

***College of Dentistry/ University of Baghdad***

***2018***

***College of Dentistry/ University of Baghdad***

***First Year - Curriculum.***

**First year curriculum (1st academic year, 30 weeks)**

***Department of Oral & Maxillofacial Surgery***

**A- Basic information**

|  |  |  |
| --- | --- | --- |
| **1-Subject title** | **Human Anatomy I** |  |
| **2-Number of credits** | Theory:2 | Laboratory: 2 |
| **3-Number of contact hours** | Theory:1h/wk. | Laboratory: 2 |
| **4-Subject time** | First Year |  |

|  |  |  |
| --- | --- | --- |
| **Hours** | **Title of the lectures** | **No.** |
| **1** |  Introduction to Human Anatomy   Descriptive Anatomic Terms | **1** |
| **1** | Basic Structures: Skin, Fasciae, Muscle, Joints, Ligament, Bursae | **2** |
| **1** | Basic Structures: Bone, Cartilage, Blood Vessels, Lymphatic System | **3** |
| **1** | Basic Structures: Bone, Cartilage, Blood Vessels, Lymphatic System | **4** |
| **1** | Basic Structures: Nervous System, Mucous Membranes, Serous  Membranes | **5** |
| **1** | Skeletal system of the body: Skull :Cranial Bones | **6** |
| **1** | Skeletal system of the body: Skull :Cranial Bones | **7** |
| **1** | Skeletal system of the body: Skull : Facial Bones | **8** |
| **1** | Skeletal system of the body: Skull : Facial Bones | **9** |
| **1** | External Views of the Skull | **10** |
| **1** | External Views of the Skull | **11** |
| **1** | The Cranial Cavity   Major Foramina and Fissures locations and structures pass through   Neonatal Skull | **12** |
| **1** | The Cranial Cavity   Major Foramina and Fissures locations and structures pass through   Neonatal Skull | **13** |
| **1** |  Skeleton of the Orbital Region, Openings into the Orbital Cavity   Skeleton of the External Nose, nasal cavity, Paranasal Sinuses   Auditory ossicles   Hyoid bone | **14** |
| **1** |  Skeleton of the Orbital Region, Openings into the Orbital Cavity   Skeleton of the External Nose, nasal cavity, Paranasal Sinuses   Auditory ossicles   Hyoid bone | **15** |
| **1** | The Vertebral Column | **16** |
| **1** | The Vertebral Column | **17** |
| **1** |  Structure of the Thoracic Wall   Joints of the Chest Wall   Suprapleural Membrane   Diaphragm   Surface Anatomy | **18** |
| **1** |  Structure of the Thoracic Wall   Joints of the Chest Wall   Suprapleural Membrane   Diaphragm   Surface Anatomy | **19** |
| **1** | Thoracic cavity: Mediastinum, Pleurae, Trachea, Bronchi, Lungs | **20** |
| **1** | Thoracic cavity: Mediastinum, Pleurae, Trachea, Bronchi, Lungs | **21** |
| **1** | Pericardium, Heart, Large arteries, veins and nerves of thorax | **22** |
| **1** | Pericardium, Heart, Large arteries, veins and nerves of thorax | **23** |
| **1** | Pericardium, Heart, Large arteries, veins and nerves of thorax | **24** |
| **1** |  Bones of the Shoulder (Pectoral girdle) girdles   Bones of the Upper extremities | **25** |
| **1** |  Bones of the Shoulder (Pectoral girdle) girdles   Bones of the Upper extremities | **26** |
| **1** |  Bones of the Pelvic girdle   Bones of the Lower extremities | **27** |
| **1** |  Bones of the Pelvic girdle   Bones of the Lower extremities | **28** |
| **1** | Abdominal cavity and organs | **29** |
| **1** | Abdominal cavity and organs | **30** |
| **30** |  | **Total** |

***Laboratory sessions***

|  |  |  |
| --- | --- | --- |
| **Hours** | **Title of the sessions** | **No.** |
| **2** |  Introduction to Human Anatomy   Descriptive Anatomic Terms | **1** |
| **2** | Basic Structures: Skin, Fasciae, Muscle, Joints, Ligament, Bursae | **2** |
| **2** | Basic Structures: Bone, Cartilage, Blood Vessels, Lymphatic System | **3** |
| **2** | Basic Structures: Bone, Cartilage, Blood Vessels, Lymphatic System | **4** |
| **2** | Basic Structures: Nervous System, Mucous Membranes, Serous  Membranes | **5** |
| **2** | Skeletal system of the body: Skull :Cranial Bones | **6** |
| **2** | Skeletal system of the body: Skull :Cranial Bones | **7** |
| **2** | Skeletal system of the body: Skull : Facial Bones | **8** |
| **2** | Skeletal system of the body: Skull : Facial Bones | **9** |
| **2** | External Views of the Skull | **10** |
| **2** | External Views of the Skull | **11** |
| **2** | The Cranial Cavity   Major Foramina and Fissures locations and structures pass through   Neonatal Skull | **12** |
| **2** | The Cranial Cavity   Major Foramina and Fissures locations and structures pass through   Neonatal Skull | **13** |
| **2** |  Skeleton of the Orbital Region, Openings into the Orbital Cavity   Skeleton of the External Nose, nasal cavity, Paranasal Sinuses   Auditory ossicles   Hyoid bone | **14** |
| **2** |  Skeleton of the Orbital Region, Openings into the Orbital Cavity   Skeleton of the External Nose, nasal cavity, Paranasal Sinuses   Auditory ossicles   Hyoid bone | **15** |
| **2** | The Vertebral Column | **16** |
| **2** | The Vertebral Column | **17** |
| **2** |  Structure of the Thoracic Wall   Joints of the Chest Wall   Suprapleural Membrane   Diaphragm   Surface Anatomy | **18** |
| **2** |  Structure of the Thoracic Wall   Joints of the Chest Wall   Suprapleural Membrane   Diaphragm   Surface Anatomy | **19** |
| **2** | Thoracic cavity: Mediastinum, Pleurae, Trachea, Bronchi, Lungs | **20** |
| **2** | Thoracic cavity: Mediastinum, Pleurae, Trachea, Bronchi, Lungs | **21** |
| **2** | Pericardium, Heart, Large arteries, veins and nerves of thorax | **22** |
| **2** | Pericardium, Heart, Large arteries, veins and nerves of thorax | **23** |
| **2** | Pericardium, Heart, Large arteries, veins and nerves of thorax | **24** |
| **2** |  Bones of the Shoulder (Pectoral girdle) girdles   Bones of the Upper extremities | **25** |
| **2** |  Bones of the Shoulder (Pectoral girdle) girdles   Bones of the Upper extremities | **26** |
| **2** |  Bones of the Pelvic girdle   Bones of the Lower extremities | **27** |
| **2** |  Bones of the Pelvic girdle   Bones of the Lower extremities | **28** |
| **2** | Abdominal cavity and organs | **29** |
| **2** | Abdominal cavity and organs | **30** |
| **60** |  | **Total** |

***The grading system***

|  |  |  |
| --- | --- | --- |
| **Number** | **Assessment measurement** | **Score distribution** |
| 1 | First semester (12.5%) | Written 12.5% |
| 2 | Mid year examination (25%) | Written 25% |
| 3 | Second semester (12.5%) | Written 12.5% |
| 4 | Final examination (50%) | Written 30%,lab20% |
| **Total** | **100%** | **100%** |

***Technology Support***

|  |  |  |  |
| --- | --- | --- | --- |
| **Number** | **Subject** | **Yes √** | **No 🞩** |
| **1** | Online Authoring systems |  | **No 🞩** |
| **2** | Internet access and E-mail |  | **No 🞩** |
| **3** | A data show projector | **Yes √** |  |
| **4** | Microsoft power point for lecture presentations | **Yes √** |  |
| **5** | Digital camera | **Yes √** | **No 🞩** |
| **6** | Video and audio media equipments | **Yes √** | **No 🞩** |
| **7** | Others (specify) | Wireless microphone and 2 speakers | **No 🞩** |

***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 |  |

|  |  |
| --- | --- |
| **Title of the lectures** | **Hours** |
| Introduction to Medical and oral Biology | **2** |
| Prokaryotes and Eukaryotes | **2** |
| General and oral Immunity | **2** |
| Bacteria and oral disease | **2** |
| Genetics and its role in oral diseases | **2** |
| Simple epithelial tissue ( Tongue) | **2** |
| Stratified epithelial tissue | **2** |
| Glandular epithelial tissue ( salivary gland) | **2** |
| General connective tissue (blood) | **2** |
| Muscular tissue | **2** |
| Nerve tissue | **2** |
| Cell structure (oral mucus membrane) | **2** |
| Plasma membrane structure | **2** |
| Passage of Materials across Cell Membrane | **2** |
| Cell cycle | **2** |
| Mitosis and meiosis | **2** |
| Cell energy | **2** |
| Nucleic acid, DNA and RNA | **2** |
| 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* | **2** |
| Nemathelminthes, *Ascaris lumbricoides*, | **2** |
| *Ancylostoma duodenale, Entrobius vermicularis* | **2** |
| Platyhelminthes, *Fasciola hepatica* | **2** |
| *Schistosoma spp.* | **2** |
|  | **60** |

***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***  ***Trichomonan tenax*** | **2** |
| **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*** | **2** |
| **27** | **Endoskeleton of frog** | **2** |
| **28** | **Experiment...examine samples of water** | **2** |
| **29** | **Experiment...examine samples of water (one hour), Experiment ...Blood groups(one hour)** | **2** |
| **30** | **Experiment ...Blood groups** | **2** |
| **Total** |  | **60** |

***The grading system***

|  |  |  |
| --- | --- | --- |
| **Number** | **Assessment measurement** | **%** |
| **1** | **Term Tests** | **16** |
| **2** | **Laboratory** | **7** |
| **3** | **Quizzes** | **2** |
| **4** | **Midyear** | **25** |
| **5** | **Final Exam** | **50** |
| **Total** |  | **100** |

***Technology Support***

|  |  |  |  |
| --- | --- | --- | --- |
| **Number** | **Subject** | **Yes √** | **No 🞩** |
| **1** | Online Authoring systems |  | **No 🞩** |
| **2** | Internet access and E-mail |  | **No 🞩** |
| **3** | A data show projector | **Yes √** |  |
| **4** | Microsoft power point for lecture presentations | **Yes √** |  |
| **5** | Digital camera |  | **No 🞩** |
| **6** | Video and audio media equipments |  | **No 🞩** |
| **7** | Others (specify) | **Yes** |  |

***Department of Basic Science***

**A- Basic information**

|  |  |  |
| --- | --- | --- |
| **1-Subject title** | **Computer** |  |
| **2-Number of credits** | Theory:2 | Laboratory:2 |
| **3-Number of contact hours** | Theory: 1h/wk | Laboratory: 2h/wk |
| **4-Subject time** | First year |  |

|  |  |  |
| --- | --- | --- |
| **Hours** | **Titles of the lectures** | **No.** |
| 1 | **Introduction about computer /Hardware and Software/computer structure/`Floppy magnetic disks** | **1** |
| 1 | **Operating systems/CD-ROM/** | **2** |
| 1 | **Create Files &Folders**  **High level programming language /Constant and variable/Library Function /Arithmetic expression/Type of Monitor /Number of systems** | **3** |
| 1 | **Introduction about MS-DOS**  **Operating systems/DOS drive /Key-Board** | **4** |
| 1 | **DOS commands /Internal Commands/External Commands** | **5** |
| 1 | **Introduction about Windows /A look at Windows 7/Stating Windows XP/Working with a windows Program** | **6** |
| 1 | **Working with files and folders/ Using My computer** | **7** |
| 1 | **Working with Taskbar and Desktop** | **8** |
| 1 | **Using Windows Accessories** | **9** |
| 1 | **A look at Control Panel** | **10** |
| 1 | **Widows Explorer** | **11** |
| 1 | **libraries** | **12** |
| 1 | **Introduction about Microsoft Word**  **A look at Microsoft Word /Editing Document** | **13** |
| 1 | **Formatting Text/** | **14** |
| 1 | **Formatting paragraphs** | **15** |
| 1 | **Proofing documents** | **16** |
| 1 | **Adding Tables** | **17** |
| **1** | **Inserting Graphic Elements** | **18** |
| 1 | **Controlling page Appearance** | **19** |
| 1 | **Introduction about Excels /A Look at Microsoft Excel** | **20** |
| 1 | **Modifying A Worksheet /performing Calculations** | **21** |
| 1 | **Formatting a worksheet/ Developing a work book** | **22** |
| 1 | **Printing Workbook Contents/Customizing Layout** | **23** |
| 1 | **Introduction about Microsoft Access/ A look at Microsoft Access** | **24** |
| 1 | **Creating Data tables /properties of the fields** | **25** |
| 1 | **Querying the database/Designing Forms/Producing reports** | **26** |
| 1 | **Introduction about Microsoft Power point/starting power point** | **27** |
| 1 | **Formatting text/Using graphics and Text** | **28** |
| 1 | **Manipulating the slides/Using Multimedia Elements** | **29** |
| 1 | **Power point Management** | **30** |
| **30** |  | **Total** |

|  |  |  |
| --- | --- | --- |
| **Hours** | **Lab. Experiment** | **No.** |
| **2** | **Introduction about compute /Hardware and Software/computer structure/`Floppy magnetic disks** | **1** |
| **2** | **Operating systems/CD-ROM/** | **2** |
| **2** | **Create Files &Folders**  **High level programming language /Constant and variable/Library Function /Arithmetic expression/Type of Monitor /Number of systems** | **3** |
| **2** | **Introduction about MS-DOS**  **Operating systems/DOS drive /Key-Board** | **4** |
| **2** | **DOS commands /Internal Commands/External Commands** | **5** |
| **2** | **Introduction about Windows /A look at Windows 7/Stating Windows XP/Working with a windows Program** | **6** |
| **2** | **Working with files and folders/ Using My computer** | **7** |
| **2** | **Working with Taskbar and Desktop** | **8** |
| **2** | **Using Windows Accessories** | **9** |
| **2** | **A look at Control Panel** | **10** |
| **2** | **Widows Explorer** | **11** |
| **2** | **libraries** | **12** |
| **2** | **Introduction about Microsoft Word**  **A look at Microsoft Word /Editing Document** | **13** |
| **2** | **Formatting Text/** | **14** |
| **2** | **Formatting paragraphs** | **15** |
| **2** | **Proofing documents** | **16** |
| **2** | **Adding Tables** | **17** |
| **2** | **Inserting Graphic Elements** | **18** |
| **2** | **Controlling page Appearance** | **19** |
| **2** | **Introduction about Excels /A Look at Microsoft Excel** | **20** |
| **2** | **Modifying A Worksheet /performing Calculations** | **21** |
| **2** | **Formatting a worksheet/ Developing a work book** | **22** |
| **2** | **Printing Workbook Contents/Customizing Layout** | **23** |
| **2** | **Introduction about Microsoft Access/ A look at Microsoft Access** | **24** |
| **2** | **Creating Data tables /properties of the fields** | **25** |
| **2** | **Querying the database/Designing Forms/Producing reports** | **26** |
| **2** | **Introduction about Microsoft Power point/starting power point** | **27** |
| **2** | **Formatting text/Using graphics and Text** | **28** |
| **2** | **Manipulating the slides/Using Multimedia Elements** | **29** |
| **2** | **Power point Management** | **30** |
| **60** |  | **Total** |

***The grading system***

|  |  |  |
| --- | --- | --- |
| **Number** | **Assessment measurement** | **%** |
| **1** | **Laboratory** | **40** |
| **2** | **Quizzes** | **10** |
| **3** | **Final Exam** | **50** |
| **Total** |  | **100** |

***Technology Support***

|  |  |  |  |
| --- | --- | --- | --- |
| **Number** | **Subject** | **Yes √** | **No 🞩** |
| **1** | Online Authoring systems |  | **No 🞩** |
| **2** | Internet access and E-mail |  | **No 🞩** |
| **3** | A data show projector | **Yes √** |  |
| **4** | Microsoft power point for lecture presentations | **Yes √** |  |
| **5** | Digital camera |  | **No 🞩** |
| **6** | Video and audio media equipments |  | **No 🞩** |
| **7** | Others (specify) | **Yes** |  |

***Department of Basic science***

**A- Basic information**

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

|  |  |  |
| --- | --- | --- |
| **Number** | **Title of the lectures** | **Hours** |
| **1** | **Terminology** | 2 |
| **2** | **Terminology** | 2 |
| **3** | ***Force on &in body:***  Static forces :( type of levers with medical examples).  Dynamic forces (Centrifuge) | 2 |
| **4** | ***Force on &in body:***  Static forces :( type of levers with medical examples).  Dynamic forces (Centrifuge) | 2 |
| **5** | ***Physics of the skeleton:***  Bones:(Function of bones, Composition of bone, bone remodeling, compact and trabecular bone)  Stress-strain curve :( compressive and tensile stress, young modulus). Bone joints :( Synovial fluid, coefficient of a joint). | 2 |
| **6** | ***Physics of the skeleton:***  Bones:(Function of bones, Composition of bone, bone remodeling, compact and trabecular bone)  Stress-strain curve :( compressive and tensile stress, young modulus). Bone joints :( Synovial fluid, coefficient of a joint). | 2 |
| **7** | ***Heat and cold in medicine:***  Temperature scales, thermograph, cold in medicine and cryosurgery. | 2 |
| **8** | ***Heat and cold in medicine:***  Temperature scales, thermograph, cold in medicine and cryosurgery. | 2 |
| **9** | ***Energy, work and power of the body:***  First law of thermodynamic. Energy change in the body (Met, Basal metabolic rate (BMR).  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 |
| **10** | ***Energy, work and power of the body:***  First law of thermodynamic. Energy change in the body (Met, Basal metabolic rate (BMR).  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 (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 |
| **12** | ***Pressure:***  Definition, absolute pressure, gauge pressure, negative pressure, unit of pressure. Measurement of pressure in the body (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  (EMG). Electrical potential in the heart (electrocardiogram ECG). Electroencephalogram (EEG) | 2 |
| **14** | ***Electricity within the body:***  Electrical potential of nerves (resting potential, action potential in myelinated and unmyelinated nerves) Electromyogram  (EMG). Electrical potential in the heart (electrocardiogram ECG). Electroencephalogram (EEG) | 2 |
| **15** | ***Sound in medicine:***  Properties of sound.  Stethoscope (including heart sound).mechanism of hearing | 2 |
| **16** | ***Sound in medicine:***  Properties of sound.  Stethoscope (including heart sound).mechanism of hearing | 2 |
| **17** | ***Ultrasound***  (A-scan, B-scan, M-scan and Doppler effect).  Physiological effect of ultrasound in therapy. | **2** |
| **18** | ***Ultrasound***  (A-scan, B-scan, M-scan and Doppler effect).  Physiological effect of ultrasound in therapy. | **2** |
| **19** | ***Light in medicine:***  Properties of light, measurement of light and its units. Application of visible light in medicine (endoscope).Application of ultraviolet and infrared light in medicine. | **2** |
| **20** | ***Light in medicine:***  Properties of light, measurement of light and its units. Application of visible light in medicine (endoscope).Application of ultraviolet and infrared light in medicine. | **2** |
| **21** | ***Laser in medicine***.  What is laser? Application of laser in medicine | **2** |
| **22** | ***Laser in medicine***.  What is laser? Application of laser in medicine | **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** | ***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** |
| **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** | ***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** |
| **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** | ***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** |
| **29** | ***Physics of radiation therapy:***  The dose units (Rad and Gray).Principles of radiation therapy.  Brach therapy, quality factor (QF). | **2** |
| **30** | ***Physics of radiation therapy:***  The dose units (Rad and Gray).Principles of radiation therapy.  Brach therapy, quality factor (QF). | **2** |
| **Total** |  | **60** |

***Laboratory sessions***

|  |  |  |
| --- | --- | --- |
| **Lab number** | **Study unit title** | **Hours** |
| **1** | Focal length of a concave mirror. | **2** |
| **2** | Laser application for measurements of single slit width | **2** |
| **3** | Laser application for measurements of laser wavelength | **2** |
| **4** | Divergence of laser beam | **2** |
| **5** | Intensity of laser beam | **2** |
| **6** | Widening the bundle of laser rays | **2** |
| **7** | Cathode ray oscilloscope to measure D.C voltage | **2** |
| **8** | Cathode ray oscilloscope to measure A.C voltage | **2** |
| **9** | Viscosity of a liquid using small sphere | **2** |
| **10** | Viscosity of a liquid using different small sphere weight | **2** |
| **11** | Viscosity of different kind of liquids using small sphere | **2** |
| **12** | Ohm's law to calculate unknown resistance | **2** |
| **13** | Ohm's law for metal wire with different length | **2** |
| **14** | Ohm's law for metal wire with different section area | **2** |
| **15** | The focal length of a convex lens | **2** |
| **16** | Pendulum Measuring the acceleration of free fall | **2** |
| **17** | Pendulum Measuring the acceleration of free fall of different spheres | **2** |
| **18** | Semiconductors (Junction diode). | **2** |
| **19** | Boyle's law | **2** |
| **20** | Hook's law to determine the force constant of the spring | **2** |
| **21** | Hook's law to determine the work done by the stretching the spring | **2** |
| **22** | Velocity of the sound using tube of water | **2** |
| **23** | Velocity of the sound using tube of different liquids | **2** |
| **24** | The focal length of a converging lens. | **2** |
| **25** | Measuring the intensity of radiation | **2** |
| **26** | Specific heat capacity of water | **2** |
| **27** | Specific heat capacity of solid | **2** |
| **28** | Latent heat of vaporization | **2** |
| **29** | Archimedes principle | **2** |
| **30** | Thermal conductivity | **2** |
| **Total** |  | **60** |

***The grading system***

|  |  |  |
| --- | --- | --- |
| **Number** | **Assessment measurement** | **%** |
| **1** | **First term** | **12.5** |
| **2** | **Midyear examination** | **25** |
| **3** | **Second term** | **12.5** |
| **4** | **Final examination** | **35** |
|  | **Laboratory** | **15** |
| **Total** |  | **100** |

***Technology Support***

|  |  |  |  |
| --- | --- | --- | --- |
| **Number** | **Subject** | **Yes √** | **No 🞩** |
| **1** | Online Authoring systems | Yes | **No 🞩** |
| **2** | Internet access and E-mail | Yes | **No 🞩** |
| **3** | A data show projector | **Yes √** |  |
| **4** | Microsoft power point for lecture presentations | **Yes √** |  |
| **5** | Digital camera |  | **No 🞩** |
| **6** | Video and audio media equipments |  | **No 🞩** |
| **7** | Others (specify) | **Yes** |  |

***Human Rights***

**A- Basic information**

|  |  |  |
| --- | --- | --- |
| **1-Subject title** | Human Rights |  |
| **2-Number of credits** | Theory:2 | Clinical: 0 |
| **3-Number of contact hours** | Theory:1h/wk. | Clinical: 0 |
| **4-Subject time** | First Year |  |

**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 ألإعلانات 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**  **المطلب الثاني /دور الإعلام والتنشئة** | **1** |
| **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** |

***Oral health***

**A- Basic information**

|  |  |  |
| --- | --- | --- |
| **1-Subject title** | **Oral health** |  |
| **2-Number of credits** | Theory:2 | Laboratory:0 |
| **3-Number of contact hours** | Theory:1h/wk. | Laboratory:0 |
| **4-Subject time** | First Year |  |

|  |  |  |
| --- | --- | --- |
| **Number** | **Title of the lectures** | **Hours** |
| 1 | introduction to oral health | 1 |
| 2 | the oral environment in relation to health and disease | 1 |
| 3 | dental biofilm | 1 |
| 4 | dental calculus | 1 |
| 5 | dental stain | 1 |
| 6 | dental caries | 1 |
| 7 | dental defect and anomalies | 1 |
| 8 | tooth wear | 1 |
| 9 | oral mucosa | 1 |
| 10 | periodontal tissue | 1 |
| 11 | periodontal disease(gingivitis) | 1 |
| 12 | periodontal disease(periodontitis) | 1 |
| 13 | oral- systemic linkage | 1 |
| 14 | principal of oral health and nutrition | 1 |
| 15 | diet and oral health | 1 |
| 16 | fibrous food and oral health | 1 |
| 17 | oral habit and oral health | 1 |
| 18 | oral hygiene | 1 |
| 19 | mechanical (tooth brushing ) | 1 |
| 20 | mechanical (interproximal aids ) | 1 |
| 21 | chemical (mouth rinses ) | **1** |
| 22 | chemical (tooth paste and others ) | 1 |
| 23 | oral mal odor | 1 |
| 24 | oral health care for early childhood | 1 |
| 25 | geriatric oral health care | 1 |
| 26 | oral health care for disabled people | 1 |
| 27 | smoking and oral health | 1 |
| 28 | physical activity and oral health | 1 |
| 29 | sociology and oral health | 1 |
| 30 | infection control | 1 |
| Total |  | 30 |

***The grading system***

|  |  |  |
| --- | --- | --- |
| **Number** | **Assessment measurement** | **%** |
| **1** | **Term Tests** | **25** |
| **2** | **Quizzes** | **5** |
| **3** | **Mid exam** | **20** |
| **4** | **Final examination** | **50** |
| **Total** |  | **100%** |

***Technology Support***

|  |  |  |  |
| --- | --- | --- | --- |
| **Number** | **Subject** | **Yes √** | **No 🞩** |
| **1** | Online Authoring systems |  | **No 🞩** |
| **2** | Internet access and E-mail |  | **No 🞩** |
| **3** | A data show projector | **Yes √** |  |
| **4** | Microsoft power point for lecture presentations | **Yes √** |  |
| **5** | Digital camera |  | **No 🞩** |
| **6** | Video and audio media equipments | **Yes √** | **No 🞩** |
| **7** | Others (specify) |  |  |

# Department Of Restorative Dentistry

**A- Basic information**

|  |  |  |
| --- | --- | --- |
| **1-Subject title** | **Dental Anatomy** |  |
| **2-Number of credits** | Theory:2 | Laboratory:3 |
| **3-Number of contact hours** | Theory:1h/wk | Laboratory: 3hs/wk |
| **4-Subject time** | First Year |  |

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

**Laboratory sessions**

|  |  |  |
| --- | --- | --- |
| **Lab number** | **Study unit title** | **Hours** |
| 1 | Introduction to Dental Anatomy & Carving Instruments | 3 |
| 2 | Numbering systems. | 3 |
| 3 | Practical demonstration of Carving a Cube (1cm\*1cm\*1cm) | 3 |
| 4 | -Introduction to Anatomical landmarks on Teeth models.  -Carving of a cube. | 3 |
| 5 | Description &Carving of the Labial Aspect of P. Max. Right Central Incisor. | 3 |
| 6 | Description &Carving of the Mesial aspect of P. Max. Right Central Incisor. | 3 |
| 7 | Description ,Carving & Finishing of the Incisal Aspect of Permanent Max. Right Central Incisor. | 3 |
| 8 | Practical Training of Carving of P. Max. Right Central Incisor | 3 |
| 9 | Practical Exam. Of Carving of P. Max. Right Central Incisor | 3 |
| 10 | Description &Carving of the Labial & Mesial Aspects of P. Max. Right Canine. | 3 |
| 11 | Description ,Carving & Finishing of the Incisal Aspect of P. Max. Right Canine. | 3 |
| 12 | Practical Training of Carving of P. Max. Right Canine. | 3 |
| 13 | Practical Exam. of Carving of P. Max. Right Canine. | 3 |
| 14 | Mid Year Practical Examination of Tooth Carving. | 3 |
| 15 | Description &Carving of the Buccal & Mesial Aspects of P.Max. Right 1st Premolar. | 3 |
| 16 | Description, Carving & Finishing of the Occlusal Aspect of P.Max. Right 1st Premolar. | 3 |
| 17 | Practical Training of Carving of P. Max. Right 1st Premolar | 3 |
| 18 | Practical Exam. Of Carving of P. Max. Right 1st Premolar | 3 |
| 19 | Description &Carving of the Buccal & Mesial Aspects of P.Mand. Right 1st Premolar. | 3 |
| 20 | Description, Carving & Finishing of the Occlusal Aspect of P.Mand. Right 1st Premolar. | 3 |
| 21 | Practical Training of Carving of P. Mand. Right 1st Premolar | 3 |
| 22 | Practical Exam. Of Carving of P. Mand. Right 1st Premolar | 3 |
| 23 | Description &Carving of the Buccal & Mesial Aspects of P. Max.Right 1st Molar. | 3 |
| 24 | Description, Carving & Finishing of the Occlusal Aspect of P. Max. Right 1st Molar. | 3 |
| 25 | Practical Training of Carving of P. Max. Right 1st molar. | 3 |
| 26 | Practical Exam. of Carving of P. Max. Right 1st molar. | 3 |
| 27 | Description &Carving of the Buccal & Mesial Aspects of P. Mand. Right 1st Molar | 3 |
| 28 | Description ,Carving & Finishing of the Occlusal aspect of P.Mand 1st Molar/Practical Training of Carving p.Mand 1st molar. | 3 |
| 29 | Practical Examination of Carving of P. Mand. Right 1st molar | 3 |
| 30 | Final Oral & Practical Examination of Tooth carving | 3 |
| **Total** |  | **90** |

**Grading system concerning laboratories**

|  |  |  |
| --- | --- | --- |
| **Number** | **Assessment system** | **Score distribution** |
| **1** | Quizzes | 4% |
| **2** | Written Examinations | 6% |
| **3** | Mid year | 25% |
| **4** | Practical Assessments | 6% |
| **5** | Practical Examinations | 7% |
| **6** | Participation & Activity | 2% |
| **7** | Final Examination  Theory 30% Practical 20% | 50% |
| **Total** |  | **100%** |

***Technology Support***

|  |  |  |  |
| --- | --- | --- | --- |
| **Number** | **Subject** | **Yes √** | **No 🞩** |
| **1** | Online Authoring systems | **Yes √** |  |
| **2** | Internet access and E-mail | **Yes √** |  |
| **3** | A data show projector | **Yes √** |  |
| **4** | Microsoft power point for lecture presentations | **Yes √** |  |
| **5** | Digital camera |  | **No 🞩** |
| **6** | Video and audio media equipments | **Yes √** |  |
| **7** | Others (specify) |  | **No 🞩** |

***Department of Orthodontics***

|  |  |  |
| --- | --- | --- |
| **1-Subject title** | Medical terminology |  |
| **2-Number of credits** | Theory:2 | Clinical: 0 |
| **3-Number of contact hours** | Theory:1h/wk. | Clinical: 0 |
| **4-Subject time** | First Year |  |

|  |  |  |
| --- | --- | --- |
| **Number** | **Title of the lectures** | **Hours** |
| **1**  **2** | * **Define language, Medicine, Dentistry, and a term.** * **Basic Elements of a Medical Word**. * **Define the terms word root, combining vowel, combining form, prefix, and suffix.**  1. **State the rules for construction of the medical words. Roots of medical and dental words**. 2. **Suffixes: Dental, Surgical, Diagnostic, ...etc**. 3. **Suffixes: Adjective, and Noun.** 4. **Suffixes: Singular versus Plural.** 5. **Prefixes: Adjective Metric, Numbers**, **Positions, Time, Directions and Colors**  * **Divide medical words into their component parts.** * **Use multiple words' roots in a compound word.** | 1  1 |
| **3**  **4** | * **Revision of listing and defining important prefixes that deal with, numbers, colors, positions, and directions.** * **Learn standard medical and dental terms:**   **Direction of movement, position, and anatomical posture, and planes.**   * **Define, spell, and pronounce medical terms used in this lecture.** | 1  1 |
| **5**  **6** | * **Body structure and organization** * **Name and elements of the body systems:**   **Cells, tissues, organs, and systems.**   * **Commonly used anatomical descriptive and directional terms, planes, and regions.** * **Spell, define, and pronounce new terms in this lecture.** | 1  1 |
| **7** | **The Integumentary system**   * **Definition and parts of this system** * **Function and disorders.** * **Spell, pronounce, and explain important common terms in this system.** | 1 |
| **8**  **9** | **Gastrointestinal System**   * **Definition and parts of this system.** * **Function and disorders.** * **Spell, pronounce, and explain important common terms in this system.** | 1  1 |
| **10**  **11**  **12**  **13**  **14** | **Oral and Dental terminology**   * **Definition.** * **Main Branches of Dentistry** * **Teeth surfaces.** * **Common conditions that affect the oral cavity.** * **Spell, pronounce, and explain important terms related to each branch in dentistry.** | 1  1  1  1  1 |
| **15** | **CARDIOVASCULAR SYSTEM**   * **Definition and parts of this system.** * **Function and disorders.** * **Spell, pronounce, and explain important common terms in this system.** | 1 |
| **16**  **17** | **Blood, Lymph, and Immune Systems**   * **Definition and parts of this system.** * **Function and disorders.** * **Spell, pronounce, and explain important common terms in this system.** | 1  1 |
| **18** | **THE RESPIRATORY SYSTEM**   * **Definition and parts of this system.** * **Function and disorders.** * **Spell, pronounce, and explain important common terms in this system.** | 1 |
| **19** | **Skeletal system** | 1 |
| **20** | * **Definition and parts of this system.** * **Function and disorders.** * **Spell, pronounce, and explain important common terms in this system.** | 1 |
| **21** | **Muscular system** | 1 |
| **22** | * **Definition and parts of this system.** * **Function and disorders.** * **Spell, pronounce, and explain important common terms in this system.** | 1 |
| **23** | **Nervous system**   * **Definition and parts of this system.** * **Function and disorders.** * **Spell, pronounce, and explain important common terms in this system.** | 1 |
| **24** | **Genitourinary System**   * **Definition and parts of this system.** * **Function and disorders.** * **Spell, pronounce, and explain important common terms in this system.** | 1 |
| **25** | **Endocrine System**   * **Definition and parts of this system.** * **Function and disorders.** * **Spell, pronounce, and explain important common terms in this system.** | 1 |
| **26**  **27**  **28**  **29**  **30** | **Special Senses (Taste, touch, smell, sight, and hearing)**   * **Definition and parts of each special sense.** * **Function and disorders.** * **Spell, pronounce, and explain important common terms in the current lectures.** | 1  1  1  1  1 |
| **Total** |  | **30** |

***Department of Basic Sciences***

|  |  |  |
| --- | --- | --- |
| **1-Subject title** | Arabic Language |  |
| **2-Number of credits** | Theory:2 | Clinical: 0 |
| **3-Number of contact hours** | Theory:1h/wk. | Clinical: 0 |
| **4-Subject time** | First Year |  |

|  |  |  |
| --- | --- | --- |
| **العدد** | **موضوع المحاضرة** | **الساعات** |
| **1** | **الموضوعات الأدبية**  المتنبي (حياة الشاعر مع قصيدة بالإضافة الى التعليق النقدي) | **1** |
| **2** | بدر شاكر السياب (حياة الشاعر مع قصيدة بالإضافة الى التعليق النقدي ) | **1** |
| **3** | نازك الملائكة (حياة الشاعر مع قصيدة بالإضافة الى التعليق النقدي ) | **1** |
| **4** | الجواهري (حياة الشاعر مع قصيدة بالإضافة الى التعليق النقدي ) | **1** |
| **5** | **الموضوعات النحوية**  الجملة الاسمية | **1** |
| **6** | الجملة الفعلية | **1** |
| **7** | المبتدأ | **1** |
| **8** | الخبر | **1** |
| **9** | النواسخ | **1** |
| **10** | العلامات الاصلية والفرعية في الاسم والفعل المضارع | **1** |
| **11** | العلامات الفرعية في الاسم والفعل المضارع | **1** |
| **12** | علامات النصب الفرعية | **1** |
| **13** | علامات الجر الفرعية | **1** |
| **14** | علامات الجزم الفرعية | **1** |
| **15** | **الموضوعات الصرفية**  المشتقات | **1** |
| **16** | اسم الفاعل | **1** |
| **17** | صيغ المبالغة | **1** |
| **18** | اسم المفعول | **1** |
| **19** | الفعل المجرد والمزيد | **1** |
| **20** | المذكر والمؤنث وعلامات التأنيث | **1** |
| **21** | الاسم الناقص | **1** |
| **22** | جمع الاسم المنقوص | **1** |
| **23** | الاسم المقصور | **1** |
| **24** | جمع الاسم المقصور | **1** |
| **25** | الاسم الممدود | **1** |
| **26** | جمع الاسم الممدود | **1** |
| **27** | جموع التكسير | **1** |
| **28** | **الموضوعات الاملائية** .  الحذف والزيادة  الحروف التي تحذف  الحروف التي تزاد | **1** |
| **29** | الالف المقصورة والالف الممدوة  التاء المربوطة والتاء المفتوحة  الضاد والظاد | **1** |
| **30** | الهمزة واحكامها  علامات الترقيم | **1** |
| **Total** |  | **30** |

***Department of prosthodontics***

**A- Basic information**

|  |  |  |
| --- | --- | --- |
| **1-Subject title** | **Fundamentals of Dental Materials** |  |
| **2-Number of credits** | Theory:2 | Clinical:0 |
| **3-Number of contact hours** | Theory:1h/wk. | Clinical:0 |
| **4-Subject time** | First Year |  |

|  |  |  |
| --- | --- | --- |
| **Hours** | **Title Of The Lectures** | **No.** |
| **1** | **Dental material in dentistry** | **1** |
| **1** | **Terminology in dental material** | **2** |
| **1** | **Oral environment requirements and the characteristics of ideal dental material** | **3** |
| **1** | **Classifications of dental material according to use** | **4** |
| **1** | **Classifications of dental material according to use** | **5** |
| **1** | **Classifications of dental material according to its function.** | **6** |
| **1** | **Preventive material** | **7** |
| **1** | **Restorative material** | **8** |
| **1** | **Temporary material** | **9** |
| **1** | **Auxiliary material** | **10** |
| **1** | **Selection of dental material** | **11** |
| **1** | **General properties of dental material** | **12** |
| **1** | **Mechanical properties** | **13** |
| **1** | **Mechanical properties** | **14** |
| **1** | **Stress-strain curve** | **15** |
| **1** | **Chemical properties** | **16** |
| **1** | **Optical properties** | **17** |
| **1** | **Biological properties** | **18** |
| **1** | **Thermal properties** | **19** |
| **1** | **Physical properties** | **20** |
| **1** | **Gypsum products** | **21** |
| **1** | **Gypsum products** | **22** |
| **1** | **Gypsum products** | **23** |
| **1** | **Gypsum products** | **24** |
| **1** | **Polymers** | **25** |
| **1** | **Polymers** | **26** |
| **1** | **Polymers** | **27** |
| **1** | **Polymers** | **28** |
| **1** | **Polymers** | **29** |
| **1** | **Polymers** | **30** |
| **30** |  | **Total** |

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Summary: First Year.

Total Theories - Hours/ Week: 12

Total Theories - Hours/ year: 12x30= 360

Total Practical Hours/ Week: 11

Total Practical Hours/ year: 11x 30= 330

Total Hours / Year: 690

Total credits: 35