DSC-111

Course Objectives	Competencies
Course Objectives 1. Understand and appreciate the appropriate nomer for describing the anatomical terms in head and manatomy.	SURFACE ANATOMY uclature Upon completion of this unit, the student will be able to: 1. Identify the regions of the head. 2. Identify and describe the areas of the frontal region. a. Frontal eminence b. Supraorbital ridge
	c. Glabella 3. Locate and describe the areas of the parietal and occipital regions. 4. Identify and describe each of the following areas of the temporal region. a. Auricle b. External acoustic meatus c. Helix d. Lobule e. Tragus f. Antitragus
	g. Intertragic notch 5. Identify and describe the location of each of the following areas of the orbital region. a. Medial canthus b. Lateral canthus c. Upper and lower eyelid
	6. Identify and describe each of the following areas of the nasal region. a. Nasion b. Root of the nose c. Bridge of the nose d. Ala of the nose e. Naris f. Apex of the nose g. Nasolabial sulcus 7. Explain how the Golden Proportions relate to the face and how these ratios relate to the aesthetic concerns of the vertical dimension of the face. 8. Define, describe, and identify (where appropriate) the following structures of the external structures of the oral cavity:

Course Number:	
	a. Labium superious
	b. Labium inferious
	c. Philtrum d. Vermilion border
	e. Vermilion zone
	f. Labial commissure
	g. Tubercle
	h. Wet line
	i. Labiomental groove
	 j. Mental protuberance 9. Identify the components of and differentiate between the divisions of the oral cavity.
	lo. Define and describe the following terms relating to the oral cavity:
	a. Maxilla/maxillary
	b. Mandible/mandibular
	c. Buccal
	d. Lingual
	e. Palatal
	f. Facial/labial
	 Define, describe, and identify the following structures of the oral vestibule.
	a. Buccal mucosa
	b. Buccal fat pad c. Fordyce granules
	d. Parotid papilla
	e. Linea alba
	f. Caliculus angularis (commissural papule)
	g. Vestibule
	h. Vestibular fornix
	i. Mucobuccal fold
	j. Alveolar mucosa
	k. Frenum attachment (labial and buccal)
	Mucosal tag Locate and describe the following structures located on the dental arches:
	a. Maxillary tuberosity
	b. Retromolar pad
	13. Locate and describe the following areas of the gingiva:
	a. Mucogingival junction (line)

Course Number:	
	b. Attached gingival c. Stippling
	d. Interdental gingiva (interdental papilla) e. Free gingiva (marginal gingiva) f. Gingival sulcus 14. Define exostosis and locate the following bony protuberances: a. Exostosis b. Torus palatinus c. Mandibular torus 15. Define, describe, and locate the following structures of the oral cavity proper: a. Incisive papillae b. Palatine rugae c. Medial palatine raphe d. Hard palate e. Soft palate f. Uvula g. Vibrating line h. Fovea palatini i. Pterygomandibular fold j. Hamulus 16. Define, describe, and locate the following structures of the tongue: a. Dorsal surface of the tongue b. Ventral surface of the tongue c. Base of tongue d. Body of tongue e. Apex of the tongue
	f. Sulcus terminalis g. Foramen cecum h. Palatine tonsils i. Lingual tonsils
	j. Epiglottis k. Medial lingual sulcus (median sulcus) l. Circumvallate papillae m. Filiform papillae n. Fungiform papillae
	o. Foliate papillae

Course Number:		
ĩ	1	n Lingual framum
		p. Lingual frenum q. Plica fimbriota
		r. Lingual variscosities 7. Describe and define ankyloglossia; further relate its effect on speech. 8. Define, describe, and locate the following structures of the floor of the mouth: a. Alveolingual sulcus (sublingual sulcus) b. Plica sublingualis (sublingual fold/eminence) c. Sublingual caruncles
	1	9. Define, describe, and locate the following structures of the fauces a. Anterior faucial pillar (glossopalatine arch) b. Palatine tonsils c. Posterior faucial pillar (pharyngopalatine arch)
	2	 Given a diagram of the aforementioned areas, label and identify the aforementioned structures.
		 Given a Integrate the knowledge of the oral cavity and pharynx into the clinical practice of patient care.

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Course Objectives	Competencies
Course Objectives 1. Understand and appreciate the appropriate nomenclature for describing the anatomical terms in head and neck anatomy.	INTRODUCTION TO HEAD AND NECK ANATOMY Upon completion of this unit, the student will be able to define, locate, and describe the following anatomical terms: 1. anterior (ventral) 2. posterior (dorsal) 3. superior 4. inferior 5. apex 6. frontal (coronal) plane 7. horizontal plane
	8. median (midsagittal) plane 9. sagittal 10. midsagittal section 11. frontal section 12. transverse section 13. superficial 14. deep 15. medial lateral 16. proximal 17. distal 18. ipsilateral 19. contralateral

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		d. Lobule e. Tragus f. Antitragus g. Intertragic notch 5. Identify and describe the location of each of the following areas of the orbital region.
		a. Medial canthus b. Lateral canthus c. Upper and lower eyelid
		Identify and describe each of the following areas of the nasal region. a. Nasion b. Root of the nose c. Bridge of the nose d. Ala of the nose e. Naris f. Apex of the nose g. Nasolabial sulcus
		7. Explain how the Golden Proportions relate to the face and how these ratios relate to the aesthetic concerns of the vertical dimension of the face. 8. Define, describe, and identify (where appropriate) the following structures of the external structures of the oral cavity: a. Labium superious

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	b. Labium inferious	
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	a. Maxillary tuberosity b. Retromolar pad 13. Locate and describe the following areas of the gingiva: a. Mucogingival junction (line) b. Attached gingival	

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- c. Stippling
- d. Interdental gingiva (interdental papilla)
- e. Free gingiva (marginal gingiva)
- f. Gingival sulcus
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 - a. Exostosis
 - b. Torus palatinus
 - c. Mandibular torus
- 15. Define, describe, and locate the following structures of the oral cavity proper:
 - a. Incisive papillae
 - b. Palatine rugae
 - c. Medial palatine raphe
 - d. Hard palate
 - e. Soft palate
 - f. Uvula
 - g. Vibrating line
 - h. Fovea palatini
 - i. Pterygomandibular fold
 - j. Hamulus
- 16. Define, describe, and locate the following structures of the tongue:
 - a. Dorsal surface of the tongue
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 - c. Base of tongue
 - d. Body of tongue
 - e. Apex of the tongue
 - f. Sulcus terminalis
 - g. Foramen cecum
 - h. Palatine tonsils
 - Lingual tonsils
 - i. Epiglottis
 - k. Medial lingual sulcus (median sulcus)
 - Circumvallate papillae
 - m. Filiform papillae
 - n. Fungiform papillae
 - o. Foliate papillae
 - p. Lingual frenum

Course Number:		
	q. Plica fimbriota	١
	r. Lingual variscosities 17. Describe and define ankyloglossia; further relate its effect on speech. 18. Define, describe, and locate the following structures of the floor of the mouth: a. Alveolingual sulcus (sublingual sulcus) b. Plica sublingualis (sublingual fold/eminence) c. Sublingual caruncles 19. Define, describe, and locate the following structures of the fauces a. Anterior faucial pillar (glossopalatine arch) b. Palatine tonsils	

- structures. 21. Given a
- Integrate the knowledge of the oral cavity and pharynx into the clinical practice of patient care.

c. Posterior faucial pillar (pharyngopalatine arch)

20. Given a diagram of the aforementioned areas, label and identify the aforementioned

Course Objectives	Competencies
Understand and appreciate the appropriate nomenclature for describing the anatomical terms in head and neck anatomy.	THE HUMAN DENTITION: EVOLUTION, FORM AND FUNCTION Upon completion of this unit, the student will be able to: 1. Discuss and compare the evolution of the human dentition and relate the evolution to form and function. 2. Classify the dentition of any member of the animal kingdom as homodont, heterodont, monophyodont, diphyodont or polyphyodonty, given sufficient information. 3. Name the major functions of the human dentition. 4. Identify the three major geometric shapes of the human tooth crown. 5. Describe and relate each specific each specific shape of the coronal portions of the teeth to specific function of that tooth in relation to the following forms: triangular, trapezoidal, and rhomboidal. 6. Define occlusion. 7. Briefly explain what constitutes malocclusion. 8. Describe the general rules followed in locating contact areas of individual. 9. Give two reasons why contact areas are important. 10. Discuss two purposes embrasures serve and be able to describe the normal embrasure for. 11. Correctly name the embrasures on a two-dimensional drawing, an anatomical model, or in the oral cavity. 12. Describe the root form and discuss why it is necessary for the proper functioning of the different teeth. 13. Demonstrate knowledge of the protective functions of root anatomy by discussing root length, root number, root diameter, and root concavities (as presented) as related to periodontal health. 14. Analyze the physiologic tooth form protecting the periodontium, including fundamental curvatures, proximal contact areas, embrasures, facial contours at the cervical thirds of the crowns.

Course Objectives	Competencies	
	INCISORS	
Describe the detailed morphology of the permanent dentition.	Upon completion of this unit, the student will be able to: 1. Identify the general class traits for all incisors. 2. Describe the detailed morphology of the permanent maxillary and mandibular incisors by describing, selecting from a list the correct response, identifying and/or labeling any drawing the following features: a. Contours of any surface or margin of any surface b. Structural entities such as mamelons, grooves, pits, ridges, fossae, lobes, cingula, twists of incisal edges, etc. c. Height of contour d. Contact areas (position and e. Incisal edges in relation to the root axis line f. Relative dimensions and shape; that is, mesial/distal dimensions, labiolingual measurements, cervical dimensions, and root/crown ratios 3. Relate the shape of the incisors to their function in the oral cavity. 4. Make comparisons between the individual incisors. 5. Determine the correct Universal, Palmer, or FDI number for any given incisor. 6. Distinguish the arch traits that distinguish a maxillary incisor from a mandibular incisor. 7. Determine from a given diagram, or specimen whether a given incisor is maxillary, or mandibular; right or left. 8. Reproduce the accurate morphological characteristics of the permanent maxillary and mandibular incisors. 9. Describe the shape of the pulp chamber in relation to the external surface of the central and lateral incisors. 10. Differentiate between the root morphology of maxillary and mandibular incisors. 11. Discuss the proximal CEJ variations between various incisors. 12. Recognize an incisor clinically and radiographically. 13. Identify extracted central and lateral incisors and determine whether the given tooth is a maxillary, mandibular, permanent, or primary; further determine whether it is a right or left. 14. Reproduce the accurate morphological characteristics of the permanent incisor teeth on graph paper. 15. Describe any developmental disturbances/anomalies, commonly seen in this class of teeth. 16. Identify the calcification and eruption dates ass	

	Course Objectives	Competencies
6.		Upon completion of this unit, the student will be able to: 1. Identify the general class traits for all canines. 2. Describe the detailed morphology of the permanent maxillary and mandibular canines by describing, selecting from a list the correct response, identifying and/or labeling any drawing the following features: a. Contours of any surface or margin of any surface b. Structural entities such as mamelons, grooves, pits, ridges, fossae, lobes, cingula, twists of incisal edges, etc. c. Height of contour d. Contact areas (position/location) e. Incisal edges in relation to the root axis line f. Relative dimensions and shape; that is, mesial/distal dimensions, labiolingual measurements, cervical dimensions, and root/crown ratios 3. Relate the shape of the canines to their function in the oral cavity. 4. Make comparisons between the individual canines. 5. Determine the correct Universal, Palmer, or FDI number for any given canine. 6. Distinguish the arch traits that distinguish a mexillary cenine from a mandibular canine. 7. Determine from a given diagram, or specimen whether a given canine is maxillary, or mandibular; right or left. 8. Reproduce the accurate morphological characteristics of the permanent maxillary and mandibular canines. 9. Describe the shape of the pulp chamber in relation to the external surface of the canines. 10. Differentiate between the root morphology of maxillary and mandibular canines; root concavities, root length and diameter and relate this to its integrity in the dentition. 11. Discuss the proximal CEI variations between various canines. 12. Recognize a canine clinically and radiographically. 13. Identify extracted canines and determine whether the given tooth is a maxillary, mandibular,
		9. Describe the shape of the pulp chamber in relation to the external surface of the canines. 10. Differentiate between the root morphology of maxillary and mandibular canines; root concavities, root length and diameter and relate this to its integrity in the dentition. 11. Discuss the proximal CEJ variations between various canines. 12. Recognize a canine clinically and radiographically. 13. Identify extracted canines and determine whether the given tooth is a maxillary, mandibular,
		permanent, or primary; further determine whether it is a right or left. 14. Reproduce the accurate morphological characteristics of the permanent canine teeth on graph paper. 15. Describe any developmental disturbances/anomalies, commonly seen in this class of teeth. 16. Identify the calcification and eruption dates associated with the permanent canines. 17. Relate the chronology of the root completion times for the permanent canines. 18. Relate the canine's lingual anatomy to its transitional and functional role.

Course Objectives	Competencies
6. Describe the detailed morphology of the permanent dentition.	Upon completion of this unit, the student will be able to: 1. Identify the general class traits for all molars. 2. Identify the type traits that assist in determining a particular maxillary molar. 3. Identify the type traits that assist in determining a particular mandibular molars. 4. Describe the detailed morphology of the permanent maxillary and mandibular molars by describing, selecting from a list the correct response, identifying and/or labeling any drawing the following features: a. Contours of any surface or margin of any surface b. Structural entities such as grooves, pits, ridges, fossae, lobes, etc. c. Height of contour on facial and lingual surfaces d. Contact areas (position/location) on mesial and distel surfaces e. Relative dimensions and shape; that is, mesial/distal dimensions, labiolingual measurements, cervical dimensions, and root/crown ratios 5. Briefly describe the components of the maxillary molar cusp triangle. 6. Relate the shape of the molars to their function in the oral cavity. 7. Make comparisons between the individual molars. 8. Determine the correct Universal, Palmer, or FDI number for any given molar. 9. Distinguish the arch traits that distinguish a maxillary molar from a mandibular molar. 10. Determine from a given diagram, radiograph, or specimen whether a given molar is maxillary, or mandibular; 1°, 2° 3°, or right or left. 11. Reproduce the accurate morphological characteristics of the permanent maxillary and mandibular molars. 12. Relate the occlusal groove anatomy to caries initiator. 13. Describe the shape of the pulp chamber in relation to the external surface of the molars. 14. Differentiate between the root morphology of maxillary and mandibular molars; root concavities, root length and diameter and relate this to its integrity in the dentition. 15. Identify how the placement of the root apices assists in determining a specific molar. 16. Discuss the proximal CEI variations between the various molars. 17. Identify now the placement of the root apices
	 Identify how the placement of the root apices assists in determining a specific molar. Discuss the proximal CEJ variations between the various molars. Identify extracted molars and determine whether the given tooth is a maxillary, mandibular, permanent, or primary; further determine whether it is a right or left.
	22. Recognize the molar in a changing dentition.23. Given various teeth covered in the permanent dentition, place these teeth in order of eruption.

Course Objectives	Competencies
	OCCLUSION
 Describe the intra-arch relationship of the teeth and its effect on the health of the supportive structures. Integrate the knowledge of the dentitions into the care and dental treatment of patients. 	Upon completion of this unit, the student will be able to: 1. Define occlusion and identify its importance. 2. Discuss ideal occlusion and its relationship to contact points in the dentition. 3. Discuss and differentiate between centric relation and centric occlusion. 4. Identify the three areas of centric stops; further state their function in occlusion. 5. Define interdigitation. 6. Discuss what is meant by physiologic rest position. 7. Discuss the importance of freeway space. 8. Identify the three sections of the dental arch; further state their curvatures. 9. Relate the phases of arch development and thoroughly discuss the changes that are occurring during these phases. 10. Identify the compensating curves of the dental arches and briefly relate their function in occlusion. 11. Describe the ways food is broken apart and released from the tooth. 12. Discuss the orientation of individual teeth in the dental arches and why these teeth are oriented in the manner. 13. List, describe, and differentiate between the various eccentric jaw relationships. 14. Differentiate between incisal guidance and anterior guidance and describe its role in protrusive mandibular movements. 15. Differentiate between the working side and the non-working side during lateral excursion. 16. Discuss the function of the canine rise. 17. Differentiate between group function and balancing interference when discussing occlusal movements. 18. List, identify from a diagram and discuss the profiles of the face and their relationship to tooth /jaw positioning. 19. Describe the effects of the terminal plane in the primary dentition. 20. Briefly discuss the interrelationship of cusps and incisal ridges in both the primary and secondary dentitions. a. Ideal occlusion b. Class I occlusion b. Class I occlusion

- c. Class I with a tendency to Class II occlusion
- d. Class I with a tendency to Class III occlusion
- e. Class II, Division I
- f. Class II, Division II
- Class III
- 22. Identify and describe the malocclusion terms for individual teeth and groups of teeth.

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- a. Openbite
- b. Edge-to-edge/end-to-end
- c. Crossbite
- d. Overjet
- e. Underjet
- f. Overbite
 - Slight
 - Moderate
 - Severe
 - Impinging
- g. Versions
 - Labioversion
 - Linguoversion
 - Buccoversion
 - Supraversion
 - Torsoversion
 - Infraversion
- Describe and give examples of functional and nonfunctional (working and nonworking) occlusal contacts.
- 24. Differentiate between primary occlusal trauma and secondary occlusal trauma.
- 25. Given a model, or clinic patient, be able to classify the occlusal relationship.
- Given a clinic patient, analyze the causative factors resulting in malocclusion and determine the effects on the periodontium