

**HIBBING COMMUNITY COLLEGE
COURSE OUTLINE**

COURSE TITLE & NUMBER: DAS1507: Dental Anatomy 1

CREDITS: 3 (3 Lec / 0 Lab)

PREREQUISITES: READ 0920

CATALOG DESCRIPTION:

Dental Anatomy 1 is an introduction to all the oral structures and their functions within the human body. The student becomes aware of cell structure and formation and the development of the head and dental structures. This course is a prerequisite for Dental Anatomy 2.

OUTLINE OF MAJOR CONTENT AREAS:

- I. Prefixes and suffixes
- II. Descriptive terms identifying areas of the body
- III. Body planes
- IV. Body systems and tissues
- V. The human organism
 - A. Cells
 - B. Tissues and organs
 - C. Body systems
 - D. Skeletal system
 - E. Anatomical landmarks and bones of the skull
- VI. Bones of the cranium
 - A. Frontal bone
 - B. Parietal bones
 - C. Occipital bone
 - D. Temporal bones
 - E. Sphenoid bone
 - F. Ethmoid bone
- VII. Bones of the face
 - A. Zygomatic bones
 - B. Maxillary bones
 - C. Palatine bones
 - D. Nasal bones
 - E. Lacrimal bones
 - F. Vomer
 - G. Inferior nasal conchae
 - H. Mandible
- VIII. Auditory ossicles
- IX. Hyoid bone
- X. Tempromandibular joint (TMJ)
 - A. Meniscus

- B. Capsular ligament
- C. Movements of the TMJ
- D. Dysfunction of the TMJ
- XI. Muscular system
 - A. Functions
 - B. Type of muscle
 - 1. Skeletal
 - 2. Smooth
 - 3. Cardiac
 - C. Major muscles of mastication
 - 1. Masseter
 - 2. Internal pterygoid
 - 3. External pterygoid
 - 4. Temporal
 - D. Muscles of facial expression
 - 1. Buccinator
 - 2. Orbicularis oris
 - 3. Mentalis
 - 4. Zygomatic major
 - E. Muscles of floor of the mouth
 - 1. Mylohyoid
 - 2. Digastric
 - 3. Stylohyoid
 - 4. Geniohyoid
 - F. Extrinsic muscles of the tongue
 - 1. Genioglossus
 - 2. Hyoglossus
 - 3. Styloglossus
- XII. Ligament functions
- XIII. Mandibular ligaments
- XIV. Paranasal sinuses
 - A. Sinusitis symptoms
 - B. Sinus functions
- XV. Salivary glands
 - A. Salivary secretions
 - B. Parotid
 - C. Submandibular glands
 - D. Sublingual glands
- XVI. Oral facial structures and oral cavity
 - A. Lips
 - B. Cheeks
 - C. Tongue
 - D. Oral mucosa
 - E. Hard palate
 - F. Soft palate
 - G. Gag reflex

- XVII. Dental arches
 - A. Dentition
 - 1. Primary
 - 2. Permanent
 - B. Mixed dentition
- XVIII. Types of teeth and functions
 - A. Incisors
 - B. Cuspids (canine)
 - C. Premolars (bicuspid)
 - D. Molars
- XIX. Tooth tissues and functions
 - A. Enamel
 - B. Dentin
 - C. Cementum
 - D. Pulp
- XX. Numbering systems
 - A. Universal numbering system
 - B. Federation Dentaire International System
- XXI. Tooth morphology
- XXII. Nervous system
 - A. Cranial nerves
 - B. Trigeminal nerve
- XXIII. Circulatory system
 - A. Arterial flow to dental structures
 - B. Veinous flow to dental structures
- XXIV. Lymphatic system
 - A. Function
 - B. Lymph nodes

COURSE GOALS/OBJECTIVES/OUTCOMES:

Students will:

1. list common prefixes and suffixes relative to dentistry.
2. describe anatomic position.
3. explain the different body planes.
4. explain the human organism and cell components.
5. list body systems.
6. identify and locate bones of the skull.
7. identify and locate bones of the face.
8. identify temporomandibular joint parts.
9. identify and locate the muscles of mastication and facial expression.
10. list the hyoid muscles.
11. list the muscles of the tongue.
12. identify paranasal sinuses.
13. list major salivary glands.
14. list and identify oral structures.

15. identify the dental arches.
16. identify the permanent and primary dentition.
17. list the types of teeth and functions.
18. list tooth tissues and functions.
19. identify the tooth numbering systems.
20. define tooth morphology.
21. identify the nervous system.
22. trace the arterial and venous flow to dental structures.
23. identify the lymphatic system
24. list the lymph nodes.
25. describe the function of the lymphatic system.

MNTC GOALS AND COMPETENCIES MET:

N/A

HCC COMPETENCIES MET:

Working Productively & Cooperatively
 Communicating Clearly & Effectively
 Thinking Creatively & Critically
 Social/Civic Responsibility

STUDENT CONTRIBUTIONS:

Attendance is crucial in this class. The student is expected to attend all lectures and working sessions, participate in class activities, participate and implement input into class discussions, and hand in outside assignments when due.

STUDENT ASSESSMENT SHALL TAKE PLACE USING INSTRUMENTS SELECTED/DEVELOPED BY THE COURSE INSTRUCTOR.

SPECIAL INFORMATION: (SPECIAL FEES, DIRECTIVES ON HAZARDOUS MATERIALS, TEXTBOOK USED, ETC.)

AASC APPROVAL DATE:	September 17, 2014
REVIEW DATE:	September 2019

DAS1507: so
091714