جامعة الفرقان

المنهاج الموحد لكلية طب الاسنان/العراق

منهاج السنة الأولى

2025 - 2024

Department of Oral & Maxillofacial Surgery

Basic information

Subject title General Anatomy

No.	Title of the lectures	Hours
1	Introduction to Human Anatomy Descriptive Anatomic Terms	1
2	Basic Structures: Skin, Fasciae, Muscle, Joints, Ligament, Bursae	1
3	Basic Structures: Bone, Cartilage, Blood Vessels, Lymphatic System	2
4	Basic Structures: Nervous System, Mucous Membranes, Serous Membranes	1
5	Skeletal system of the body: Skull :Cranial Bones	2
6	Skeletal system of the body: Skull : Facial Bones	2
7	External Views of the Skull	2
8	• The Cranial Cavity • Major Foramina and Fissures locations and structures pass through • Neonatal Skull	2
9	▪ Skeleton of the Orbital Region, Openings into the Orbital Cavity ▪ Skeleton of the External Nose, nasal cavity, Paranasal Sinuses ▪ Auditory ossicles Hyoid bone	2
10	The Vertebral Column	2
11	▪ Structure of the Thoracic Wall ▪ Joints of the Chest Wall	2

	▪ Suprapleural Membrane ▪ Diaphragm ▪ Surface Anatomy	
12	Thoracic cavity: Mediastinum, Pleurae, Trachea, Bronchi, Lungs	**2**
13	Pericardium, Heart, Large arteries, veins and nerves of thorax	**3**
14	▪ Bones of the Shoulder (Pectoral girdle) girdles ▪ Bones of the Upper extremities	**2**
15	▪ Bones of the Pelvic girdle ▪ Bones of the Lower extremities	**2**
16	Abdominal cavity and organs	**2**
Total		**30**

20	Vertebral column	**2**
21	Structure of the Thoracic cage (Sternum ,Ribs, Costal Cartilages)	**2**
22	Thoracic cavity (Mediastinum, Pleurae, Trachea, Bronchi)	**2**
23	lung	**2**
24	Anatomy of heart	**2**
25	Major arteries, veins and nerves of thorax	**2**
26	Bones of the Shoulder (Pectoral girdle) girdles	**2**
27	Bones of the Upper extremities	**2**
28	Bones of the Pelvic girdle	**2**
29	Bones of the Lower extremities	**2**
30	Abdominal cavity and organs	**2**
Total		**60**

Laboratory sessions

No.	Title of the sessions	Hours
1	Introduction to anatomy	2
2	Basic structures part 1 (Skin, Fasciae, Muscle, Joints, Ligament, Bursae)	2
3	Basic structures part 2 (bone,Cartilage, Blood Vessels, Lymphatic System) and classification of human skeleton	2
4	Basic structures part 3(Nervous System, Mucous Membranes, Serous Membranes)	2
5	Frontal Bone, Parietal bones	2
6	Occipital bone	2
7	Temporal bones	2
8	Sphenoid bone	2
9	Ethmoid bone	2
10	Zygomatic bones,Maxillae	2
11	Nasal bones ,Lacrimal bones, Vomer,Palatine bones,Inferior conchae	2
12	Mandible	2
13	External Views of the Skull	2
14	Cranial cavity	2
15	Major Foramina and Fissures locations and structures pass through the skull	2
16	Orbit	2
17	nasal cavity	2
18	Auditory ossicles , Hyoid bone	2
19	General Characteristics of a Vertebra	2
20	Vertebral column	2
21	Structure of the Thoracic cage (Sternum ,Ribs, Costal Cartilages)	2
22	Thoracic cavity (Mediastinum, Pleurae, Trachea, Bronchi)	2
23	lung	2
24	Anatomy of heart	2
25	Major arteries, veins and nerves of thorax	2
26	Bones of the Shoulder (Pectoral girdle) girdles	2
27	Bones of the Upper extremities	2
28	Bones of the Pelvic girdle	2
29	Bones of the Lower extremities	2
30	Abdominal cavity and organs	2
Total		60

Department of Basic Science

Basic information

Subject title Biology

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 *amoebas,E. histolytica, E.coli, E.gingivalis*	**2**
Flagellates, *Giardia lamblia, Trichomonas tenax, T.hominas, T.vaginalis*	**2**
Leishmania , cutaneous and vesiral	**2**
Sporozoa, *Plasmodium spp.*	**2**
Toxoplasma gondii	1
Nemathelminthes, *Ascaris lumbricoides,*	1
Ancylostoma duodenale, Entrobius vermicularis	1
Platyhelminthes, *Fasciola hepatica*	1
Schistosoma spp.	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	***Entamoeba histolytica , Entamoeba coli***	**2**
19	***Giardia lamblia , Trichomonas vaginalis***	**2**

	Trichomonan tenax	
20	*Leishmania tropica,Leshmania donovani*	**2**
21	*Trypanosoma gambiense,T.rhodesiense*	**2**
22	*Plasmodium vivax, Toxoplasma gondii*	**2**
23	*Balantidium coli*	**2**
24	*Echinococcus granulosus,Taenia saginata* *Taenia solium*	**2**
25	*Ancylostoma, Ascaris , Entrobius*	**2**
26	*Schistosoma spp, Fasciola hepatica*	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		

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

Department of Basic Science- Basic information

-Subject title Computer

No.	Title of the lectures	Hours Theory
1	Introduction about computer /Hardware and Software/computer structure/` Floppy magnetic disks	1
2	E-learning	1
3	Introduction to E-learning Google Classroom Platform Google drive	1
4	Google forms	1
5	Online conferencing	1
6	Introduction about Windows /A look at Windows 10/Stating Windows 10/Working with a windows Program	1
7	Working with files and folders/ Using My computer	1
8	Working with Taskbar and Desktop	1
9	Using Windows Accessories	1
10	A look at Control Panel	1
11	Widows Explorer	1
12	Libraries	1
13	Introduction about Microsoft Word2016 A look at Microsoft Word /Editing Document	1
14	Formatting Text/	1
15	Formatting paragraphs	1
16	Proofing documents	1
17	Adding Tables	1
18	Inserting Graphic Elements	1
19	Controlling page Appearance	1
20	Introduction about Excels /A Look at Microsoft Excel	1
21	Modifying A Worksheet /performing Calculations	1
22	Formatting a worksheet/ Developing a work book	1
23	Printing Workbook Contents/Customizing Layout	1
24	Introduction about Microsoft Access/ A look at Microsoft Access	1
25	Creating Data tables /properties of the fields	1
26	Querying the database/Designing Forms/Producing reports	1
27	Introduction about Microsoft Power point/starting power point2016	1
28	Formatting text/Using graphics and Text	1
29	Manipulating the slides/Using Multimedia Elements	1
30	Power point Management	1
Total		30

No.	Lab. Experiment	Hours
1	Introduction about computer /Hardware and Software/computer structure/` Floppy magnetic disks.	2
2	Operating systems/CD-ROM/	2
3	Create Files &Folders High level programming language /Constant and variable/Library Function /Arithmetic expression/Type of Monitor /Number of systems	2
4	Introduction about MS-DOS Operating systems/DOS drive /Key-Board	2
5	DOS commands /Internal Commands/External Commands	2
6	Introduction about Windows /A look at Windows 7/Stating Windows 7/Working with a windows Program	2
7	Working with files and folders/ Using My computer	2
8	Working with Taskbar and Desktop	2
9	Using Windows Accessories	2

10	A look at Control Panel	2
11	Widows Explorer	2
12	Libraries	2
13	Introduction about Microsoft Word A look at Microsoft Word /Editing Document	2
14	Formatting Text/	2
15	Formatting paragraphs	2
16	Proofing documents	2
17	Adding Tables	2
18	Inserting Graphic Elements	2
19	Controlling page Appearance	2
20	Introduction about Excels /A Look at Microsoft Excel	2
21	Modifying A Worksheet /performing Calculations	2
22	Formatting a worksheet/ Developing a work book	2
23	Printing Workbook Contents/Customizing Layout	2
24	Introduction about Microsoft Access/ A look at Microsoft Access	2
25	Creating Data tables /properties of the fields	2
26	Querying the database/Designing Forms/Producing reports	2
27	Introduction about Microsoft Power point/starting power point	2
28	Formatting text/Using graphics and Text	2
29	Manipulating the slides/Using Multimedia Elements	2
30	Power point Management	2
Total		60

Department of Basic science Basic information

-Subject title Medical Physics

Number	Title of the lectures	Hours
1	**Terminology** Terms: Medical Physics, physical medicine, Physical therapy, Health Physics, Radiological Physics, clinical physics.	2
2	Modeling, Accuracy, Precision, False Positive, False Negative.	2
3	***Force on &in body:*** Static forces :(type of levers with medical examples).	2
4	Dynamic forces (Centrifuge)	2
5	***Physics of the skeleton:*** Bones:(Function of bones, Composition of bone, bone remodeling, compact and trabecular bone)	2
6	Stress-strain curve :(compressive and tensile stress, young modulus). Bone joints :(Synovial fluid, coefficient of a joint).	2
7	***Heat and cold in medicine:*** Physical basis of heat and temperature, Temperature scales, Converting Temperatures, Temperature in Dentistry, Thermal expansion, (Linear, Area, Volume Thermal Expansion),	2
8	Thermometry, Heat therapy, Thermography, Cold in medicine and cryosurgery. Thermal conductivity.	2
9	***Energy, work and power of the body:*** First law of thermodynamic. Energy change in the body (Met, Basal metabolic rate (BMR).	2
10	Work and power. Efficiency heat losses from the body. Anaerobic phase and aerobic phase. Hypothalamus (body's thermostat).Heat lost by (radiation, convection, evaporation of sweat and respiration).	2
11	***Pressure:*** Definition, absolute pressure, gauge pressure, negative pressure, unit of pressure. Measurement of pressure in the body	2
12	(Manometer).Pressure inside the skull. Eye pressure. Pressure in the skeleton. Pressure in the urinary bladder.Boyle's law: (pressure while diving).HOT (hyperbaric oxygen therapy).	2
13	***Electricity within the body:*** Electrical potential of nerves (resting potential, action potential in myelinated and unmyelinated nerves) Electromyogram	2
14	(EMG). Electrical potential in the heart (electrocardiogram ECG). Electroencephalogram (EEG)	2
15	***Sound in medicine:*** Properties of sound.	2
16	Stethoscope (including heart sound).mechanism of hearing	2
17	***Ultrasound*** (A-scan, B-scan, M-scan and Doppler effect).	**2**
18	Physiological effect of ultrasound in therapy.	**2**
19	***Light in medicine:*** Light nature, Planck Equation, (Reflection, Refraction and	**2**

20	Absorption of Light, Properties of light), Diffuse reflection, Specular reflection, Phototherapy, Application of ultraviolet and infrared light in medicine, Tanning and Skin Cancer.	**2**
21	***Laser in medicine***. What is laser? Application of laser in medicine Atomic Transitions, Population inversion, Laser Typical Characteristics, General Applications of Laser, Laser Dental Applications, Reshape gum tissue, Laser aided teeth whitening, Laser Drill.	**2**
22		**2**
23	***Physics of eye and vision:*** Focusing element of the eye (cornea, lens). Element of the eye (pupil, aqueous humor, vitreous humor, sclera).Visual acuity, Snellen chart, optical density.	**2**
24		**2**
25	***Physics of diagnostic X-ray:*** Properties of X-ray, production of X-ray. Absorption of X-ray, contrast media-ray image (penumbra, grid, and intensifying screens).Radiation to patients from X-ray (filters).	**2**
26		**2**
27	***Physics of nuclear medicine:*** Radioactivity decay, half-life, units. Basic instrumentation and its medical application (GM-tube, Photomultiplier tube, scintillation detector, solid state detector).Therapy with radioactivity. Radiation doses in nuclear medicine.	**2**
28		**2**
29	***Physics of radiation therapy:*** The dose units (Rad and Gray).Principles of radiation therapy. Brach therapy, quality factor (QF).	**2**
30		**2**
Total		**60**

Laboratory sessions

Lab number	Study unit title	Hours
1	Guidelines of Medical Physics Lab and Rules must be obeyed by the students	**2**
2	Graphing Techniques	**2**
3	Ohm's law: - verify ohm's law - to find the value of different values of resistance	**2**
4		**2**
5	**Semiconductors (junction diode):** To determine the characteristics of the semiconductors Comparison between omic and non-omic resistance	**2**
6		**2**
7	**Cathode Ray Oscilloscope** -Measurement of deflection sensitivity of D. C. voltage. -Measurement of deflection sensitivity of A. C. voltage	**2**
8		**2**

9	**The focal length of convex lens:** -Rough value of focal length of different convex lenses, -A graphical method of measuring of focal length, Comparison between these methods and the given value.	**2**
10		**2**
11	**Hook's law:** -To verify Hook's law and determine the force constant of the spring. -To determine the work done by stretching the spring.	**2**
12		**2**
13	**Focal length of concave mirror:** -Locating the radius of curvature -Determining the focal length	**2**
14		**2**
15	General review and 1st course exam	
16	**Laser applications:** -To measure the width of a single slit by using a laser -To measure the wavelength of laser by using a certain single slit	**2**
17		**2**
18	**Boyle's law:** -To verify Boyle's law -To measure the pressure of the atmosphere	**2**
19		**2**
20	**Inverse Square law:** - To verify the inverse square law - Radiation shielding by different thicknesses of of a certain material	**2**
21		**2**
22	**Viscosity of a liquid** - To determine the viscosity of a medium using a small sphere falls with a constant terminal velocity. - To verify Stokes' law	**2**
23		**2**
24	**Velocity of the sound** - To measure the velocity of the sound by using a resonance tube, closed at one end, at room temperature. - Calculated the theoretical and practical values of the velocity of sound and comparing between them.	**2**
25		**2**
26	**The focal length of a converging lens** - To determine the focal length of a converging lens by lens displacement method using conjugate foci. - To calculate curvature value of this converging lens	**2**
27		**2**
28	**Simple Pendulum** -To determine the periodic time and its variation with the length of the pendulum -To calculate the acceleration of free fall	**2**
29		**2**
30	General review and 2nd course exam	**2**
Total		**60**

Human Rights A- Basic information

-Subject title Human Rights

العدد	موضوع المحاضرة	الساعات
1	المقدمة /الباب الأول في حقوق الإنسان الفصل الأول /حقوق الإنسان في الحضارات القديمة المبحث الأول /حقوق الإنسان في الحضارات اليونانية والمصرية المطلب الأول /حقوق الإنسان في الحضارة اليونانية المطلب الثاني /حقوق الإنسان قي الحضارة المصرية القديمة المبحث الثاني /حقوق الإنسان في الحضارات القديمة	1
2	الفصل الثاني /حقوق الإنسان في الشرائع والأديان السماوية المبحث الأول /حقوق الإنسان في الديانات المسيحية واليهودية المبحث الثاني /حقوق الإنسان في الإسلام	1
3	الفصل الثالث /مصادر حقوق الإنسان المبحث الأول /المصادر الدولية المطلب الأول /الإعلان العالمي لحقوق الإنسان	1
4	المطلب الثاني /العهدان الدوليان الخاصان بحقوق الإنسان	1
5	المبحث الثاني / المصادر الوطنية المطلب الأول /إعلان حقوق الإنسان والمواطن الفرنسي (26 اب 1789)	1
6	المطلب الثاني /الدساتير و الإعلانات الفرنسية التي تلت إعلان الحقوق لسنه 1789	1
7	المطلب الثالث /دستور جمهورية العراق لسنه 2005	1
8	الفصل الرابع /ضمانات حقوق الإنسان المبحث الأول /ضمانات حقوق الإنسان على الصعيد الداخلي المطلب الأول /الضمانات الدستورية	1
9	المطلب الثاني /الضمانات القضائية	1
10	المبحث الثاني /ضمانات حقوق الإنسان في الإسلام المطلب الاول /إقرار مبدأ ثنائية المسؤولية في المجتمع الإسلامي المطلب الثاني /الصفة الدينية للقانون الإسلامي.	1
11	المطلب الثالث /بعض الأنظمة الإسلامية لمصلحة الفرد والجماعة والسلطات الحاكمه	1
12	المبحث الثالث /ضمانات حقوق الإنسان على الصعيد الدولي المطلب الأول /ميثاق الأمم المتحدة المطلب الثاني /الجمعية العامة للأمم المتحدة	1
13	الطلب الثالث /المجلس الاقتصادي والاجتماعي المطلب الرابع /مجلس حقوق الإنسان	1
14	المبحث الرابع /دور المنظمات الإقليمية في حماية حقوق الإنسان المطلب الأول /الاتفاقية الأوربية لحقوق الإنسان	1
15	المطلب الثاني /الاتفاقية الأمريكية لحقوق الإنسان المطلب الثالث /الميثاق الإفريقي لحقوق الإنسان والشعوب المطلب الرابع /الميثاق العربي لحقوق الإنسان الفصل الخامس /مستقبل حقوق الإنسان المبحث الأول /التقدم التكنولوجي وأثره على الحقوق و الحريات حقوق الإنسان والحريات العامة .	1
16	المطلب الأول /الأحزاب السياسية وحقوق الإنسان	1

	المطلب الثاني /دور الإعلام والتنشئة	
17	المبحث الثاني /العولمة وحقوق الإنسان المطلب الأول /الخصوصية وحقوق الإنسان المطلب الثاني /الهيمنة وحقوق الإنسان	1
18	الفصل الأول /مفهوم الديمقراطية, تطوره تعريفه وإبعاده المبحث الأول /جذور مفهوم الديمقراطية و تطورها	1
19	المبحث الثاني /تعريف الديمقراطية	1
20	المبحث الثالث /الديمقراطية بين العالمية والخصوصية.	1
21	الفصل الثاني /إشكال الديمقراطية البحث الأول /الديمقراطية المباشرة المطلب الأول /مضمون الديمقراطية المباشرة المطلب الثاني /تطبيقات الديمقراطية المباشرة المطلب الثالث /تقدير نظام الديمقراطية المباشرة	1
22	المبحث الثاني /الديمقراطية شبه المباشرة المطلب الأول /مفهوم الديمقراطية شبه المباشرة مطلي الثاني /مظاهر الديمقراطية شبه المباشرة	1
23	المطلب الثالث /تقدير نظام الديمقراطية شبه المباشرة المبحث الثالث /الديمقراطية التمثيلية.	1
24	المطلب الاول /مفهوم النظام التمثيلي وطبيعته القانونية المطلب الثاني /أركان النظام التمثيلي	1
25	المطلب الثالث /إشكال النظام التمثيلي النيابي	1
26	المبحث الرابع / المجلس النيابي المطلب الأول / نظام المجلس النيابي الواحد ونظام المجلسين المطلب الثاني التنظيم الداخلي للمجلس النيابي	1
27	الفصل الثالث /أليه النظام التمثيلي النيابي :الانتخاب المبحث الأول /مفهوم الانتخاب وتكيفه القانوني المطلب واحد /مفهوم الانتخاب المطلب الثاني /التكيف القانوني للانتخاب المبحث الثاني /هيئة الناخبين المطلب الأول /مفهوم هيئة الناخبين المطلب الثاني /تكوين هيئة الناخبين	1
28	المطلب الثالث /المرشحون لانتخاب المبحث الثالث /تنظيم عملية الانتخاب المطلب الأول /تحديد الدوائر الانتخابية المطلب الثاني /الدوائر الانتخابية المطلب الثالث /المرشحون	1
29	المطلب الرابع /الحملة الانتخابية المطلب الخامس /التصويت المبحث الرابع / تنظيم الانتخابات المطلب الثاني /الانتخاب الفردي والانتخاب بالقائمة الامريكية (اسيان) .	1
30	المطلب الثالث /نظام الأغلبية ونظام التمثيل النسبي المطلب الرابع /نظام تمثيل المصالح المطلب الخامس /نظام التصويت الاختيار والتصويت الاجباري المطلب السادس /نظام التصويت السري والتصويت العلني	1
Total		30

Department Of Restorative and Aesthetic Dentistry

Basic information

Subject title Dental Anatomy

Number	Title of the lectures/ Dental Anatomy	Hours
1	Introduction	2
2	Introduction	2
3	Numbering Systems	2
4	Numbering Systems	2
5	Anatomical Landmarks	2
6	Anatomical Landmarks	2
7	Permanent Maxillary Central Incisor	2
8	Permanent Maxillary Central Incisor	2
9	Permanent Maxillary Lateral Incisor	2
10	Permanent Maxillary Lateral Incisor	2
11	Permanent Mandibular Incisors	2
12	Permanent Mandibular Incisors	2
13	Permanent Mandibular Incisors	2
14	Permanent Canines	2
15	Permanent Canines	2
16	Permanent Maxillary Premolars	2
17	Permanent Maxillary Premolars	2
18	Permanent Mandibular First Premolars	2
19	Permanent Mandibular First Premolars	2
20	Permanent Mandibular Second Premolar	2
21	Permanent Maxillary First Molar Permanent maxillary second and third molars	2
22	Permanent Maxillary First Molar Permanent maxillary second and third molars	2
23	Permanent Mandibular First Molar	2
24	Permanent Mandibular Second and third Molars	2
25	Tooth Development	2
26	Tooth Development	2
27	Pulp Cavities	2
28	Pulp Cavities	2
29	Occlusion and physiologic form of teeth and periodontium	2
30	Occlusion and physiologic form of teeth and periodontium	2
Total		60

Laboratory sessions

Lab number	Study unit title	Hours
1	Introduction to Dental Anatomy & Carving Instruments	2
2	Numbering systems.	2
3	Practical demonstration of Carving a Cube (1cm*1cm*1cm)	2
4	-Introduction to Anatomical landmarks on Teeth models. -Carving of a cube.	2
5	Description &Carving of the Labial Aspect of P. Max. Right Central Incisor.	2
6	Description &Carving of the Mesial aspect of P. Max. Right Central Incisor.	2
7	Description ,Carving & Finishing of the Incisal Aspect of Permanent Max. Right Central Incisor.	2
8	Practical Training of Carving of P. Max. Right Central Incisor	2
9	Practical Exam. Of Carving of P. Max. Right Central Incisor	2
10	Description &Carving of the Labial & Mesial Aspects of P. Max. Right Canine.	2
11	Description ,Carving & Finishing of the Incisal Aspect of P Max. Right Canine.	2
12	Practical Training of Carving of P. Max. Right Canine.	2
13	Practical Exam. of Carving of P. Max. Right Canine.	2
14	Mid Year Practical Examination of Tooth Carving.	2
15	Description &Carving of the Buccal & Mesial Aspects of P.Max. Right 1st Premolar.	2
16	Description, Carving & Finishing of the Occlusal Aspect of P.Max. Right 1st Premolar.	2
17	Practical Training of Carving of P. Max. Right 1st Premola	2
18	Practical Exam. Of Carving of P. Max. Right 1st Premolar	2
19	Description &Carving of the Buccal & Mesial Aspects of P.Mand. Right 1st Premolar.	2
20	Description, Carving & Finishing of the Occlusal Aspect of P.Mand. Right 1st Premolar.	2
21	Practical Training of Carving of P. Mand. Right 1st Premolar	2
22	Practical Exam. Of Carving of P. Mand. Right 1st Premolar	2
23	Description &Carving of the Buccal & Mesial Aspects of P	2

	Max.Right 1st Molar.	
24	Description, Carving & Finishing of the Occlusal Aspect of P. Max. Right 1st Molar.	2
25	Practical Training of Carving of P. Max. Right 1st molar.	2
26	Practical Exam. of Carving of P. Max. Right 1st molar.	2
27	Description &Carving of the Buccal & Mesial Aspects of P. Mand. Right 1st Molar	2
28	Description ,Carving & Finishing of the Occlusal aspect of P.Mand 1st Molar/Practical Training of Carving p.Mand 1st molar.	2
29	Practical Examination of Carving of P. Mand. Right 1st molar	2
30	Final Oral & Practical Examination of Tooth carving	2
Total		**60**

Department of Basic science - Basic information

-Subject title Medical Terminology

No	Study unit title	Hours
1	(Prefixes & suffixes	1
2	Integumentary system	1
3	Muscular system	1
4	Respiratory system	1
5	Digestive system	1
6	Nervous system	1
7	Cardiovascular system	1
8	Blood and Lymph	1
9	Immune system	1
10	Endocrine system	1
11	Five sense	1
12	Genitourinary system	1
13	(Dental terminology (part I	1
14	(Dental terminology (part II	1
15	(Dental terminology (part III	1
16	Small Talk	1
17	Common Mistakes	1
18	Passive voice	1
19	Direct and indirect speech	1
20	Synonyms in English	1
21	Adjectives	1
22	Integrating a quotation into an essay	1
23	Prepositions in English Grammar with Examples	1
24	Idioms and Phrases	1
25	Writing assignment	1
26	Pronunciation rules	1
27	Tenses	1
28	Synonyms and Antonyms	1
29	Paraphrasing	1
30	Essay writing skills	1
Total		30

Department of Basic science - Basic information

-Subject title Medical Chemistry

Number	Title of the lectures	Hours
1	Acid, Base and Salt	2
2	salts, preparation of salts	2
3	Fluid and electrolyte	2
4	Buffer-pH and Acid-Base Balance	2
5	acid-base balance and blood pH	2
6	Colloids and colloidal dispersions	2
7	Chirality in Biological Systems	2
8	concentration, preparation of solutions	2
9	Pollution	2
10	Radiochemistry	2
11	Alkanes and Cycloalkanes	2
12	Alkenes and Alkynes	2
13	Aromatic compounds	2
14	Aromatic compounds in Nature	2
15	Stereoisomers of Carbon	2
16	Diastereomers	2
17	Alcohols, Phenols, Ethers and Thiols (preparation, reactions)	2
18	Carboxylic Acids And Their Derivatives , part 1	2
19	Carboxylic Acids And Their Derivatives , part 2	2
20	Aldehydes and ketones	2
21	Carbohydrates	2
22	Monosaccharide's	2
23	Disaccharides Carbohydrates and oral health	2
24	Lipids	2
25	Derived lipids The role of lipids in teeth diseases	2
26	Proteins	1
27	Amino acids Effects of protein on oral health	1
28	Nucleic Acids	1
29	Nucleosides, Nucleotides	1
30	Dioxy and ribo Nucliec acids	1

.	Subject /theory	Time/Hr.
1	Introduction to biosafety and biosecurity Occupational safety and health Key components of bio-risk management Definition & concepts of biosecurity &biosafety	1
2	Universal safety precaution Components of biosafety in all labs Biosafety barriers in labs Personal Protective Equipment (PPE) Facility design	1
3	Bio-risk Management System Assess the capability of the laboratory Staff control Relation of risk groups of biosafety level, practices and equipment	1
4	Transportation of biological material International transport regulation The basic triple packaging system	1
5	Safety for support staff Laboratory Hygiene Engineering and building maintenance services	1

Laboratory sessions

Lab number	Study unit title	Hours
1	Action of Strong Base and Acids	**2**
2	Solubility rules and Applications (Solubility rules of salts).	**2**
3	Test for negative ions (Anions).part 1	**2**
4	Test for negative ions (Anions). part 2	**2**
5	PH meter	**2**
6	Test for positive ions (Cations). part 1	**2**
7	Test for positive ions (Cations). part 2	**2**
8	Titration	**2**
9	Safety of chemicals part 1	**2**
10	Safety of chemicals part2	**2**
11	hydrocarbons	**2**
12	Aliphatic Hydrocarbons	**2**
13	Aromatic hydrocarbons, part 1	**2**