

5. Orthodontic Science

Lec.	Subject	hours
1.	Introduction general overview: a- Definition of orthodontics. b- Definition of malocclusion in comparison with normal. c- Orthodontic. d- General outline. e- Description of various conditions requiring orthodontic treatment.	4
2.	Orthodontic appliances: a- General description. b- Removable. c- Fixed. d- Myofunctional. e- Removable orthodontic appliances. 1- Description, function and requirements. 2- Properties of various components with emphasis on stainless steel wires and their manipulation. 3- Retention and anchorage. 4- Types. 5- Active components to move teeth. Labia-lingual movement. Mesio-distal movement Expansion and construction. Inter maxillary retractions. Retainer plates and other auxiliary appliance. The acrylic base plate. Requirements to allow function of the appliance. f- Repair and modification of Removable appliance.	12
3.	Growth and development: a- Embryology and growth of the face and jaws. b- Development relationship of the dental apparatus to the skeletal and cranial structures.	5
4.	Development relationship of the soft tissues. a- Tooth eruption. b- Process of eruption. C -Sequence of eruption.	5
5.	Stages of occlusion - definition of normal occlusion.	4