion + exam
2	1	Identify The human fetus. And fetal membranes.	The human fetus. And fetal membranes.	Lecture	General question discussion + exam
3	1	Identify and transverse section of The gut tube	The gut tube	Lecture	General question discussion + exam
4	1	Identify and transverse sections of the body cavities	the body cavities	Lecture	General question discussion + +exam
5	1	Identify the Third month to birth	Third month to birth	Lecture	General question

					discussion + exam
6	1	Identify placenta	Placenta	Lecture	General question discussion + exam
7	1	Identify Somitogenesis	Somitogenesis	Lecture	General question discussion + exam
8	1	Identify Myogenesis	Myogenesis	Lecture	General question discussion + +exam
9	1	Identify Scheduled examination. Of embryo	Scheduled examination.	Lecture	General question discussion + exam
10	1	Identify the fetus	the fetus	Lecture	General question discussion + exam
11	1	Identify Teratology.	Teratology The	Lecture	General question discussion + exam
12	1	Identify The birth defects	birth defects.	Lecture	General question discussion + exam
13	1	Identify the Birth defects and prenatal diagnosis	prenatal diagnosis	Lecture	General question discussion + exam
14	1	Identify the Birth defects and Postnatal diagnosis	Postnatal diagnosis	Lecture	General question discussion + exam
15	1	Exam	exam	Lecture	General question discussion + exam

** there is no practice

7-Infrastructure of embryology for the second academic level	
1-Required course books	Medical Embryology
2- main references (sources)	Color Atlas of Embryology. Drews 1995-Developmental Biology. Gilbert 2003--2 2006
3- Recommended books and references (scientific journals, reports)	All embryos books and magazines
4- Electronic references, websites	https://themdjourney.com/20-best-emberyology-books-for-medical-students/#The_Anatomy_Coloring_Book

Academic Description Of Biology For The First Academic Level

This summary provides a summary of the most important characteristics of the scheduled and expected learning outcomes of student achievement that show whether or not he or she has made maximum use of learning opportunities is correlating them with the description of the program

1-symbol

BIO204

2-Scientific Department / Center

Human anatomy

3-The number of study hours

biology... 60 hours theoretical // 60 hours practical // 15 hours tutorial

4-Academic Program Objectives

1 -Identification of the different cellular parts.

2 -Describe the connection of different cellular parts and determine their functions.

3 -Estimation of the normal values of biological activities in relation to different biological conditions.

4 -Distinguishing between the normal and abnormal functions of the cellular parts.

5 -Studying the sequence of biological events in the human body.

6-Studying the cell structure microscopically.

7- Apply the basic scientific building blocks he has acquired to conduct scientific research and medical studies.

5-Acquired skills

1-Promote the student to research problems and find solutions to them.

2 -Analyzing the results for use in learning.

3 -Analysis and plans to deal with problems in the field of human medicine.

4- Supporting the continuous updating of his information by accessing the latest research..

- **Teaching and learning methods**

-1 Scientific and weekly surprise tests fixed.

2 -In-class exercises and activities

3- Guide students to some websites.

- **Evaluation Methods**

1 -Daily theory exams

2 -Daily practical laboratory exams

3 -Theoretical and practical exam for half of the course and the end of the course 4- Oral exam

Behavioral and value objectives

1 -Doctors can understand others and understand and treat pain

2 -Doctors who can maintain an ethical standard and maintain medical information at a high level are considered.

3 -Preparations enable doctors to give priority to the patient.

4 -Preparing doctors who can take into account the human aspect of the patient.
5 -General skills, employing special motivation and personal development:
6 -Develop students' ability to deal with technical means
7 -Develop the student's ability to deal with the Internet.
8 -Develop the student's ability to deal with multimedia.
9 - Develop the student's ability to dialogue and debate.

6-The structure of the course for theoretical and practice biology /first academic level / the first course

week	Hours	Required educational goals	Unit name and/or topic	education method	evaluation method
1	2	Introduction & Definitions	Cells make up living things	Theoretical lectures and practical laboratories	Discussions, reports, tests and exams (theoretical and practical)
	3	Practical Training			
2	2	Data Collection	Cells make up living things	Theoretical lectures and practical laboratories	Discussions, reports, tests and exams (theoretical and practical)
	3	Practical Training			
3	2	Sampling Methods	Cells make up living things	Theoretical lectures and practical laboratories	Discussions, reports, tests and exams (theoretical and practical)
	3	Practical Training			
4	2	Data Presentation	Cells make up living things	Theoretical lectures and practical laboratories	Discussions, reports, tests and exams (theoretical and practical)
	3	Practical Training			
5	2	Measurements of Central Tendency	Membrane models Have Changed	Theoretical lectures and practical laboratories	Discussions, reports, tests and exams (theoretical and practical)
	3	Practical Training			
6	2	Measurements of Variability	Membrane models Have Changed	Theoretical lectures and practical laboratories	Discussions, reports, tests and exams (theoretical and practical)
	3	Practical Training			
7	2	Range & Variance	Membrane models Have Changed	Theoretical lectures and practical laboratories	Discussions, reports, tests and exams (theoretical and practical)
	3	Practical Training			
8	2	Standard Deviation & Coefficient of	Membrane models Have Changed	Theoretical lectures and practical	Discussions, reports, tests and exams

		Variation		laboratories	(theoretical and practical)
	3	Practical Training			
9	2	Probability (Part 1)	Energy	Theoretical lectures and practical laboratories	Discussions, reports, tests and exams (theoretical and practical)
	3	Practical Training			
10	2	Probability (Part 2)	Energy	Theoretical lectures and practical laboratories	Discussions, reports, tests and exams (theoretical and practical)
	3	Practical Training			
11	2	Student's t-Test	Energy	Theoretical lectures and practical laboratories	Discussions, reports, tests and exams (theoretical and practical)
	3	Practical Training			
12	2	Chi-square Test (Part 1)	Energy	Theoretical lectures and practical laboratories	Discussions, reports, tests and exams (theoretical and practical)
	3	Practical Training			
13	2	Chi-square Test (Part 2)	How Cells Acquired ATP	Theoretical lectures and practical laboratories	Discussions, reports, tests and exams (theoretical and practical)
	3	Practical Training			
14	2	Correlation & Regression (Part 1)	How Cells Acquired ATP	Theoretical lectures and practical laboratories	Discussions, reports, tests and exams (theoretical and practical)
	3	Practical Training			
15	2	Correlation & Regression (Part 2)	How Cells Acquired ATP	Theoretical lectures and practical laboratories	Discussions, reports, tests and exams (theoretical and practical)
	3	Practical Training			

6-The structure of the course for theoretical and practice biology /first academic level / the first course

week	Hours	Required educational goals	Unit name and/or topic	education method	evaluation method
1	2	Introduction & Definitions	Cells make up living things	Theoretical lectures and practical laboratories	Discussions, reports, tests and exams (theoretical and practical)
	3	Practical Training			
2	2	Data Collection	Cells make up	Theoretical	Discussions,

	3	Practical Training	living things	lectures and practical laboratories	reports, tests and exams (theoretical and practical)
3	2	Sampling Methods	Cells make up living things	Theoretical lectures and practical laboratories	Discussions, reports, tests and exams (theoretical and practical)
	3	Practical Training			
4	2	Data Presentation	Cells make up living things	Theoretical lectures and practical laboratories	Discussions, reports, tests and exams (theoretical and practical)
	3	Practical Training			
5	2	Measurements of Central Tendency	Membrane models Have Changed	Theoretical lectures and practical laboratories	Discussions, reports, tests and exams (theoretical and practical)
	3	Practical Training			
6	2	Measurements of Variability	Membrane models Have Changed	Theoretical lectures and practical laboratories	Discussions, reports, tests and exams (theoretical and practical)
	3	Practical Training			
7	2	Range & Variance	Membrane models Have Changed	Theoretical lectures and practical laboratories	Discussions, reports, tests and exams (theoretical and practical)
	3	Practical Training			
8	2	Standard Deviation & Coefficient of Variation	Membrane models Have Changed	Theoretical lectures and practical laboratories	Discussions, reports, tests and exams (theoretical and practical)
	3	Practical Training			
9	2	Probability (Part 1)	Energy	Theoretical lectures and practical laboratories	Discussions, reports, tests and exams (theoretical and practical)
	3	Practical Training			
10	2	Probability (Part 2)	Energy	Theoretical lectures and practical laboratories	Discussions, reports, tests and exams (theoretical and practical)
	3	Practical Training			
11	2	Student’s t-Test	Energy	Theoretical lectures and practical laboratories	Discussions, reports, tests and exams (theoretical and practical)
	3	Practical Training			

12	2	Chi-square Test (Part 1)	Energy	Theoretical lectures and practical laboratories	Discussions, reports, tests and exams (theoretical and practical)
	3	Practical Training			
13	2	Chi-square Test (Part 2)	How Cells Acquired ATP	Theoretical lectures and practical laboratories	Discussions, reports, tests and exams (theoretical and practical)
	3	Practical Training			
14	2	Correlation & Regression (Part 1)	How Cells Acquired ATP	Theoretical lectures and practical laboratories	Discussions, reports, tests and exams (theoretical and practical)
	3	Practical Training			
15	2	Correlation & Regression (Part 2)	How Cells Acquired ATP	Theoretical lectures and practical laboratories	Discussions, reports, tests and exams (theoretical and practical)
	3	Practical Training			

7-The structure of the course for theoretical and practice biology /first academic level / the second course					
week	**Hours**	**Required educational goals**	**Unit name and/or topic**	**education method**	**evaluation method**
1	2	Introduction & Definitions	Cells Divisions	Theoretical lectures and practical laboratories	Discussions, reports, tests and exams (theoretical and practical)
	2	Practical Training			
2	2	Data Collection	Cells Divisions	Theoretical lectures and practical laboratories	Discussions, reports, tests and exams (theoretical and practical)
	2	Practical Training			
3	2	Sampling Methods	Cells have a chromosome	Theoretical lectures and practical laboratories	Discussions, reports, tests and exams (theoretical and practical)
	2	Practical Training			
4	2	Data Presentation	Cells have a chromosome	Theoretical lectures and practical laboratories	Discussions, reports, tests and exams (theoretical and practical)
	2	Practical Training			
5	2	Measurements of Central Tendency	Cells have a chromosome	Theoretical lectures and practical laboratories	Discussions, reports, tests and exams (theoretical and
	2	Practical			

		Training			practical)
6	2	Measurements of Variability	Introducing Gregor Mendel	Theoretical lectures and practical laboratories	Discussions, reports, tests and exams (theoretical and practical)
	2	Practical Training			
7	2	Range & Variance	Introducing Gregor Mendel	Theoretical lectures and practical laboratories	Discussions, reports, tests and exams (theoretical and practical)
	2	Practical Training			
8	2	Standard Deviation & Coefficient of Variation	Introducing Gregor Mendel	Theoretical lectures and practical laboratories	Discussions, reports, tests and exams (theoretical and practical)
	2	Practical Training			
9	2	Probability (Part 1)	Chromosomes and genes	Theoretical lectures and practical laboratories	Discussions, reports, tests and exams (theoretical and practical)
	2	Practical Training			
10	2	Probability (Part 2)	Chromosomes and genes	Theoretical lectures and practical laboratories	Discussions, reports, tests and exams (theoretical and practical)
	2	Practical Training			
11	2	Student’s t-Test	Considering the Chromosomes	Theoretical lectures and practical laboratories	Discussions, reports, tests and exams (theoretical and practical)
	2	Practical Training			
12	2	Chi-square Test (Part 1)	Considering the Chromosomes	Theoretical lectures and practical laboratories	Discussions, reports, tests and exams (theoretical and practical)
	2	Practical Training			
13	2	Chi-square Test (Part 2)	Searching for the Genetic Material	Theoretical lectures and practical laboratories	Discussions, reports, tests and exams (theoretical and practical)
	2	Practical Training			
14	2	Correlation & Regression (Part 1)	Searching for the Genetic Material	Theoretical lectures and practical laboratories	Discussions, reports, tests and exams (theoretical and practical)
	2	Practical Training			
15	2	Correlation & Regression (Part 2)	What Genes Do	Theoretical lectures and practical	Discussions, reports, tests and exams

	2	Practical Training		laboratories	(theoretical and practical)

8-Infrastructure of biology for the first academic level	
1-Required course books	Medical Biology by Sylvia Madar
2- main references (sources)	Human Anatomy and Cellphysiology by Mc graw bill 17 th ed
3- Recommended books and references (scientific journals, reports)	All embryos books and magazines
4- Electronic references, websites	https://themdjourney.com/20-best-biology-books-for-medical-students/#The_Anatomy_Coloring_Book