

Medical Biology

A course concerned with the study of living organisms and some vital processes and the relationship between each other

Theoretical: includes several lectures, the first section of which deals with living organisms, the cell and vital activities, the second section deals with the subject of parasites, their types, their life cycle and methods of reproduction, while the third section of them talks about tissues and classifications

Different Learning Methods in the Department of Dentistry

A- Auditory method: This method depends on communicating information in the form of sounds that are heard by the learner for analysis and storage.

B- Visual method: in which information is communicated by displaying color images, videos or any form of visual educational aids.

C- Reading method: It is one of the methods that depend on reading information to understand and store it.

D. Interdisciplinary professional education where dental students collaborate with other healthcare professionals, to promote a holistic approach to patient care.

Different evaluation methods for students in the Department of Dentistry

Daily tests with multiple-choice questions for subjects that require practical skills.

B- Daily exams with practical questions.

C- Semester and final exams.

D- Setting grades for the assigned homework .

H- Grades of participation of questions competing for the subjects of study.

G- Daily evaluation of the student's work in scientific laboratories and educational clinics.

Learning Outcomes for Dental Courses

Using health information technology in oral and dental health care effectively.

Apply appropriate professional, ethical and legal standards in the provision of patient care in accordance with health care rules and regulations.

Providing graduates with scientific knowledge and professional skills in the fields of oral and dental surgery, dental prosthesis, dental preservation,

orthodontics, pediatric dentistry, periodontal pathology and surrounding tissues, as well as community dentistry.

- Knowledge of the principles of oral and dental health and understanding of the development, prevention and treatment of related diseases
- Health promotion and disease prevention to serve the community.
- Integrating basic and medical sciences into healthcare practice.
- Develop decision-making and problem-solving skills in healthcare.
- Evaluate the state of oral and dental health and the medical condition of the patient, request the necessary diagnostic analyzes, and interpret the results of various analyzes to reach the appropriate diagnosis.
- Prepare a care plan for the prevention and treatment of diseases taking into account the needs of the patient.
- Demonstrate competence in performing procedures safely in all aspects of dentistry and prevent injuries arising from treatment.

Providing graduates with theoretical knowledge and laboratory and clinical skills that increase the effectiveness of diagnosis.

Preparing dental graduates and training them to become distinguished in various fields of dentistry.

Lesson name and units

<i>Subject</i>	<i>1st Semester hours/week</i>		<i>2nd Semester hours/week</i>		<i>Units</i>	<i>Code</i>
	<i>Theory</i>	<i>Practical</i>	<i>Theory</i>	<i>Practical</i>		
2. Biology	2	2	2	2	6	BL102

Department of Basic Science

A- Basic information

1-Subject title	Biology	
2-Number of credits	Theory: 4	Laboratory: 2
3-Number of contact hours	Theory: 2h/wk.	Laboratory:2h/wk.
4-Subject time	First Year	

No.	Title of Lectures	Hours
1.	Introduction to Medical and oral Biology	2
2.	Prokaryotes and Eukaryotes	2
3.	General and oral Immunity	2
4.	Bacteria and oral disease	2
5.	Genetics and its role in oral diseases	2
6.	Simple epithelial tissue (Tongue)	2
7.	Stratified epithelial tissue	2
8.	Glandular epithelial tissue (salivary gland)	2
9.	General connective tissue (blood)	2
10.	Muscular tissue	2
11.	Nerve tissue	2
12.	Cell structure (oral mucus membrane)	2
13.	Plasma membrane structure	2
14.	Passage of Materials across Cell Membrane	2
15.	Cell cycle	2
16.	Mitosis and meiosis	2
17.	Cell energy	2
18.	Nucleic acid, DNA and RNA	2
19.	Introduction to parasitology	2

Types of parasites and host	2
General and oral protozoa	2
Human <i>amoebas</i> , <i>E. histolytica</i> , <i>E.coli</i> , <i>E.gingivalis</i>	2
Flagellates, <i>Giardia lamblia</i> , <i>Trichomonas tenax</i> , <i>T.hominas</i> , <i>T.vaginalis</i>	2
<i>Leishmania</i> , cutaneous and vesiral	2
Sporozoa, <i>Plasmodium spp.</i>	2
<i>Toxoplasma gondii</i>	1
Nemathelminthes, <i>Ascaris lumbricoides</i> ,	1
<i>Ancylostoma duodenale</i> , <i>Entrobilus vermicularis</i>	1
Platyhelminthes, <i>Fasciola hepatica</i>	1
<i>Schistosoma spp.</i>	1

no	Subject /practical	Time /Hr.
1	Overview of biological safety & security equipment	1
2	Introduction to Biosecurity Risk characterization in biosecurity Vulnerability assessment Components of laboratory biosecurity	1
3	Biosafety practices part Biosafety rules simulations 3D	1
4	Disinfection & Sterilization Hazardous chemical Decontamination and biological waste Disposal	1
5	Biosafety training	1

Laboratory sessions

Lab number	Study unit title	Hours
1	Laboratory safety	2
2	Parts of microscope	2
3	Types of cells	2
4	Simple epithelial tissue	2
5	Stratified epithelia tissue	2
6	Glandular epithelial tissue	2
7	Serous, Mucous, Sero-mucous cell glands	2
8	Proper connective tissue, Loose	2
9	Proper connective tissue, dense	2
10	Special connective tissue, type of cells	2
11	Cartilage, Hyaline, Elastic, Fibro	2
12	Compact and spongy bone	2
13	Human Blood, W.B.C , R.B.C and frog blood	2
14	Muscular tissue: Skeletal, cardiac and smooth muscles	2
15	Nerve cell	2
16	Central and peripheral nerve system	2
17	Spinal cord and meninges	2
18	<i>Entamoeba histolytica</i> , <i>Entamoeba coli</i>	2
19	<i>Giardia lamblia</i> , <i>Trichomonas vaginalis</i>	2

	<i>Trichomonan tenax</i>	
20	<i>Leishmania tropica, Leshmania donovani</i>	2
21	<i>Trypanosoma gambiense, T. rhodesiense</i>	2
22	<i>Plasmodium vivax, Toxoplasma gondii</i>	2
23	<i>Balantidium coli</i>	2
24	<i>Echinococcus granulosus, Taenia saginata</i> <i>Taenia solium</i>	2
25	<i>Ancylostoma, Ascaris, Entrobilus</i>	2
26	<i>Schistosoma spp, Fasciola hepatica</i>	1
27	Endoskeleton of frog	1
28	Experiment...examine samples of water	1
29	Experiment...examine samples of water (one hour), Experiment ...Blood groups(one hour)	1
30	Experiment ...Blood groups	1
Total		

<i>no</i>	Subject /practical	Time /Hr.
<i>1</i>	Hazard group classification system A biosafety cabinet(BSC)	<i>1</i>
<i>2</i>	Hazards Control measures for work with blood and human tissues	<i>1</i>
<i>3</i>	Bio-risk Management System Assess the capability of the laboratory Staff control Relation of risk groups of biosafety level, practices and equipment	<i>1</i>
<i>4</i>	Management Biological agents Routes of infections Basis of control measure	<i>1</i>
<i>5</i>	Types of biological wastes Categories of biological wastes Decontamination of biological wastes, Hazardous chemical	<i>1</i>