HIBBING COMMUNITY COLLEGE
COURSE OUTLINE

COURSE TITLE & NUMBER: Dental Anatomy 1: DAS1507
CREDITS: 3 (3 Lec / 0 Lab)
PREREQUISITES:

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:
1. Prefixes and suffixes
2. Descriptive terms identifying areas of the body
3. Body planes
4. Body systems and tissues
5. The human organism
   A. Cells
   B. Tissues and organs
   C. Body systems
   D. Skeletal system
   E. Anatomical landmarks and bones of the skull
6. Bones of the cranium
   A. Frontal bone
   B. Parietal bones
   C. Occipital bone
   D. Temporal bones
   E. Sphenoid bone
   F. Ethmoid bone
7. 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
8. Auditory ossicles
9. Hyoid bone
10. Tempromandibular joint (TMJ)
    A. Meniscus
    B. Capsular ligament
C. Movements of the TMJ
D. Dysfunction of the TMJ

11. 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

12. Ligament functions
13. Mandibular ligaments
14. Paranasal sinuses
   A. Sinusitis symptoms
   B. Sinus functions
15. Salivary glands
   A. Salivary secretions
   B. Parotid
   C. Submandibular glands
   D. Sublingual glands
16. Oral facial structures and oral cavity
   A. Lips
   B. Cheeks
   C. Tongue
   D. Oral mucousa
   E. Hard palate
   F. Soft palate
   G. Gag reflex
17. Dental arches
A. Dentition
   1. Primary
   2. Permanent
B. Mixed dentition
18. Types of teeth and functions
   A. Incisors
   B. Cuspids (canine)
   C. Premolars (bicuspids)
   D. Molars
19. Tooth tissues and functions
   A. Enamel
   B. Dentin
   C. Cementum
   D. Pulp
20. Numbering systems
   A. Universal numbering system
   B. Federation Dentaire International System
21. Tooth morphology
22. Nervous system
   A. Cranial nerves
   B. Trigeminal nerve
23. Circulatory system
   A. Arterial flow to dental structures
   B. Veinous flow to dental structures
24. Lymphatic system
   A. Function
   B. Lymph nodes

**COURSE GOALS/OBJECTIVES/OUTCOMES:**
1. Students will describe anatomic positions, body planes, & body systems as they relate to the general health of the body.
2. Students will identify and locate structures of the head and neck including bones, muscles, sinuses, salivary glands, and oral landmarks.
3. Students will identify permanent and primary teeth, their functions, and characteristics.
4. Students will identify the dental arches and tooth numbering systems.
5. Students will define terminology relative to teeth and oral tissues, which includes prefixes and suffixes used in dentistry.
6. Students will trace and understand the arterial and venous flow to the dental structures.

**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.)

Curriculum Committee Approval Date: May 1, 2018

AASC APPROVAL DATE: May 9, 2018
REVIEW DATE: May 2023