

## 2011 Mississippi Curriculum Framework

### Postsecondary Dental Hygiene Technology

(Program CIP: 51.0602 – Dental Hygienist)

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Standards in this document are based on information from the following organizations:

### Dental Assisting National Board Certified Dental Assistant Examination Topics

Commission on Dental Accreditation. (2010). *Accreditation standards for dental hygiene education programs*. Chicago, IL: American Dental Association.

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### Related Academic Standards

CTB/McGraw-Hill LLC. (2005). *Tests of adult basic education, Forms 9 and 10*. Monterey, CA: Author.

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## Preface

### Dental Hygiene Research Synopsis

Articles, books, Web sites, and other materials listed at the end of each course were considered during the revision process. *ADHA Journal of Dental Hygiene* and the *Commission on Dental Accreditation* were especially useful in providing insight into trends and issues in the field. These references are suggested for use by instructors and students during the study of the topics outlined.

Industry advisory team members from colleges throughout the state were asked to give input related to changes to be made to the curriculum framework. Specific comments related to soft skills needed in this program included initiative, punctuality, great personality, and people skills, as well as dependability and team cooperation. Occupational-specific skills stated included instrumentation and patient education. Safety practices emphasized included infection control and universal precautions.

Instructors from colleges throughout the state were also asked to give input on changes to be made to the curriculum framework. Changes suggested for the curriculum included increasing both clinical and instruction hours as well as adding more digital components to the curriculum.

### Curriculum

The following national standards were referenced in each course of the curriculum:

- CTB/McGraw-Hill LLC *Tests of Adult Basic Education, Forms 9 and 10 Academic Standards*
- *21<sup>st</sup> Century Skills*
- *2010 Accreditation Standards for Dental Hygiene Education Programs*

### Needs of the Future Workforce

Dental Hygienist is among the fastest growing occupations. Job prospects will be good for most graduates, but competition will be keen in some areas. Older dentists, who have been less likely to employ dental hygienists, are leaving the occupation and will be replaced by recent graduates, who are more likely to employ one or more hygienists. In addition, as dentists' workloads increase, they are expected to hire more hygienists to perform preventive dental care, such as cleaning, so that they may devote their own time to more complex procedures. (US Bureau of Labor Statistics, 2010). The occupation is projected to grow 30 percent in Mississippi and 37 percent in the United States (EMSI, 2011).

Region	2010 Jobs	2020 Jobs	Change	% Change	Openings	2010 Median Hourly Earnings
Regional Total	1,273	1,657	384	30%	653	\$25.25
National Total	175,407	223,183	47,776	27%	84,083	\$32.36

Industry and instructor comments, along with current research, were considered by the curriculum revision team during the revision process, and changes were made as needed and appropriate. Many of the skills and topics noted in the research were already included in the curriculum framework. Specific changes made to the curriculum at the date curriculum revision meeting included:

- Competencies and objectives were reviewed to ensure accuracy and appropriateness.
- DHT 1512, formerly named Periodontics, was renamed Periodontology.
- The Recommended Tools and Equipment list was updated.

### **Assessment**

Students will be assessed using the *Dental Hygiene Licensure Exam* administered by the Council of Interstate Testing Agencies (CITA). <http://www.citaexam.com/dhcontent.html>

### **Alternate Assessments**

No alternate assessment has been approved at this time.

### **Professional Learning**

It is suggested that instructors participate in professional learning related to the following concepts:

- How to use the program Blackboard site
- Differentiated instruction – To learn more about differentiated instruction, please go to [http://www.paec.org/teacher2teacher/additional\\_subjects.html](http://www.paec.org/teacher2teacher/additional_subjects.html) and click on Differentiated Instruction. Work through this online course and review the additional resources.

### **Program Exceptions**

Based on the following position by the American Dental Association, only a degree program is offered for Dental Hygiene:

*Dental hygienists receive their education through academic programs at community colleges, technical colleges, dental schools or universities. The majority of community college programs take at least two years to complete, with graduates receiving associate degrees. Receipt of this degree allows a hygienist to take licensure examinations (national and state or regional), become licensed and to work in a dental office.*

*It is the position of the ADHA that graduation from an accredited dental hygiene program of at least two academic years of full-time instruction in an institution of higher education and successful completion of the National Board Dental Hygiene Examination is the minimum educational preparation necessary for dental hygiene licensure and practice. The ADHA opposes reduction of educational standards and/or requirements for licensure of dental hygienists.*

## Foreword

As the world economy continues to evolve, businesses and industries must adopt new practices and processes in order to survive. Quality and cost control, work teams and participatory management, and an infusion of technology are transforming the way people work and do business. Employees are now expected to read, write, and communicate effectively; think creatively, solve problems, and make decisions; and interact with each other and the technologies in the workplace. Career–technical programs must also adopt these practices in order to provide graduates who can enter and advance in the changing work world.

The curriculum framework in this document reflects these changes in the workplace and a number of other factors that impact local career–technical programs. Federal and state legislation calls for articulation between high school and community college programs, integration of academic and career skills, and the development of sequential courses of study that provide students with the optimum educational path for achieving successful employment. National skills standards, developed by industry groups and sponsored by the U.S. Department of Education and Labor, provide career and technical educators with the expectations of employers across the United States. All of these factors are reflected in the framework found in this document.

Referenced throughout the courses of the curriculum are the 21st Century Skills, which were developed by the Partnership for 21st Century Skills, a group of business and education organizations concerned about the gap between the knowledge and skills learned in school and those needed in communities and the workplace. A portion of the 21st Century Skills addresses learning skills needed in the 21st century, including information and communication skills, thinking and problem-solving skills, and interpersonal and self-directional skills. Another important aspect of learning and working in the 21st century involves technology skills. The International Society for Technology in Education, developer of the National Educational Technology Standards (NETS), was a strategic partner in the Partnership for 21st Century Skills. Each postsecondary program of instruction consists of a program description and a suggested sequence of courses that focus on the development of occupational competencies. The MS-CPAS2 blueprints are based upon the suggested course sequences to allow for year 1 and year 2 assessments for all exit options. Please refer to the blueprint online. Each career–technical course in this sequence has been written using a common format, which includes the following components:

- Course Name – A common name that will be used by all community and junior colleges in reporting students
- Course Abbreviation – A common abbreviation that will be used by all community and junior colleges in reporting students
- Classification – Courses may be classified as the following:
  - Career–technical core – A required career–technical course for all students
  - Area of concentration (AOC) core – A course required in an area of concentration of a cluster of programs
  - Career–technical elective – An elective career–technical course
  - Related academic course – An academic course that provides academic skills and knowledge directly related to the program area

- Academic core – An academic course that is required as part of the requirements for an associate’s degree
- Description – A short narrative that includes the major purpose(s) of the course and the recommended number of hours of lecture and laboratory activities to be conducted each week during a regular semester
- Prerequisites – A listing of any courses that must be taken prior to or on enrollment in the course
- Corequisites – A listing of courses that may be taken while enrolled in the course
- Competencies and Suggested Objectives – A listing of the competencies (major concepts and performances) and the suggested student objectives that will enable students to demonstrate mastery of these competencies

The following guidelines were used in developing the program(s) in this document and should be considered in compiling and revising course syllabi and daily lesson plans at the local level:

- The content of the courses in this document reflects approximately 75% of the time allocated to each course. The remaining 25% of each course should be developed at the local district level and may reflect the following:
  - Additional competencies and objectives within the course related to topics not found in the state framework, including activities related to specific needs of industries in the community college district
  - Activities that develop a higher level of mastery on the existing competencies and suggested objectives
  - Activities and instruction related to new technologies and concepts that were not prevalent at the time the current framework was developed or revised
  - Activities that include integration of academic and career–technical skills and course work, school-to-work transition activities, and articulation of secondary and postsecondary career–technical programs
  - Individualized learning activities, including work-site learning activities, to better prepare individuals in the courses for their chosen occupational areas
- Sequencing of the course within a program is left to the discretion of the local district. Naturally, foundation courses related to topics such as safety, tool and equipment usage, and other fundamental skills should be taught first. Other courses related to specific skill areas and related academics, however, may be sequenced to take advantage of seasonal and climatic conditions, resources located outside of the school, and other factors.
- Programs that offer an Associate of Applied Science degree must include a minimum 15-semester-credit-hour academic core. Specific courses to be taken within this core are to be determined by the local district. Minimum academic core courses are as follows:
  - 3 semester credit hours (sch)                      Math/Science Elective
  - 3 semester credit hours                        Written Communications Elective
  - 3 semester credit hours                        Oral Communications Elective
  - 3 semester credit hours                        Humanities/Fine Arts Elective



## Table of Contents

Acknowledgments.....	2
Preface.....	3
Foreword.....	5
Program Description.....	9
Suggested Course Sequence .....	11
Dental Hygiene Technology Courses .....	13
Fundamentals of Dental Hygiene.....	13
Dental Anatomy .....	17
Head and Neck Anatomy .....	19
Oral Histology and Embryology.....	22
Dental Radiology .....	25
Clinical Dental Hygiene.....	28
Periodontics.....	31
Dental Hygiene Seminar I.....	34
Dental Hygiene Seminar II .....	37
General/Oral Pathology .....	39
Clinical Dental Hygiene II.....	42
Clinical Dental Hygiene III.....	45
Dental Hygiene Materials .....	48
Dental Pharmacology.....	51
Community Dental Health .....	54
Dental Ethics/Law.....	57
Dental Hygiene Seminar III.....	59
Dental Hygiene Seminar IV.....	62
Recommended Tools and Equipment .....	65
Appendix A: Standards Based on the Commission on Dental Accreditation.....	69
Appendix B: Related Academic Standards.....	70
Appendix C: 21 <sup>st</sup> Century Skills .....	71



## Program Description

The Dental Hygiene Technology Program is a general education and clinical dental hygiene experience to prepare one for a career in the dental hygiene profession. All phases of dental hygiene education are covered and practiced by clinical experience. CPR-Health Care Provider is a prerequisite for the program. The curriculum requires a minimum of 85 semester hours of study. The program requires 50 hours of dental hygiene courses, 32-33 academic hours leading to an Associate Degree in Dental Hygiene, and an additional 3 hour elective. A graduate will be eligible to take the examination of the National Board of Dental Examiners as well as individual state board examinations for dental hygiene.

The Career-technical courses in the following list are required in the Dental Hygiene Technology curriculum:

- 5 semester credit hours (sch) Fundamentals of Dental Hygiene
- 4 sch Dental Radiology
- 5 sch Clinical Dental Hygiene I
- 2 sch Dental Anatomy
- 2 sch Head and Neck Anatomy
- 3 sch Dental Hygiene Materials
- 2 sch Oral Histology and Embryology
- 5 sch Clinical Dental Hygiene II
- 2 sch Periodontics
- 2 sch Dental Pharmacology
- 6 sch Clinical Dental Hygiene III
- 3 sch Community Dental Health
- 2 sch Dental Ethics/Law
- 1 sch Dental Hygiene Seminar I
- 1 sch Dental Hygiene Seminar II
- 1 sch Dental Hygiene Seminar III
- 1 sch Dental Hygiene Seminar IV
- 3 sch General/Oral Pathology

The following academic courses are required in the Dental Hygiene Technology curriculum:

- 4 sch Anatomy and Physiology I (BIO 2514)
- 4 sch Anatomy and Physiology II (BIO 2524)
- 3 sch Math/Science Elective
- 3 sch Written Communications Elective
- 3-4 sch Microbiology (BIO 2923 or 2924)
- 3 sch Social/Behavioral Science Elective\*
- 3 sch Humanities/Fine Arts Elective
- 3 sch Oral Communications Elective
- 3 sch Principles of Nutrition or Nutrition (HEC 1233 or 1253)
- 3 sch General Psychology I (PSY 1513)

\* Introduction to Sociology I (SOC 2113) is required by national standards.

An additional 3 hour elective should be selected from the following list:

English Composition II (ENG 1113)  
Introduction to Chemistry (CHE 1113)  
General Chemistry I (CHE 1213)  
General Chemistry Laboratory I (CHE 1211)  
Introduction to Computer Concepts (CSC 1113)  
Fundamentals of Microcomputer Application (CPT 1113)

Industry standards are taken from the Commission on Dental Accreditation's Accreditation Standards for Dental Hygiene Education Programs (2011).

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**Suggested Course Sequence\***  
**Dental Hygiene Technology**  
**Associate of Applied Science Degree**

FIRST YEAR

5 sch Fundamentals of Dental Hygiene (DHT 1115) 2 sch Dental Anatomy (DHT 1212) 4 sch Dental Radiology (DHT 1314) 1 sch Dental Hygiene Seminar I (DHT 1911) 4 sch Anatomy and Physiology I (BIO 2514) 3 sch Math/Science Elective <hr style="width: 10%; margin-left: 0;"/> 19 sch	4 sch Anatomy and Physiology II (BIO 2524) 5 sch Clinical Dental Hygiene I (DHT 1415) 3-4 sch Microbiology (BIO 2923 or 2924) 2 sch Periodontics (DHT 1512) 1 sch Dental Hygiene Seminar II (DHT 1921) 2 sch Oral Histology and Embryology (DHT 1232) 2 sch Head and Neck Anatomy (DHT 1222) <hr style="width: 10%; margin-left: 0;"/> 19-20 sch
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SUMMER TERM

3 sch Written Communications Elective
3 sch Social/Behavior Science Elective **
3 sch General Psychology I (PSY 1513)
3 sch Humanities/Fine Arts Elective
<hr style="width: 10%; margin-left: 0;"/> 12 sch

SECOND YEAR

5 sch Clinical Dental Hygiene II (DHT 2425) 3 sch Dental Hygiene Materials (DHT 2613) 3 sch General/Oral Pathology (DHT 2233) 3 sch Principles of Nutrition (FCS 1233) or Nutrition (FCS 1253) 2 sch Dental Pharmacology (DHT 2712) 1 sch Dental Hygiene Seminar III (DHT 2931) <hr style="width: 10%; margin-left: 0;"/>	6 sch Clinical Dental Hygiene III (DHT 2436) 3 sch Community Dental Health (DHT 2813) 2 sch Dental Ethics/Law (DHT 2922) 3 sch Oral Communications Elective 1 sch Dental Hygiene Seminar IV (DHT 2941) 3 sch Elective <hr style="width: 10%; margin-left: 0;"/> 18 sch
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17 sch

\* Students who lack entry level skills in math, English, science, etc. will be provided related studies.

\*\* Introduction to Sociology I (SOC 2113) is required by national standards.

**APPROVED ELECTIVES FOR DENTAL HYGIENE TECHNOLOGY:**

English Composition II (ENG 1123)

Chemistry Survey (CHE 1113)

General Chemistry I (CHE 1213)

General Chemistry Laboratory I (CHE 1211)

Introduction to Computer Concepts (CSC 1113)

Fundamentals of Microcomputer Applications (CPT 1113)

## Dental Hygiene Technology Courses

**Course Name:** Fundamentals of Dental Hygiene

**Course Abbreviation:** DHT 1115

**Classification:** Career-Technical Core

**Description:** This course will provide the dental hygiene student with the fundamental knowledge and skills necessary for interaction with clients. The lecture portion will focus on the history, philosophy, and theories relevant to the profession of dental hygiene. Lecture highlights will include discussion of the latest health care settings, trends, and approaches to comprehensive care. The preclinical portion will provide the student with opportunities for the development of psychomotor skills and opportunities for interaction with clients, which will provide emphasis on trust, care, and responsibility as part of becoming a professional. (5 sch: 2 hr. lecture, 6 hr. lab)

**Prerequisite:** None

<b>Competencies and Suggested Objectives</b>	
1.	Discuss the history, philosophy, and theories relevant to the dental hygiene profession. <sup>DH1</sup> <ol style="list-style-type: none"> <li>a. Define, in writing and through conversation, medical and dental terminology.</li> <li>b. Apply professional practices/behaviors and utilize the ethics of the profession of dental hygiene.</li> <li>c. Demonstrate knowledge concerning the historical movement that precipitated the profession of dental hygiene.</li> <li>d. Assess the need for procedures involved in maintaining, cleaning, and operating dental equipment.</li> <li>e. Explain the rationale behind operator and office aseptic techniques.</li> <li>f. Analyze the need for examination and scaling instruments.</li> <li>g. Explain the rationale behind manual and motor-driven polishing procedures.</li> <li>h. Assess the rationale behind and importance of operator expertise in answering client questions.</li> </ol>
2.	Discuss the issues relevant to establishing trust, care, and responsibility with clients. <sup>DH1, DH4</sup> <ol style="list-style-type: none"> <li>a. Apply professional behaviors that promote respect for both the health care professional and client.</li> <li>b. Explain what can be learned of the client's story or dialogue history.</li> <li>c. Assess the latest health care settings, trends, and approaches of the dental hygiene profession.</li> </ol>
3.	Develop psychomotor skills necessary for the delivery of dental hygiene services. <sup>DH3, DH4</sup> <ol style="list-style-type: none"> <li>a. Demonstrate the ability to operate the dental chair and other operator equipment.</li> <li>b. Demonstrate the ability to position the patient and self to obtain maximum visibility, accessibility, and comfort.</li> <li>c. Maintain the clinical equipment used in the dental hygiene clinic.</li> <li>d. Demonstrate the procedure to sterilize and disinfect specific clinical materials, equipment, and instruments.</li> </ol>

<ul style="list-style-type: none"> <li>e. Perform an assessment of vital signs on a patient.</li> <li>f. Access intraoral and extraoral conditions using palpation and visual detections for abnormalities.</li> <li>g. Document intraoral and extraoral clinical manifestations on charts.</li> <li>h. Discuss emergency procedures given specific emergency situations.</li> <li>i. Formulate an appropriate, sequential Dental Hygiene Treatment Plan for individuals with specific needs based on the results of data gathered during assessment procedures.</li> <li>j. Demonstrate use of examination and scaling instruments.</li> <li>k. Practice manual and motor-driven polishing procedures.</li> </ul>
<p>4. Recognize the basic etiology of dental disease, related treatment, and preventive measures. DH3, DH4</p> <ul style="list-style-type: none"> <li>a. Explain basic constituents and the appearance of plaque and dental calculus, and its effect on the dental health of the client.</li> <li>b. Identify types, causes, and possibilities for removal of specific stains and accretions.</li> <li>c. Apply the concept of selective polishing procedures for all clients.</li> <li>d. Apply procedures necessary for the dental prophylaxis polishing techniques (materials, methods, and equipment).</li> <li>e. Counsel patients on available sources of fluoride for use as a dental disease preventive.</li> <li>f. Demonstrate all topical fluoride techniques.</li> </ul>

## STANDARDS

### *Standards Based on the Commission on Dental Accreditation*

- DH1 General education content including oral and written communications, psychology, and sociology.
- DH3 Dental sciences including
- DH3A tooth morphology;
  - DH3B head, neck, and oral anatomy;
  - DH3C oral embryology and histology;
  - DH3D oral pathology;
  - DH3E radiography;
  - DH3F periodontology;
  - DH3G pain management; and
  - DH3H dental materials.
- DH4 Dental hygiene science including
- DH4A oral health education and preventive counseling,
  - DH4B health promotion,
  - DH4C patient management,
  - DH4D clinical dental hygiene,
  - DH4E provision of services for and management of patients with special needs,
  - DH4F community dental/oral health,
  - DH4G medical and dental emergencies including basic life support,
  - DH4H legal and ethical aspects of dental hygiene practice,
  - DH4I infection and hazard control management, and

DH4J the provision of oral health care services to patients with blood borne infectious diseases.

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*Related Academic Standards*

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- R1 Interpret Graphic Information (forms, maps, reference sources)
- R2 Words in Context (same and opposite meaning)
- R3 Recall Information (details, sequence)
- R4 Construct Meaning (main idea, summary/paraphrase, compare/contrast, cause/effect)
- R5 Evaluate/Extend Meaning (fact/opinion, predict outcomes, point of view)
- M1 Addition of Whole Numbers (no regrouping, regrouping)
- M2 Subtraction of Whole Numbers (no regrouping, regrouping)
- M3 Multiplication of Whole Numbers (no regrouping, regrouping)
- M4 Division of Whole Numbers (no remainder, remainder)
- M5 Decimals (addition, subtraction, multiplication, division)
- M6 Fractions (addition, subtraction, multiplication, division)
- M7 Integers (addition, subtraction, multiplication, division)
- M8 Percents
- M9 Algebraic Operations
- A1 Numeration (ordering, place value, scientific notation)
- A2 Number Theory (ratio, proportion)
- A3 Data Interpretation (graph, table, chart, diagram)
- A4 Pre-Algebra and Algebra (equations, inequality)
- A5 Measurement (money, time, temperature, length, area, volume)
- A6 Geometry (angles, Pythagorean theory)
- A7 Computation in Context (whole numbers, decimals, fractions, algebraic operations)
- A8 Estimation (rounding, estimation)
- L1 Usage (pronoun, tense, subject/verb agreement, adjective, adverb)
- L2 Sentence Formation (fragments, run-on, clarity)
- L3 Paragraph Development (topic sentence, supporting sentence, sequence)
- L4 Capitalization (proper noun, titles)
- L5 Punctuation (comma, semicolon)
- L6 Writing Conventions (quotation marks, apostrophe, parts of a letter)
- S1 Vowel (short, long)
- S2 Consonant (variant spelling, silent letter)
- S3 Structural Unit (root, suffix)

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*21<sup>st</sup> Century Skills*

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- CS4 Health Literacy
- CS7 Critical Thinking and Problem Solving
- CS8 Communication and Collaboration
- CS9 Information Literacy
- CS11 ICT Literacy

- CS12 Flexibility and Adaptability
- CS13 Initiative and Self-Direction
- CS14 Social and Cross-Cultural Skills
- CS15 Productivity and Accountability
- CS16 Leadership and Responsibility

### **SUGGESTED REFERENCES**

Nield-Gehrig, J.S. (2007). *Fundamentals of periodontal instrumentation and advanced root instrumentation* (6<sup>th</sup> ed.). Philadelphia, PA: Lippincott, Williams, & Wilkins.

Wilkins, E.M. (2009). *Clinical practice of the dental hygienist* (10<sup>th</sup> ed.). Philadelphia, PA: Lippincott, Williams, & Wilkins.



**Course Name:** Dental Anatomy

**Course Abbreviation:** DHT 1212

**Classification:** Career-Technical Core

**Description:** A study of the morphological characteristics of the teeth and supporting structures.  
(2 sch: 2 hr. lecture)

**Prerequisite:** None

<b>Competencies and Suggested Objectives</b>	
1. Explain dentition. <sup>DH3A</sup>	<ol style="list-style-type: none"> <li>a. Describe dentition.</li> <li>b. Describe the physiological form and function of the teeth.</li> <li>c. Differentiate between normal occlusion and malocclusion in relation to intercusping and interdigitation during both centric relationships and excursions of the mandible.</li> <li>d. Identify the individual tooth, deciduous and permanent, in a clinical environment by identifying natural specimens in laboratory exercises.</li> </ol>
2. Explain related structures. <sup>DH3A</sup>	<ol style="list-style-type: none"> <li>a. Describe related structures of the dentition with correct terminology and nomenclature.</li> <li>b. Utilize basic knowledge of tooth tissues, the exfoliation and eruption of teeth, tooth contact and alignment in the arch, and tooth relationship to the supporting structures.</li> </ol>

## STANDARDS

### *Standards Based on the Commission on Dental Accreditation*

DH3 Dental sciences content including  
DH3A tooth morphology.

### *Related Academic Standards*

- R1 Interpret Graphic Information (forms, maps, reference sources)
- R2 Words in Context (same and opposite meaning)
- R3 Recall Information (details, sequence)
- R4 Construct Meaning (main idea, summary/paraphrase, compare/contrast, cause/effect)
- R5 Evaluate/Extend Meaning (fact/opinion, predict outcomes, point of view)
- M1 Addition of Whole Numbers (no regrouping, regrouping)
- M2 Subtraction of Whole Numbers (no regrouping, regrouping)
- M3 Multiplication of Whole Numbers (no regrouping, regrouping)
- M4 Division of Whole Numbers (no remainder, remainder)
- M5 Decimals (addition, subtraction, multiplication, division)
- M6 Fractions (addition, subtraction, multiplication, division)
- M7 Integers (addition, subtraction, multiplication, division)

- M8 Percents
- M9 Algebraic Operations
- A1 Numeration (ordering, place value, scientific notation)
- A2 Number Theory (ratio, proportion)
- A3 Data Interpretation (graph, table, chart, diagram)
- A4 Pre-Algebra and Algebra (equations, inequality)
- A5 Measurement (money, time, temperature, length, area, volume)
- A6 Geometry (angles, Pythagorean theory)
- A7 Computation in Context (whole numbers, decimals, fractions, algebraic operations)
- A8 Estimation (rounding, estimation)
- L1 Usage (pronoun, tense, subject/verb agreement, adjective, adverb)
- L2 Sentence Formation (fragments, run-on, clarity)
- L3 Paragraph Development (topic sentence, supporting sentence, sequence)
- L4 Capitalization (proper noun, titles)
- L5 Punctuation (comma, semicolon)
- L6 Writing Conventions (quotation marks, apostrophe, parts of a letter)
- S1 Vowel (short, long)
- S2 Consonant (variant spelling, silent letter)
- S3 Structural Unit (root, suffix)

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### *21<sup>st</sup> Century Skills*

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- CS4 Health Literacy
- CS7 Critical Thinking and Problem Solving
- CS8 Communication and Collaboration
- CS9 Information Literacy
- CS11 ICT Literacy
- CS13 Initiative and Self-Direction

### **SUGGESTED REFERENCES**

Brand, R.W. & Isselhard, D.E. (2003). *Anatomy of orofacial structures* (7<sup>th</sup> ed.). St. Louis, MO: Mosby.

**Course Name:** Head and Neck Anatomy

**Course Abbreviation:** DHT 1222

**Classification:** Career-Technical Core

**Description:** A detailed study of skeletal, muscular, vascular, and neural features of the face, head, and neck. (2 sch: 2 hr. lecture)

**Prerequisite:** None

<b>Competencies and Suggested Objectives</b>	
1.	Explain the skeletal features of the face, head, and neck. <ol style="list-style-type: none"> <li>Identify, by their position and relationship to one another, the bones which make up the head, spine, face, and neck.</li> <li>Identify the sutures, openings, foramina, and canals relating to the bones that make up the head, spine, face, and neck.</li> </ol>
2.	Explain the muscular, vascular, and neural features of the face, head, and neck. <ol style="list-style-type: none"> <li>Identify the location and actions of the muscles of mastication, the hyoid muscles, and the sternocleidomastoid muscles.</li> <li>Trace the blood supply to and from structures in the head and neck, the nerve supply, and the lymphatic drainage from these structures.</li> <li>Identify the structures relating to the temporomandibular joint, the salivary system, the nasal cavity, and the paranasal sinuses.</li> </ol>

## STANDARDS

*Standards Based on the Commission on Dental Accreditation*

DH3B Dental sciences content must include head, neck and oral anatomy.

*Related Academic Standards*

- R1 Interpret Graphic Information (forms, maps, reference sources)
- R2 Words in Context (same and opposite meaning)
- R3 Recall Information (details, sequence)
- R4 Construct Meaning (main idea, summary/paraphrase, compare/contrast, cause/effect)
- R5 Evaluate/Extend Meaning (fact/opinion, predict outcomes, point of view)
- M1 Addition of Whole Numbers (no regrouping, regrouping)
- M2 Subtraction of Whole Numbers (no regrouping, regrouping)
- M3 Multiplication of Whole Numbers (no regrouping, regrouping)
- M4 Division of Whole Numbers (no remainder, remainder)
- M5 Decimals (addition, subtraction, multiplication, division)
- M6 Fractions (addition, subtraction, multiplication, division)
- M7 Integers (addition, subtraction, multiplication, division)

- M8 Percents
- M9 Algebraic Operations
- A1 Numeration (ordering, place value, scientific notation)
- A2 Number Theory (ratio, proportion)
- A3 Data Interpretation (graph, table, chart, diagram)
- A4 Pre-Algebra and Algebra (equations, inequality)
- A5 Measurement (money, time, temperature, length, area, volume)
- A6 Geometry (angles, Pythagorean theory)
- A7 Computation in Context (whole numbers, decimals, fractions, algebraic operations)
- A8 Estimation (rounding, estimation)
- L1 Usage (pronoun, tense, subject/verb agreement, adjective, adverb)
- L2 Sentence Formation (fragments, run-on, clarity)
- L3 Paragraph Development (topic sentence, supporting sentence, sequence)
- L4 Capitalization (proper noun, titles)
- L5 Punctuation (comma, semicolon)
- L6 Writing Conventions (quotation marks, apostrophe, parts of a letter)
- S1 Vowel (short, long)
- S2 Consonant (variant spelling, silent letter)
- S3 Structural Unit (root, suffix)

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### *21<sup>st</sup> Century Skills*

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- CS1 Global Awareness
- CS2 Financial, Economic, Business and Entrepreneurial Literacy
- CS3 Civic Literacy
- CS4 Health Literacy
- CS5 Environmental Literacy
- CS6 Creativity and Innovation
- CS7 Critical Thinking and Problem Solving
- CS8 Communication and Collaboration
- CS9 Information Literacy
- CS10 Media Literacy
- CS11 ICT Literacy
- CS12 Flexibility and Adaptability
- CS13 Initiative and Self-Direction
- CS14 Social and Cross-Cultural Skills
- CS16 Leadership and Responsibility
- CS15 Productivity and Accountability

### **SUGGESTED REFERENCES**

Brand, R.W. & Isselhard, D.E. (2003). *Anatomy of orofacial structures* (7<sup>th</sup> ed.). St. Louis, MO: Mosby.

Fehrenbach, M. J., & Herring, S. W. (2006). *Illustrated anatomy of the head and neck* (3<sup>rd</sup> ed.). Philadelphia, PA: Saunders.

**Course Name:** Oral Histology and Embryology

**Course Abbreviation:** DHT 1232

**Classification:** Career-Technical Core

**Description:** This course studies the microscopic structure and development of types of cells, tissues, and organs of the human body. Also given is a survey of the elements of embryology emphasizing the area of the head and neck, as related to the development of the dental arches, salivary glands, buccal mucosa, pharynx, and tongue. (2 sch: 2 hr. lecture)

**Prerequisite:** Dental Anatomy (DHT 1212) and Head and Neck Anatomy (DHT 1222)

<b>Competencies and Suggested Objectives</b>	
1.	Describe the microscopic structure and development of types of cells, tissues, and organs of the human body. <ol style="list-style-type: none"> <li>a. Identify microscopically the components of cells which make up the following four primary tissues:               <ol style="list-style-type: none"> <li>1. Epithelium</li> <li>2. Connective tissue</li> <li>3. Muscle</li> <li>4. Nerve tissue</li> </ol> </li> <li>b. Discuss microscopic components of cells which make up the four primary tissues.</li> </ol>
2.	Discuss the elements of embryology emphasizing the area of the head and neck. <ol style="list-style-type: none"> <li>a. Identify histologically the embryonic development and formation of the following tissues of the oral cavity:               <ol style="list-style-type: none"> <li>1. Oral mucosa</li> <li>2. Bone and alveolar process</li> <li>3. The teeth</li> <li>4. The periodontal junction</li> <li>5. The dentogingival junction</li> <li>6. The periodontium</li> <li>7. The tongue</li> <li>8. The salivary glands</li> </ol> </li> <li>b. Identify the various anomalies of the oral cavity occurring during the formation and development of related tissues.</li> </ol>

## **STANDARDS**

*Standards Based on the Commission on Dental Accreditation*

DH3C Dental sciences content must include oral embryology and histology.

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*Related Academic Standards*


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- R1 Interpret Graphic Information (forms, maps, reference sources)
- R2 Words in Context (same and opposite meaning)
- R3 Recall Information (details, sequence)
- R4 Construct Meaning (main idea, summary/paraphrase, compare/contrast, cause/effect)
- R5 Evaluate/Extend Meaning (fact/opinion, predict outcomes, point of view)
- M1 Addition of Whole Numbers (no regrouping, regrouping)
- M2 Subtraction of Whole Numbers (no regrouping, regrouping)
- M3 Multiplication of Whole Numbers (no regrouping, regrouping)
- M4 Division of Whole Numbers (no remainder, remainder)
- M5 Decimals (addition, subtraction, multiplication, division)
- M6 Fractions (addition, subtraction, multiplication, division)
- M7 Integers (addition, subtraction, multiplication, division)
- M8 Percents
- M9 Algebraic Operations
- A1 Numeration (ordering, place value, scientific notation)
- A2 Number Theory (ratio, proportion)
- A3 Data Interpretation (graph, table, chart, diagram)
- A4 Pre-Algebra and Algebra (equations, inequality)
- A5 Measurement (money, time, temperature, length, area, volume)
- A6 Geometry (angles, Pythagorean theory)
- A7 Computation in Context (whole numbers, decimals, fractions, algebraic operations)
- A8 Estimation (rounding, estimation)
- L1 Usage (pronoun, tense, subject/verb agreement, adjective, adverb)
- L2 Sentence Formation (fragments, run-on, clarity)
- L3 Paragraph Development (topic sentence, supporting sentence, sequence)
- L4 Capitalization (proper noun, titles)
- L5 Punctuation (comma, semicolon)
- L6 Writing Conventions (quotation marks, apostrophe, parts of a letter)
- S1 Vowel (short, long)
- S2 Consonant (variant spelling, silent letter)
- S3 Structural Unit (root, suffix)

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*21<sup>st</sup> Century Skills*


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- CS1 Global Awareness
- CS2 Financial, Economic, Business, and Entrepreneurial Literacy
- CS3 Civic Literacy
- CS4 Health Literacy
- CS5 Environmental Literacy
- CS6 Creativity and Innovation
- CS7 Critical Thinking and Problem Solving
- CS8 Communication and Collaboration

- CS9 Information Literacy
- CS10 Media Literacy
- CS11 ICT Literacy
- CS12 Flexibility and Adaptability
- CS13 Initiative and Self-Direction
- CS14 Social and Cross-Cultural Skills
- CS16 Leadership and Responsibility
- CS15 Productivity and Accountability

### **SUGGESTED REFERENCES**

- Bath-Balogh, M., & Fehrenbach, M. J. (2010). *Illustrated dental embryology, histology, and anatomy* (3<sup>rd</sup> ed.). Philadelphia, PA: Saunders.
- Brand, R.W. & Isselhard, D.E. (2003). *Anatomy of orofacial structures* (7<sup>th</sup> ed.). St. Louis, MO: Mosby.



**Course Name:** Dental Radiology

**Course Abbreviation:** DHT 1314

**Classification:** Career-Technical Core

**Description:** This course involves a broad scope of study of radiology and its use by the dentist as a diagnostic aid. Also covered are techniques for making radiographs with safety for hygienist and patient, the processing and mounting of exposed film and their interpretation, and study of anatomical landmarks evident in periapical films. (4 sch: 3 hr. lecture, 2 hr. lab)

**Prerequisite:** None

<b>Competencies and Suggested Objectives</b>	
1.	Explain the theory and scope of radiology as related to dental hygiene. <ol style="list-style-type: none"> <li>a. Identify landmarks of the skull, maxilla, and mandible that are significant to the correct interpretation of dental radiographs.</li> <li>b. Discuss scientific principles related to the production of radiographs.</li> </ol>
2.	Apply the theory and scope of radiology as related to dental hygiene. <ol style="list-style-type: none"> <li>a. Produce radiographic exposures according to stated criteria in regard to safety to both operator and patient, including the use of film holders.</li> <li>b. Prepare radiographs that are of satisfactory diagnostic quality including periapical (adult and pedo), bitewing, and occlusal.</li> <li>c. Utilize extraoral radiographical techniques.</li> <li>d. Observe, interpret, and evaluate radiographs in regard to the normal and abnormal.</li> <li>e. Use and evaluate manual and automatic processors.</li> <li>f. Understand and demonstrate correct techniques of film duplication.</li> </ol>

## STANDARDS

### *Standards Based on the Commission on Dental Accreditation*

DH3E Dental sciences content must include radiography.

### *Related Academic Standards*

- R1 Interpret Graphic Information (forms, maps, reference sources)
- R2 Words in Context (same and opposite meaning)
- R3 Recall Information (details, sequence)
- R4 Construct Meaning (main idea, summary/paraphrase, compare/contrast, cause/effect)
- R5 Evaluate/Extend Meaning (fact/opinion, predict outcomes, point of view)
- M1 Addition of Whole Numbers (no regrouping, regrouping)
- M2 Subtraction of Whole Numbers (no regrouping, regrouping)
- M3 Multiplication of Whole Numbers (no regrouping, regrouping)
- M4 Division of Whole Numbers (no remainder, remainder)

- M5 Decimals (addition, subtraction, multiplication, division)
- M6 Fractions (addition, subtraction, multiplication, division)
- M7 Integers (addition, subtraction, multiplication, division)
- M8 Percents
- M9 Algebraic Operations
- A1 Numeration (ordering, place value, scientific notation)
- A2 Number Theory (ratio, proportion)
- A3 Data Interpretation (graph, table, chart, diagram)
- A4 Pre-Algebra and Algebra (equations, inequality)
- A5 Measurement (money, time, temperature, length, area, volume)
- A6 Geometry (angles, Pythagorean theory)
- A7 Computation in Context (whole numbers, decimals, fractions, algebraic operations)
- A8 Estimation (rounding, estimation)
- L1 Usage (pronoun, tense, subject/verb agreement, adjective, adverb)
- L2 Sentence Formation (fragments, run-on, clarity)
- L3 Paragraph Development (topic sentence, supporting sentence, sequence)
- L4 Capitalization (proper noun, titles)
- L5 Punctuation (comma, semicolon)
- L6 Writing Conventions (quotation marks, apostrophe, parts of a letter)
- S1 Vowel (short, long)
- S2 Consonant (variant spelling, silent letter)
- S3 Structural Unit (root, suffix)

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### *21<sup>st</sup> Century Skills*

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- CS1 Global Awareness
- CS2 Financial, Economic, Business, and Entrepreneurial Literacy
- CS3 Civic Literacy
- CS4 Health Literacy
- CS5 Environmental Literacy
- CS6 Creativity and Innovation
- CS7 Critical Thinking and Problem Solving
- CS8 Communication and Collaboration
- CS9 Information Literacy
- CS10 Media Literacy
- CS11 ICT Literacy
- CS12 Flexibility and Adaptability
- CS13 Initiative and Self-Direction
- CS14 Social and Cross-Cultural Skills
- CS16 Leadership and Responsibility
- CS15 Productivity and Accountability

**SUGGESTED REFERENCES**

- Frommer, H. H. (2010). *Radiology for the dental professional* (9<sup>th</sup> ed.). Philadelphia, PA: Mosby.
- Haring, J. I., & Lind, L. J. (1993). *Radiographic interpretation for the dental hygienist*. Philadelphia, PA: WB Saunders.
- Haring, J. I., & Jansen, L. (2011). *Dental radiography principles and techniques* (4<sup>th</sup> ed.). Philadelphia, PA: WB Saunders.
- Iannucci, J.M. & Howerton, L.J. (2011). *Dental radiography: Principles and techniques* (4<sup>th</sup> ed.). Philadelphia, PA: Saunders.
- Thomson, E.M. & Johnson, O. N. (2011). *Essentials of dental radiography for dental assistants and hygienists* (9<sup>th</sup> ed.). Upper Saddle River, NJ: Prentice Hall.

**Course Name:** Clinical Dental Hygiene

**Course Abbreviation:** DHT 1415

**Classification:** Career-Technical Core

**Description:** The student will apply the principles and techniques learned from previous didactic and preclinical experiences. (5 sch: 1 hr. lecture, 12 hr. clinical)

**Prerequisite:** Fundamentals of Dental Hygiene (DHT 1115)

<b>Competencies and Suggested Objectives</b>	
1.	Explain care for clients with minimal periodontal disease. <ol style="list-style-type: none"> <li>Explain an individualized treatment plan.</li> <li>Discuss a total oral prophylaxis.</li> <li>Discuss an advanced exam and dental hygiene procedures.</li> <li>Discuss a dental hygiene diagnosis.</li> <li>Discuss effectiveness of treatment.</li> <li>Explain an appropriate recall interval.</li> <li>Discuss over-the-counter dental products.</li> <li>Explain dental hygiene assistant and front office procedures.</li> </ol>
2.	Provide care for clients with minimal periodontal disease. <ol style="list-style-type: none"> <li>Present an individualized treatment plan.</li> <li>Perform a total oral prophylaxis.</li> <li>Perform advanced exam and dental hygiene procedures.</li> <li>Formulate a dental hygiene diagnosis.</li> <li>Assess effectiveness of treatment</li> <li>Establish an appropriate recall interval.</li> <li>Recommend over-the-counter dental products.</li> <li>Perform dental office procedures and dental hygiene assistant procedures.</li> </ol>

## STANDARDS

*Standards Based on the Commission on Dental Accreditation*

- DH3G Dental sciences content must include pain management.
- DH4 Dental hygiene science content must include
- DH4A oral health education and preventive counseling,
  - DH4B health promotion,
  - DH4C patient management,
  - DH4D clinical dental hygiene,
  - DH4E provision of services for and management of patients with special needs,
  - DH4I infection and hazard control management, and
  - DH4J the provision of oral health care services to patients with blood borne infectious diseases.

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*Related Academic Standards*


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- R1 Interpret Graphic Information (forms, maps, reference sources)
- R2 Words in Context (same and opposite meaning)
- R3 Recall Information (details, sequence)
- R4 Construct Meaning (main idea, summary/paraphrase, compare/contrast, cause/effect)
- R5 Evaluate/Extend Meaning (fact/opinion, predict outcomes, point of view)
- M1 Addition of Whole Numbers (no regrouping, regrouping)
- M2 Subtraction of Whole Numbers (no regrouping, regrouping)
- M3 Multiplication of Whole Numbers (no regrouping, regrouping)
- M4 Division of Whole Numbers (no remainder, remainder)
- M5 Decimals (addition, subtraction, multiplication, division)
- M6 Fractions (addition, subtraction, multiplication, division)
- M7 Integers (addition, subtraction, multiplication, division)
- M8 Percents
- M9 Algebraic Operations
- A1 Numeration (ordering, place value, scientific notation)
- A2 Number Theory (ratio, proportion)
- A3 Data Interpretation (graph, table, chart, diagram)
- A4 Pre-Algebra and Algebra (equations, inequality)
- A5 Measurement (money, time, temperature, length, area, volume)
- A6 Geometry (angles, Pythagorean theory)
- A7 Computation in Context (whole numbers, decimals, fractions, algebraic operations)
- A8 Estimation (rounding, estimation)
- L1 Usage (pronoun, tense, subject/verb agreement, adjective, adverb)
- L2 Sentence Formation (fragments, run-on, clarity)
- L3 Paragraph Development (topic sentence, supporting sentence, sequence)
- L4 Capitalization (proper noun, titles)
- L5 Punctuation (comma, semicolon)
- L6 Writing Conventions (quotation marks, apostrophe, parts of a letter)
- S1 Vowel (short, long)
- S2 Consonant (variant spelling, silent letter)
- S3 Structural Unit (root, suffix)

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*21<sup>st</sup> Century Skills*


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- CS1 Global Awareness
- CS2 Financial, Economic, Business, and Entrepreneurial Literacy
- CS3 Civic Literacy
- CS4 Health Literacy
- CS5 Environmental Literacy
- CS6 Creativity and Innovation
- CS7 Critical Thinking and Problem Solving
- CS8 Communication and Collaboration

- CS9 Information Literacy
- CS10 Media Literacy
- CS11 ICT Literacy
- CS12 Flexibility and Adaptability
- CS13 Initiative and Self-Direction
- CS14 Social and Cross-Cultural Skills
- CS16 Leadership and Responsibility
- CS15 Productivity and Accountability

## **SUGGESTED REFERENCES**

References listed in the Recommended Tool and Equipment section.

**Course Name:** Periodontics

**Course Abbreviation:** DHT 1512

**Classification:** Career-Technical Core

**Description:** An in-depth study of the supporting structures of the teeth is covered in this course. Also included is a clinical and theoretical understanding of their conditions in good health as well as their reaction to bacterial invasion in disease of varying etiology. The theory of clinical application to the management of the advanced periodontal patient to maintain a healthy and functional dental prosthesis is also studied. (2 sch: 2 hr. lecture)

**Prerequisite:** Oral Histology and Embryology (DHT 1232) and Dental Anatomy (DHT 1212)

<b>Competencies and Suggested Objectives</b>	
1.	Describe the supporting structures of the teeth. <ol style="list-style-type: none"> <li>Identify the gross and microscopic structure, physiology, and function of the healthy periodontium as an entity and in relation to the mouth and body as a whole.</li> <li>Discuss the gross and microscopic structure, physiology, and function of the healthy periodontium as an entity and in relation to the mouth and body as a whole.</li> </ol>
2.	Relate the clinical and theoretical understanding of periodontic disease. <ol style="list-style-type: none"> <li>Describe the etiology of periodontal disease as related to the initiating and modifying factors.</li> <li>Recognize the development of the disease state and the tissues involved.</li> <li>Recognize clinically the various forms of periodontal disease.</li> </ol>
3.	Apply the theory of clinical application to the management of the periodontal client. <ol style="list-style-type: none"> <li>Identify the role of the dental hygienist in the treatment of the periodontally involved patient including clinical evaluation, physiotherapy, scaling, curettage, and root planing.</li> <li>Discuss the role of the dental hygienist in the treatment of the periodontally involved patient including clinical evaluation, physiotherapy, scaling, curettage, and root planing.</li> </ol>

## **STANDARDS**

### *Standards Based on the Commission on Dental Accreditation*

- |      |   |
|------|---|
| DH3F | Dental sciences content must include periodontology.          |
| DH4B | Dental hygiene science content must include health promotion. |

### *Related Academic Standards*

- R1 Interpret Graphic Information (forms, maps, reference sources)
- R2 Words in Context (same and opposite meaning)
- R3 Recall Information (details, sequence)

- R4 Construct Meaning (main idea, summary/paraphrase, compare/contrast, cause/effect)
- R5 Evaluate/Extend Meaning (fact/opinion, predict outcomes, point of view)
- M1 Addition of Whole Numbers (no regrouping, regrouping)
- M2 Subtraction of Whole Numbers (no regrouping, regrouping)
- M3 Multiplication of Whole Numbers (no regrouping, regrouping)
- M4 Division of Whole Numbers (no remainder, remainder)
- M5 Decimals (addition, subtraction, multiplication, division)
- M6 Fractions (addition, subtraction, multiplication, division)
- M7 Integers (addition, subtraction, multiplication, division)
- M8 Percents
- M9 Algebraic Operations
- A1 Numeration (ordering, place value, scientific notation)
- A2 Number Theory (ratio, proportion)
- A3 Data Interpretation (graph, table, chart, diagram)
- A4 Pre-Algebra and Algebra (equations, inequality)
- A5 Measurement (money, time, temperature, length, area, volume)
- A6 Geometry (angles, Pythagorean theory)
- A7 Computation in Context (whole numbers, decimals, fractions, algebraic operations)
- A8 Estimation (rounding, estimation)
- L1 Usage (pronoun, tense, subject/verb agreement, adjective, adverb)
- L2 Sentence Formation (fragments, run-on, clarity)
- L3 Paragraph Development (topic sentence, supporting sentence, sequence)
- L4 Capitalization (proper noun, titles)
- L5 Punctuation (comma, semicolon)
- L6 Writing Conventions (quotation marks, apostrophe, parts of a letter)
- S1 Vowel (short, long)
- S2 Consonant (variant spelling, silent letter)
- S3 Structural Unit (root, suffix)

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### *21<sup>st</sup> Century Skills*

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- CS1 Global Awareness
- CS2 Financial, Economic, Business and Entrepreneurial Literacy
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- CS4 Health Literacy
- CS5 Environmental Literacy
- CS6 Creativity and Innovation
- CS7 Critical Thinking and Problem Solving
- CS8 Communication and Collaboration
- CS9 Information Literacy
- CS10 Media Literacy
- CS11 ICT Literacy
- CS12 Flexibility and Adaptability
- CS13 Initiative and Self-Direction



CS14 Social and Cross-Cultural Skills  
CS16 Leadership and Responsibility  
CS15 Productivity and Accountability

### **SUGGESTED REFERENCES**

Nield-Gehrig, J. S., & Willmann, D. (2011). *Foundations of periodontics for the dental hygienist* (3<sup>rd</sup> ed.). Hagerstown, MD: Lippincott Williams & Wilkins.

Perry, D.A. & Beemsterboer, P.L. (2006). *Periodontology for the dental hygienist* (3<sup>rd</sup> ed.). Philadelphia, PA: Saunders.

Vernino, A. R., Gray, J. L., & Hughes E. (Eds.). (2007). *The periodontic syllabus* (5<sup>th</sup> ed.). Hagerstown, MD. Lippincott Williams & Wilkins.

**Course Name:** Dental Hygiene Seminar I

**Course Abbreviation:** DHT 1911

**Classification:** Career-Technical Core

**Description:** This course provides the student with the opportunity to discuss managing dental office emergencies and professional development. (1 sch: 1 hr. lecture)

**Prerequisite:** None

<b>Competencies and Suggested Objectives</b>
<ol style="list-style-type: none"> <li>1. Provide fundamental knowledge and skills needed to manage dental office emergencies.               <ol style="list-style-type: none"> <li>a. State general measures the dental hygienist should know to respond to emergency situations.</li> <li>b. State the signs, symptoms, and treatments (including drugs) for selected common emergencies such as:                   <ol style="list-style-type: none"> <li>(1) Cardiac arrest</li> <li>(2) Angina pectoris</li> <li>(3) Acute myocardial infarction</li> <li>(4) Convulsions</li> <li>(5) Syncope</li> <li>(6) Asthma</li> <li>(7) Anaphylactic shock</li> <li>(8) Apnea</li> <li>(9) Hypoglycemia</li> </ol> </li> <li>c. List the equipment required to treat selected emergencies.</li> <li>d. Give the names and potential uses of the drugs in an emergency kit for the dental office.</li> </ol> </li> </ol>
<ol style="list-style-type: none"> <li>2. Discuss leadership skills.               <ol style="list-style-type: none"> <li>a. Develop progressive leadership skills.</li> <li>b. Establish professional goals.</li> <li>c. Utilize group dynamics as a means of enhancing professional growth.</li> <li>d. Participate in professional activities.</li> </ol> </li> </ol>

## STANDARDS

### *Standards Based on the Commission on Dental Accreditation*

- DH1 General education content must include oral and written communications, psychology, and sociology.
- DH2 Biomedical science content must include content in anatomy, physiology, chemistry, biochemistry, microbiology, immunology, general pathology, nutrition, and pharmacology.
- DH3G Dental sciences content must include pain management.
- DH4 Dental hygiene science content must include

DH4C	patient management,
DH4G	medical and dental emergencies including basic life support,
DH4H	legal and ethical aspects of dental hygiene practice,
DH4I	infection and hazard control management, and
DH4J	the provision of oral health care services to patients with blood borne infectious diseases.

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### *Related Academic Standards*

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- R1 Interpret Graphic Information (forms, maps, reference sources)
- R2 Words in Context (same and opposite meaning)
- R3 Recall Information (details, sequence)
- R4 Construct Meaning (main idea, summary/paraphrase, compare/contrast, cause/effect)
- R5 Evaluate/Extend Meaning (fact/opinion, predict outcomes, point of view)
- M1 Addition of Whole Numbers (no regrouping, regrouping)
- M2 Subtraction of Whole Numbers (no regrouping, regrouping)
- M3 Multiplication of Whole Numbers (no regrouping, regrouping)
- M4 Division of Whole Numbers (no remainder, remainder)
- M5 Decimals (addition, subtraction, multiplication, division)
- M6 Fractions (addition, subtraction, multiplication, division)
- M7 Integers (addition, subtraction, multiplication, division)
- M8 Percents
- M9 Algebraic Operations
- A1 Numeration (ordering, place value, scientific notation)
- A2 Number Theory (ratio, proportion)
- A3 Data Interpretation (graph, table, chart, diagram)
- A4 Pre-Algebra and Algebra (equations, inequality)
- A5 Measurement (money, time, temperature, length, area, volume)
- A6 Geometry (angles, Pythagorean theory)
- A7 Computation in Context (whole numbers, decimals, fractions, algebraic operations)
- A8 Estimation (rounding, estimation)
- L1 Usage (pronoun, tense, subject/verb agreement, adjective, adverb)
- L2 Sentence Formation (fragments, run-on, clarity)
- L3 Paragraph Development (topic sentence, supporting sentence, sequence)
- L4 Capitalization (proper noun, titles)
- L5 Punctuation (comma, semicolon)
- L6 Writing Conventions (quotation marks, apostrophe, parts of a letter)
- S1 Vowel (short, long)
- S2 Consonant (variant spelling, silent letter)
- S3 Structural Unit (root, suffix)

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### *21<sup>st</sup> Century Skills*

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- CS1 Global Awareness

- CS2 Financial, Economic, Business, and Entrepreneurial Literacy
- CS3 Civic Literacy
- CS4 Health Literacy
- CS5 Environmental Literacy
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- CS9 Information Literacy
- CS10 Media Literacy
- CS11 ICT Literacy
- CS12 Flexibility and Adaptability
- CS13 Initiative and Self-Direction
- CS14 Social and Cross-Cultural Skills
- CS16 Leadership and Responsibility
- CS15 Productivity and Accountability

### **SUGGESTED REFERENCES**

Chernega, J.B. (2001). *Emergency guide for dental auxiliaries* (3<sup>rd</sup> ed.). Albany, NY: Delmar.

**Course Name:** Dental Hygiene Seminar II

**Course Abbreviation:** DHT 1921

**Classification:** Career-Technical Core

**Description:** This course provides the student with the opportunity to discuss patient care and treatment plans and professional development. (1 sch: 1 hr. lecture)

**Prerequisite:** Dental Hygiene Seminar I (DHT 1911)

<b>Competencies and Suggested Objectives</b>
1. Demonstrate leadership skills. <ol style="list-style-type: none"> <li>a. Develop progressive leadership skills.</li> <li>b. Establish professional goals.</li> <li>c. Utilize group dynamics as a mean of enhancing professional growth.</li> <li>d. Participate in professional activities.</li> </ol>
2. Discuss dental client care. <ol style="list-style-type: none"> <li>a. Explain dental hygiene diagnosis.</li> <li>b. Discuss basic treatment plan.</li> </ol>

## STANDARDS

### *Standards Based on the Commission on Dental Accreditation*

DH1 General education content must include oral and written communications, psychology, and sociology.

### *Related Academic Standards*

- R1 Interpret Graphic Information (forms, maps, reference sources)
- R2 Words in Context (same and opposite meaning)
- R3 Recall Information (details, sequence)
- R4 Construct Meaning (main idea, summary/paraphrase, compare/contrast, cause/effect)
- R5 Evaluate/Extend Meaning (fact/opinion, predict outcomes, point of view)
- M1 Addition of Whole Numbers (no regrouping, regrouping)
- M2 Subtraction of Whole Numbers (no regrouping, regrouping)
- M3 Multiplication of Whole Numbers (no regrouping, regrouping)
- M4 Division of Whole Numbers (no remainder, remainder)
- M5 Decimals (addition, subtraction, multiplication, division)
- M6 Fractions (addition, subtraction, multiplication, division)
- M7 Integers (addition, subtraction, multiplication, division)
- M8 Percents
- M9 Algebraic Operations
- A1 Numeration (ordering, place value, scientific notation)

- A2 Number Theory (ratio, proportion)
- A3 Data Interpretation (graph, table, chart, diagram)
- A4 Pre-Algebra and Algebra (equations, inequality)
- A5 Measurement (money, time, temperature, length, area, volume)
- A6 Geometry (angles, Pythagorean theory)
- A7 Computation in Context (whole numbers, decimals, fractions, algebraic operations)
- A8 Estimation (rounding, estimation)
- L1 Usage (pronoun, tense, subject/verb agreement, adjective, adverb)
- L2 Sentence Formation (fragments, run-on, clarity)
- L3 Paragraph Development (topic sentence, supporting sentence, sequence)
- L4 Capitalization (proper noun, titles)
- L5 Punctuation (comma, semicolon)
- L6 Writing Conventions (quotation marks, apostrophe, parts of a letter)
- S1 Vowel (short, long)
- S2 Consonant (variant spelling, silent letter)
- S3 Structural Unit (root, suffix)

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### *21<sup>st</sup> Century Skills*

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- CS1 Global Awareness
- CS2 Financial, Economic, Business, and Entrepreneurial Literacy
- CS3 Civic Literacy
- CS4 Health Literacy
- CS5 Environmental Literacy
- CS6 Creativity and Innovation
- CS7 Critical Thinking and Problem Solving
- CS8 Communication and Collaboration
- CS9 Information Literacy
- CS10 Media Literacy
- CS11 ICT Literacy
- CS12 Flexibility and Adaptability
- CS13 Initiative and Self-Direction
- CS14 Social and Cross-Cultural Skills
- CS16 Leadership and Responsibility
- CS15 Productivity and Accountability

### **SUGGESTED REFERENCES**

Wilkins, E.M. (2009). *Clinical practice of the dental hygienist* (10<sup>th</sup> ed.). Philadelphia, PA: Lippincott, Williams, & Wilkins.

**Course Name:** General/Oral Pathology

**Course Abbreviation:** DHT 2233

**Classification:** Career-Technical Core

**Description:** This course offers a study of the etiology and symptomatology of the pathological conditions affecting the head and neck with emphasis on the oral cavity. (3 sch: 3 hr. lecture)

**Prerequisite:** Dental Anatomy (DHT 1212), Head and Neck Anatomy (DHT 1222), Oral Histology and Embryology (DHT 1232)

<b>Competencies and Suggested Objectives</b>	
1.	Identify pathological conditions affecting the head and neck with emphasis on the oral cavity. <ol style="list-style-type: none"> <li>a. Identify oral manifestations of disease.</li> <li>b. Identify pathological lesions found in the head and neck with emphasis on the oral cavity.</li> </ol>
2.	Discuss pathological conditions affecting the head and neck with emphasis on the oral cavity. <ol style="list-style-type: none"> <li>a. Describe the process of disease.</li> <li>b. Discuss disease prevention within the scope and responsibility of the dental hygienist.</li> <li>c. Discuss the treatment of disease within the scope and responsibility of the dental hygienist.</li> </ol>

## STANDARDS

### *Standards Based on the Commission on Dental Accreditation*

- DH2 Biomedical science content must include content in anatomy, physiology, chemistry, biochemistry, microbiology, immunology, general pathology, nutrition, and pharmacology.
- DH3D Dental sciences content must include oral pathology.
- DH4J Dental hygiene science content must include the provision of oral health care services to patients with blood borne infectious diseases.

### *Related Academic Standards*

- R1 Interpret Graphic Information (forms, maps, reference sources)
- R2 Words in Context (same and opposite meaning)
- R3 Recall Information (details, sequence)
- R4 Construct Meaning (main idea, summary/paraphrase, compare/contrast, cause/effect)
- R5 Evaluate/Extend Meaning (fact/opinion, predict outcomes, point of view)
- M1 Addition of Whole Numbers (no regrouping, regrouping)
- M2 Subtraction of Whole Numbers (no regrouping, regrouping)

- M3 Multiplication of Whole Numbers (no regrouping, regrouping)
- M4 Division of Whole Numbers (no remainder, remainder)
- M5 Decimals (addition, subtraction, multiplication, division)
- M6 Fractions (addition, subtraction, multiplication, division)
- M7 Integers (addition, subtraction, multiplication, division)
- M8 Percents
- M9 Algebraic Operations
- A1 Numeration (ordering, place value, scientific notation)
- A2 Number Theory (ratio, proportion)
- A3 Data Interpretation (graph, table, chart, diagram)
- A4 Pre-Algebra and Algebra (equations, inequality)
- A5 Measurement (money, time, temperature, length, area, volume)
- A6 Geometry (angles, Pythagorean theory)
- A7 Computation in Context (whole numbers, decimals, fractions, algebraic operations)
- A8 Estimation (rounding, estimation)
- L1 Usage (pronoun, tense, subject/verb agreement, adjective, adverb)
- L2 Sentence Formation (fragments, run-on, clarity)
- L3 Paragraph Development (topic sentence, supporting sentence, sequence)
- L4 Capitalization (proper noun, titles)
- L5 Punctuation (comma, semicolon)
- L6 Writing Conventions (quotation marks, apostrophe, parts of a letter)
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- S2 Consonant (variant spelling, silent letter)
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### *21<sup>st</sup> Century Skills*

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- CS1 Global Awareness
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- CS3 Civic Literacy
- CS4 Health Literacy
- CS5 Environmental Literacy
- CS6 Creativity and Innovation
- CS7 Critical Thinking and Problem Solving
- CS8 Communication and Collaboration
- CS9 Information Literacy
- CS10 Media Literacy
- CS11 ICT Literacy
- CS12 Flexibility and Adaptability
- CS13 Initiative and Self-Direction
- CS14 Social and Cross-Cultural Skills
- CS16 Leadership and Responsibility
- CS15 Productivity and Accountability



**SUGGESTED REFERENCES**

Ibsen, O.A. & Phelan, J.A. (2008). *Oral pathology for the dental hygienist* (5<sup>th</sup> ed.). Philadelphia, PA: Saunders.

**Course Name:** Clinical Dental Hygiene II

**Course Abbreviation:** DHT 2425

**Classification:** Career-Technical Core

**Description:** This course is a continuation of the principles and techniques involved in the practice of dental hygiene. Emphasis will be on theoretical background needed to provide advanced clinical skills. Clinical experiences will focus on treatment of clients with moderate to advanced periodontal disease. (5 sch: 1 hr. lecture, 12 hr. clinical)

**Prerequisite:** Periodontics (DHT 1512) and Clinical Dental Hygiene I (DHT 1415)

<b>Competencies and Suggested Objectives</b>	
1.	Provide care for clients with moderate to advanced periodontal disease. <ol style="list-style-type: none"> <li>a. Name the parts of the ultrasonic scalers and air polishers, and know the function of each.</li> <li>b. List the precautions, indications, and contraindications for using the ultrasonic scaler and air polisher.</li> <li>c. Discuss the operating techniques of the ultrasonic scaler and air polisher, and demonstrate how to use it/them on clinical patients to efficiently remove calculus and/or stain.</li> <li>d. Demonstrate the daily maintenance of the ultrasonic scaler and air polisher.</li> <li>e. Demonstrate the procedure for unit preparation, client preparation, instrumentation, and post-operative instructions when using ultrasonic instrumentation.</li> <li>f. Differentiate between scaling and root planing.</li> <li>g. Give reasons to root plane completely.</li> <li>h. Demonstrate the process of performing a root planing on a clinical client.</li> <li>i. Explain the difference between gingival, subgingival, and surgical curettage.</li> <li>j. List objectives of curettage.</li> <li>k. Demonstrate the use of subgingival irrigation techniques.</li> <li>l. Explain how topical anesthesia is applied prior to curettage.</li> <li>m. Describe instrumentation for curettage.</li> <li>n. List the effects of instrumentation for curettage.</li> <li>o. Explain steps in the healing process and factors that interfere with healing.</li> </ol>
2.	Utilize skills in caring for all special needs clients. <ol style="list-style-type: none"> <li>a. Analyze reasons that certain clients experience pain and are anxious about dental treatment and be able to deal with these clients in a manner which instills confidence.</li> <li>b. Utilize skills in caring for special needs clients including the geriatric, oral surgery client, client with a fractured jaw, the pregnant client, client during puberty/menopause/adolescence, and the client with a physical or sensory handicap.</li> </ol>

## STANDARDS

### *Standards Based on the Commission on Dental Accreditation*

- DH3G Dental sciences content must include pain management.
- DH4 Dental hygiene science content must include
- DH4A oral health education and preventive counseling,
  - DH4B health promotion,
  - DH4C patient management,
  - DH4D clinical dental hygiene,
  - DH4E provision of services for and management of patients with special needs,
  - DH4I infection and hazard control management, and
  - DH4J the provision of oral health care services to patients with blood borne infectious diseases.

### *Related Academic Standards*

- R1 Interpret Graphic Information (forms, maps, reference sources)
- R2 Words in Context (same and opposite meaning)
- R3 Recall Information (details, sequence)
- R4 Construct Meaning (main idea, summary/paraphrase, compare/contrast, cause/effect)
- R5 Evaluate/Extend Meaning (fact/opinion, predict outcomes, point of view)
- M1 Addition of Whole Numbers (no regrouping, regrouping)
- M2 Subtraction of Whole Numbers (no regrouping, regrouping)
- M3 Multiplication of Whole Numbers (no regrouping, regrouping)
- M4 Division of Whole Numbers (no remainder, remainder)
- M5 Decimals (addition, subtraction, multiplication, division)
- M6 Fractions (addition, subtraction, multiplication, division)
- M7 Integers (addition, subtraction, multiplication, division)
- M8 Percents
- M9 Algebraic Operations
- A1 Numeration (ordering, place value, scientific notation)
- A2 Number Theory (ratio, proportion)
- A3 Data Interpretation (graph, table, chart, diagram)
- A4 Pre-Algebra and Algebra (equations, inequality)
- A5 Measurement (money, time, temperature, length, area, volume)
- A6 Geometry (angles, Pythagorean theory)
- A7 Computation in Context (whole numbers, decimals, fractions, algebraic operations)
- A8 Estimation (rounding, estimation)
- L1 Usage (pronoun, tense, subject/verb agreement, adjective, adverb)
- L2 Sentence Formation (fragments, run-on, clarity)
- L3 Paragraph Development (topic sentence, supporting sentence, sequence)
- L4 Capitalization (proper noun, titles)
- L5 Punctuation (comma, semicolon)
- L6 Writing Conventions (quotation marks, apostrophe, parts of a letter)
- S1 Vowel (short, long)

- S2 Consonant (variant spelling, silent letter)
- S3 Structural Unit (root, suffix)

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### *21<sup>st</sup> Century Skills*

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- CS1 Global Awareness
- CS2 Financial, Economic, Business, and Entrepreneurial Literacy
- CS3 Civic Literacy
- CS4 Health Literacy
- CS5 Environmental Literacy
- CS6 Creativity and Innovation
- CS7 Critical Thinking and Problem Solving
- CS8 Communication and Collaboration
- CS9 Information Literacy
- CS10 Media Literacy
- CS11 ICT Literacy
- CS12 Flexibility and Adaptability
- CS13 Initiative and Self-Direction
- CS14 Social and Cross-Cultural Skills
- CS16 Leadership and Responsibility
- CS15 Productivity and Accountability

### **SUGGESTED REFERENCES**

- Nield-Gehrig, J.S. (2007). *Fundamentals of periodontal instrumentation and advanced root instrumentation* (6<sup>th</sup> ed.). Philadelphia, PA: Lippincott, Williams, & Wilkins.
- Wilkins, E.M. (2009). *Clinical practice of the dental hygienist* (10<sup>th</sup> ed.). Philadelphia, PA: Lippincott, Williams, & Wilkins.

**Course Name:** Clinical Dental Hygiene III

**Course Abbreviation:** DHT 2436

**Classification:** Career-Technical Core

**Description:** This course offers a culmination of practice and the clinical procedures and theoretical knowledge needed to provide preventive, interceptive, and definitive dental hygiene treatment. (6 sch: 2 hr. lecture, 12 hr. clinical)

**Prerequisite:** Clinical Dental Hygiene II (DHT 2425)

<b>Competencies and Suggested Objectives</b>	
1.	<p>Explain care for clients with more advanced periodontal disease.</p> <ol style="list-style-type: none"> <li>a. Discuss treating moderate to severe periodontal disease.</li> <li>b. Explain all auxiliary duties in the dental office.</li> <li>c. Discuss periodontal screening.</li> <li>d. Discuss preventive dental hygiene services at a pace that closely resembles a typical appointment in a dental practice.</li> <li>e. Discuss dental hygiene diagnosis for clients with more advanced disease.</li> <li>f. Explain a treatment plan for clients with more advanced disease.</li> </ol>
2.	<p>Provide care for clients with more advanced periodontal disease.</p> <ol style="list-style-type: none"> <li>a. Develop skills in treating moderate to severe periodontal disease.</li> <li>b. Develop skills in performing all auxiliary duties in the dental office.</li> <li>c. Provide periodontal screening.</li> <li>d. Provide preventive dental hygiene services at a pace that closely resembles a typical appointment in a dental practice.</li> <li>e. Assess data to arrive at a dental hygiene diagnosis for a client with a more advanced disease.</li> <li>f. Implement a treatment plan for a client with a more advanced disease.</li> <li>g. Provide post-treatment evaluation for a client with advanced disease.</li> </ol>

## STANDARDS

*Standards Based on the Commission on Dental Accreditation*

- DH3G Dental sciences content must include pain management.
- DH4 Dental hygiene science content must include
- DH4A oral health education and preventive counseling,
  - DH4B health promotion,
  - DH4C patient management,
  - DH4D clinical dental hygiene,
  - DH4E provision of services for and management of patients with special needs,
  - DH4I infection and hazard control management, and
  - DH4J the provision of oral health care services to patients with blood borne infectious diseases.

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*Related Academic Standards*


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- R1 Interpret Graphic Information (forms, maps, reference sources)
- R2 Words in Context (same and opposite meaning)
- R3 Recall Information (details, sequence)
- R4 Construct Meaning (main idea, summary/paraphrase, compare/contrast, cause/effect)
- R5 Evaluate/Extend Meaning (fact/opinion, predict outcomes, point of view)
- M1 Addition of Whole Numbers (no regrouping, regrouping)
- M2 Subtraction of Whole Numbers (no regrouping, regrouping)
- M3 Multiplication of Whole Numbers (no regrouping, regrouping)
- M4 Division of Whole Numbers (no remainder, remainder)
- M5 Decimals (addition, subtraction, multiplication, division)
- M6 Fractions (addition, subtraction, multiplication, division)
- M7 Integers (addition, subtraction, multiplication, division)
- M8 Percents
- M9 Algebraic Operations
- A1 Numeration (ordering, place value, scientific notation)
- A2 Number Theory (ratio, proportion)
- A3 Data Interpretation (graph, table, chart, diagram)
- A4 Pre-Algebra and Algebra (equations, inequality)
- A5 Measurement (money, time, temperature, length, area, volume)
- A6 Geometry (angles, Pythagorean theory)
- A7 Computation in Context (whole numbers, decimals, fractions, algebraic operations)
- A8 Estimation (rounding, estimation)
- L1 Usage (pronoun, tense, subject/verb agreement, adjective, adverb)
- L2 Sentence Formation (fragments, run-on, clarity)
- L3 Paragraph Development (topic sentence, supporting sentence, sequence)
- L4 Capitalization (proper noun, titles)
- L5 Punctuation (comma, semicolon)
- L6 Writing Conventions (quotation marks, apostrophe, parts of a letter)
- S1 Vowel (short, long)
- S2 Consonant (variant spelling, silent letter)
- S3 Structural Unit (root, suffix)

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*21<sup>st</sup> Century Skills*


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- CS1 Global Awareness
- CS2 Financial, Economic, Business, and Entrepreneurial Literacy
- CS3 Civic Literacy
- CS4 Health Literacy
- CS5 Environmental Literacy
- CS6 Creativity and Innovation
- CS7 Critical Thinking and Problem Solving
- CS8 Communication and Collaboration

- CS9 Information Literacy
- CS10 Media Literacy
- CS11 ICT Literacy
- CS12 Flexibility and Adaptability
- CS13 Initiative and Self-Direction
- CS14 Social and Cross-Cultural Skills
- CS16 Leadership and Responsibility
- CS15 Productivity and Accountability

### **SUGGESTED REFERENCES**

Wilkins, E.M. (2009). *Clinical practice of the dental hygienist* (10<sup>th</sup> ed.). Philadelphia, PA: Lippincott, Williams, & Wilkins.

**Course Name:** Dental Hygiene Materials

**Course Abbreviation:** DHT 2613

**Classification:** Career-Technical Core

**Description:** This course offers the study of materials used in dentistry, their physical and chemical properties, and proper manipulation as used in the operator and laboratory. (3 sch: 2 hr. lecture, 2 hr. lab)

**Prerequisite:** None

<b>Competencies and Suggested Objectives</b>	
1.	Discuss selected dental materials within the dental hygienist's scope of practice. <ol style="list-style-type: none"> <li>a. Discuss materials used in dentistry.</li> <li>b. Demonstrate the ability to manipulate plaster, stone, impression materials, dental amalgam, dental cements, bases, composite resins, and abrasive agents.</li> <li>c. Describe the armamentaria and techniques of restorative materials.</li> <li>d. Perform allowable procedures which meet the stated criteria as designated by the State of Mississippi Board of Dental Examiners.</li> <li>e. Demonstrate conversant knowledge of various laboratory techniques for full denture, partial denture, fixed bridge, crown, and inlay preparations; fluoride trays; and night guards.</li> </ol>
2.	Demonstrate the use of selected dental materials within the dental hygienist's scope of practice. <ol style="list-style-type: none"> <li>a. Identify materials used in dentistry.</li> <li>b. Demonstrate the ability to manipulate plaster, stone, impression materials, dental amalgam, dental cements, bases, composite resins, and abrasive agents.</li> <li>c. Describe the armamentaria and techniques of restorative materials.</li> <li>d. Perform allowable procedures which meet the stated criteria as designated by the State of Mississippi Board of Dental Examiners.</li> <li>e. Demonstrate conversant knowledge of the various laboratory techniques for full denture, partial denture, fixed bridge, crown, and inlay preparations; fluoride trays; and night guards.</li> </ol>

## STANDARDS

### *Standards Based on the Commission on Dental Accreditation*

DH3H Dental sciences content must include dental materials.

### *Related Academic Standards*

- R1 Interpret Graphic Information (forms, maps, reference sources)  
 R2 Words in Context (same and opposite meaning)



- R3 Recall Information (details, sequence)
- R4 Construct Meaning (main idea, summary/paraphrase, compare/contrast, cause/effect)
- R5 Evaluate/Extend Meaning (fact/opinion, predict outcomes, point of view)
- M1 Addition of Whole Numbers (no regrouping, regrouping)
- M2 Subtraction of Whole Numbers (no regrouping, regrouping)
- M3 Multiplication of Whole Numbers (no regrouping, regrouping)
- M4 Division of Whole Numbers (no remainder, remainder)
- M5 Decimals (addition, subtraction, multiplication, division)
- M6 Fractions (addition, subtraction, multiplication, division)
- M7 Integers (addition, subtraction, multiplication, division)
- M8 Percents
- M9 Algebraic Operations
- A1 Numeration (ordering, place value, scientific notation)
- A2 Number Theory (ratio, proportion)
- A3 Data Interpretation (graph, table, chart, diagram)
- A4 Pre-Algebra and Algebra (equations, inequality)
- A5 Measurement (money, time, temperature, length, area, volume)
- A6 Geometry (angles, Pythagorean theory)
- A7 Computation in Context (whole numbers, decimals, fractions, algebraic operations)
- A8 Estimation (rounding, estimation)
- L1 Usage (pronoun, tense, subject/verb agreement, adjective, adverb)
- L2 Sentence Formation (fragments, run-on, clarity)
- L3 Paragraph Development (topic sentence, supporting sentence, sequence)
- L4 Capitalization (proper noun, titles)
- L5 Punctuation (comma, semicolon)
- L6 Writing Conventions (quotation marks, apostrophe, parts of a letter)
- S1 Vowel (short, long)
- S2 Consonant (variant spelling, silent letter)
- S3 Structural Unit (root, suffix)

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### *21<sup>st</sup> Century Skills*

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- CS1 Global Awareness
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- CS4 Health Literacy
- CS5 Environmental Literacy
- CS6 Creativity and Innovation
- CS7 Critical Thinking and Problem Solving
- CS8 Communication and Collaboration
- CS9 Information Literacy
- CS10 Media Literacy
- CS11 ICT Literacy
- CS12 Flexibility and Adaptability

CS13 Initiative and Self-Direction  
CS14 Social and Cross-Cultural Skills  
CS16 Leadership and Responsibility  
CS15 Productivity and Accountability

### **SUGGESTED REFERENCES**

Powers, J. M. & Sakaguchi, R. L.(2006). *Craig's restorative dental materials* (12<sup>th</sup> ed.). Philadelphia, PA: Mosby.

Powers, J.M. & Wataha, J.C. (2007). *Dental materials: Properties and manipulation* (9<sup>th</sup> ed.). St. Louis, MO: Mosby.

**Course Name:** Dental Pharmacology

**Course Abbreviation:** DHT 2712

**Classification:** Career-Technical Core

**Description:** This course gives a basic introduction to drug actions, their mechanisms, and the reactions of the body to these drugs. Special emphasis is given to the drugs used in the modern dental office including emergency procedures. (2 sch: 2 hr. lecture)

**Prerequisite:** None

<b>Competencies and Suggested Objectives</b>	
1.	Discuss the drug laws and usage as related to the dental practice. <ol style="list-style-type: none"> <li>a. Explain the laws governing drug use and procurement with special emphasis placed on those specifically spelled out in the practice acts of Mississippi.</li> <li>b. Identify the most reliable sources of drug information.</li> </ol>
2.	Apply knowledge of pharmacology to the practice of dental hygiene. <ol style="list-style-type: none"> <li>a. Describe pharmacological terms, prescriptions, and dosages.</li> <li>b. Interpret a drug prescription.</li> <li>c. Manage clinical situations involving drugs and drug-related techniques encountered in general dental practice.</li> <li>d. Utilize various drugs as adjuncts to dental hygiene procedures that are administered by the dental hygienist.</li> <li>e. Demonstrate the ability to take critical drug information from each client, evaluate it, and translate it into how it may or may not alter the course of dental hygiene treatment.</li> </ol>

## STANDARDS

### *Standards Based on the Commission on Dental Accreditation*

- DH2 Biomedical science content must include content in anatomy, physiology, chemistry, biochemistry, microbiology, immunology, general pathology, nutrition, and pharmacology.
- DH3G Dental sciences content must include pain management.
- DH4G Dental hygiene science content must include medical and dental emergencies including basic life support.

### *Related Academic Standards*

- R1 Interpret Graphic Information (forms, maps, reference sources)
- R2 Words in Context (same and opposite meaning)
- R3 Recall Information (details, sequence)
- R4 Construct Meaning (main idea, summary/paraphrase, compare/contrast, cause/effect)
- R5 Evaluate/Extend Meaning (fact/opinion, predict outcomes, point of view)

- M1 Addition of Whole Numbers (no regrouping, regrouping)
- M2 Subtraction of Whole Numbers (no regrouping, regrouping)
- M3 Multiplication of Whole Numbers (no regrouping, regrouping)
- M4 Division of Whole Numbers (no remainder, remainder)
- M5 Decimals (addition, subtraction, multiplication, division)
- M6 Fractions (addition, subtraction, multiplication, division)
- M7 Integers (addition, subtraction, multiplication, division)
- M8 Percents
- M9 Algebraic Operations
  - A1 Numeration (ordering, place value, scientific notation)
  - A2 Number Theory (ratio, proportion)
  - A3 Data Interpretation (graph, table, chart, diagram)
  - A4 Pre-Algebra and Algebra (equations, inequality)
  - A5 Measurement (money, time, temperature, length, area, volume)
  - A6 Geometry (angles, Pythagorean theory)
  - A7 Computation in Context (whole numbers, decimals, fractions, algebraic operations)
  - A8 Estimation (rounding, estimation)
- L1 Usage (pronoun, tense, subject/verb agreement, adjective, adverb)
- L2 Sentence Formation (fragments, run-on, clarity)
- L3 Paragraph Development (topic sentence, supporting sentence, sequence)
- L4 Capitalization (proper noun, titles)
- L5 Punctuation (comma, semicolon)
- L6 Writing Conventions (quotation marks, apostrophe, parts of a letter)
- S1 Vowel (short, long)
- S2 Consonant (variant spelling, silent letter)
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### *21<sup>st</sup> Century Skills*

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- CS1 Global Awareness
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- CS9 Information Literacy
- CS10 Media Literacy
- CS11 ICT Literacy
- CS12 Flexibility and Adaptability
- CS13 Initiative and Self-Direction
- CS14 Social and Cross-Cultural Skills
- CS16 Leadership and Responsibility

CS15 Productivity and Accountability

### **SUGGESTED REFERENCES**

Haveles, E. B. (2010). *Applied pharmacology for the dental hygienist* (6<sup>th</sup> ed.). St. Louis, MO: Mosby.

**Course Name:** Community Dental Health

**Course Abbreviation:** DHT 2813

**Classification:** Career-Technical Core

**Description:** This course provides an introduction to preventive dentistry as administered on federal, state, and local levels through official and voluntary health agencies. Supervised field experience gives an opportunity to observe and participate in some phases of community and school dental health programs. (3 sch: 2 hr. lecture, 3 hr. clinical)

**Corequisite:** Clinical Dental Hygiene III (DHT 2436)

<b>Competencies and Suggested Objectives</b>	
1.	Discuss community oral health programs. <ol style="list-style-type: none"> <li>a. Explain rationale behind public health functions in community dental health.</li> <li>b. Discuss community dental health programs in schools, nursing homes, state hospitals, maternal and childcare facilities, and other known areas of need.</li> </ol>
2.	Evaluate community oral health needs. <ol style="list-style-type: none"> <li>a. Assess the role of public health agencies in meeting dental needs of a community.</li> <li>b. Plan community dental health programs to meet dental health needs.</li> <li>c. Conduct the community dental health programs.</li> <li>d. Discuss the diverse socio-economic strata within a community.</li> <li>e. Evaluate program effectiveness via dental indices and statistical data.</li> </ol>

## STANDARDS

### *Standards Based on the Commission on Dental Accreditation*

- DH1 General education content must include oral and written communications, psychology, and sociology.
- DH4 Dental hygiene science content must include
- DH4A oral health education and preventive counseling,
  - DH4B health promotion,
  - DH4C patient management,
  - DH4D clinical dental hygiene,
  - DH4E provision of services for and management of patients with special needs,
  - DH4F community dental/oral health,
  - DH4G medical and dental emergencies including basic life support,
  - DH4H legal and ethical aspects of dental hygiene practice,
  - DH4I infection and hazard control management, and
  - DH4J the provision of oral health care services to patients with blood borne infectious diseases.

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*Related Academic Standards*


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- R1 Interpret Graphic Information (forms, maps, reference sources)
- R2 Words in Context (same and opposite meaning)
- R3 Recall Information (details, sequence)
- R4 Construct Meaning (main idea, summary/paraphrase, compare/contrast, cause/effect)
- R5 Evaluate/Extend Meaning (fact/opinion, predict outcomes, point of view)
- M1 Addition of Whole Numbers (no regrouping, regrouping)
- M2 Subtraction of Whole Numbers (no regrouping, regrouping)
- M3 Multiplication of Whole Numbers (no regrouping, regrouping)
- M4 Division of Whole Numbers (no remainder, remainder)
- M5 Decimals (addition, subtraction, multiplication, division)
- M6 Fractions (addition, subtraction, multiplication, division)
- M7 Integers (addition, subtraction, multiplication, division)
- M8 Percents
- M9 Algebraic Operations
- A1 Numeration (ordering, place value, scientific notation)
- A2 Number Theory (ratio, proportion)
- A3 Data Interpretation (graph, table, chart, diagram)
- A4 Pre-Algebra and Algebra (equations, inequality)
- A5 Measurement (money, time, temperature, length, area, volume)
- A6 Geometry (angles, Pythagorean theory)
- A7 Computation in Context (whole numbers, decimals, fractions, algebraic operations)
- A8 Estimation (rounding, estimation)
- L1 Usage (pronoun, tense, subject/verb agreement, adjective, adverb)
- L2 Sentence Formation (fragments, run-on, clarity)
- L3 Paragraph Development (topic sentence, supporting sentence, sequence)
- L4 Capitalization (proper noun, titles)
- L5 Punctuation (comma, semicolon)
- L6 Writing Conventions (quotation marks, apostrophe, parts of a letter)
- S1 Vowel (short, long)
- S2 Consonant (variant spelling, silent letter)
- S3 Structural Unit (root, suffix)

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*21<sup>st</sup> Century Skills*


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- CS1 Global Awareness
- CS2 Financial, Economic, Business and Entrepreneurial Literacy
- CS3 Civic Literacy
- CS4 Health Literacy
- CS5 Environmental Literacy
- CS6 Creativity and Innovation
- CS7 Critical Thinking and Problem Solving
- CS8 Communication and Collaboration

- CS9 Information Literacy
- CS10 Media Literacy
- CS11 ICT Literacy
- CS12 Flexibility and Adaptability
- CS13 Initiative and Self-Direction
- CS14 Social and Cross-Cultural Skills
- CS16 Leadership and Responsibility
- CS15 Productivity and Accountability

### **SUGGESTED REFERENCES**

- Geurink, K.V. (2011). *Community oral health practice for the dental hygienist* (3<sup>rd</sup> ed.). Philadelphia, PA: Saunders.
- Gluck, G.M. & Morganstein, W.M. (Eds.) (2002). *Jong's community dental health* (5<sup>th</sup> ed.). Philadelphia, PA: Mosby.



**Course Name:** Dental Ethics/Law

**Course Abbreviation:** DHT 2922

**Classification:** Career-Technical Core

**Description:** Focus on the ethical and legal aspects of providing dental health care. (2 sch: 2 hr. lecture)

**Prerequisite:** None

<b>Competencies and Suggested Objectives</b>	
1.	Explain the ethical aspects of providing dental health care. <ol style="list-style-type: none"> <li>Analyze the basic criteria in ethical judgments.</li> <li>Prepare an ethical case study in a form outlined for dealing with an ethical dilemma.</li> <li>Relate each item in the ADHA Code of Ethics into a practical, everyday philosophy.</li> </ol>
2.	Explain the legal aspects of providing dental health care. <ol style="list-style-type: none"> <li>Recognize specific legal terms and their significance to dentistry and dental hygiene.</li> <li>Incorporate legalities into practical experience for the protection of the dental hygienist, dentist, and patient.</li> <li>Prepare a case study in dental law with inclusion of ethical concepts.</li> <li>Discuss the Mississippi Dental Practice Act.</li> </ol>

## STANDARDS

### *Standards Based on the Commission on Dental Accreditation*

DH4H Dental hygiene science content must include legal and ethical aspects of dental hygiene practice.

### *Related Academic Standards*

- R1 Interpret Graphic Information (forms, maps, reference sources)
- R2 Words in Context (same and opposite meaning)
- R3 Recall Information (details, sequence)
- R4 Construct Meaning (main idea, summary/paraphrase, compare/contrast, cause/effect)
- R5 Evaluate/Extend Meaning (fact/opinion, predict outcomes, point of view)
- M1 Addition of Whole Numbers (no regrouping, regrouping)
- M2 Subtraction of Whole Numbers (no regrouping, regrouping)
- M3 Multiplication of Whole Numbers (no regrouping, regrouping)
- M4 Division of Whole Numbers (no remainder, remainder)
- M5 Decimals (addition, subtraction, multiplication, division)
- M6 Fractions (addition, subtraction, multiplication, division)
- M7 Integers (addition, subtraction, multiplication, division)
- M8 Percents

- M9 Algebraic Operations
- A1 Numeration (ordering, place value, scientific notation)
- A2 Number Theory (ratio, proportion)
- A3 Data Interpretation (graph, table, chart, diagram)
- A4 Pre-Algebra and Algebra (equations, inequality)
- A5 Measurement (money, time, temperature, length, area, volume)
- A6 Geometry (angles, Pythagorean theory)
- A7 Computation in Context (whole numbers, decimals, fractions, algebraic operations)
- A8 Estimation (rounding, estimation)
- L1 Usage (pronoun, tense, subject/verb agreement, adjective, adverb)
- L2 Sentence Formation (fragments, run-on, clarity)
- L3 Paragraph Development (topic sentence, supporting sentence, sequence)
- L4 Capitalization (proper noun, titles)
- L5 Punctuation (comma, semicolon)
- L6 Writing Conventions (quotation marks, apostrophe, parts of a letter)
- S1 Vowel (short, long)
- S2 Consonant (variant spelling, silent letter)
- S3 Structural Unit (root, suffix)

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### *21<sup>st</sup> Century Skills*

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- CS1 Global Awareness
- CS2 Financial, Economic, Business, and Entrepreneurial Literacy
- CS3 Civic Literacy
- CS4 Health Literacy
- CS5 Environmental Literacy
- CS6 Creativity and Innovation
- CS7 Critical Thinking and Problem Solving
- CS8 Communication and Collaboration
- CS9 Information Literacy
- CS10 Media Literacy
- CS11 ICT Literacy
- CS12 Flexibility and Adaptability
- CS13 Initiative and Self-Direction
- CS14 Social and Cross-Cultural Skills
- CS16 Leadership and Responsibility
- CS15 Productivity and Accountability

### **SUGGESTED REFERENCES**

Kimbrough, V. J. & Lautar, C. J. (2011). *Ethics, jurisprudence, and practice management in dental hygiene* (3<sup>rd</sup> ed.). Upper Saddle River, NJ: Prentice Hall.

**Course Name:** Dental Hygiene Seminar III

**Course Abbreviation:** DHT 2931

**Classification:** Career-Technical Core

**Description:** This course provides the student with the opportunity to discuss dental disciplines and professional development. (1 sch: 1 hr. lecture)

**Prerequisite:** Dental Hygiene Seminar II (DHT 1921)

<b>Competencies and Suggested Objectives</b>
1. Participate in leadership activities. <ol style="list-style-type: none"> <li>a. Develop progressive leadership skills.</li> <li>b. Establish professional goals.</li> <li>c. Utilize group dynamics as a means of enhancing professional growth.</li> <li>d. Participate in professional activities.</li> </ol>
2. Discuss the different disciplines of dentistry. <ol style="list-style-type: none"> <li>a. Critique presentations of members of the dental specialties.</li> <li>b. Discover other opportunities in the dental field.</li> </ol>
3. Discuss clinical simulation exam format. <ol style="list-style-type: none"> <li>a. Complete clinical simulation.</li> <li>b. Discuss test taking strategies.</li> <li>c. Complete case studies in the following areas: pediatric client, adult periodontally involved client, geriatric client, special needs client, and medically compromised client.</li> <li>d. Critique case studies.</li> <li>e. Critique care plans.</li> </ol>

## STANDARDS

### *Standards Based on the Commission on Dental Accreditation*

- DH1 General education content must include oral and written communications, psychology, and sociology.
- DH2 Biomedical science content must include content in anatomy, physiology, chemistry, biochemistry, microbiology, immunology, general pathology, nutrition, and pharmacology.
- DH3 Dental sciences content must include
- DH3A tooth morphology,
  - DH3B head, neck and oral anatomy,
  - DH3C oral embryology and histology,
  - DH3D oral pathology,
  - DH3E radiography,
  - DH3F periodontology,
  - DH3G pain management, and
  - DH3H dental materials.

- DH4 Dental hygiene science content must include
- DH4A oral health education and preventive counseling,
  - DH4B health promotion,
  - DH4C patient management,
  - DH4D clinical dental hygiene,
  - DH4E provision of services for and management of patients with special needs,
  - DH4F community dental/oral health,
  - DH4G medical and dental emergencies including basic life support,
  - DH4H legal and ethical aspects of dental hygiene practice,
  - DH4I infection and hazard control management, and
  - DH4J the provision of oral health care services to patients with blood borne infectious diseases.

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*Related Academic Standards*

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- R1 Interpret Graphic Information (forms, maps, reference sources)
- R2 Words in Context (same and opposite meaning)
- R3 Recall Information (details, sequence)
- R4 Construct Meaning (main idea, summary/paraphrase, compare/contrast, cause/effect)
- R5 Evaluate/Extend Meaning (fact/opinion, predict outcomes, point of view)
- M1 Addition of Whole Numbers (no regrouping, regrouping)
- M2 Subtraction of Whole Numbers (no regrouping, regrouping)
- M3 Multiplication of Whole Numbers (no regrouping, regrouping)
- M4 Division of Whole Numbers (no remainder, remainder)
- M5 Decimals (addition, subtraction, multiplication, division)
- M6 Fractions (addition, subtraction, multiplication, division)
- M7 Integers (addition, subtraction, multiplication, division)
- M8 Percents
- M9 Algebraic Operations
- A1 Numeration (ordering, place value, scientific notation)
- A2 Number Theory (ratio, proportion)
- A3 Data Interpretation (graph, table, chart, diagram)
- A4 Pre-Algebra and Algebra (equations, inequality)
- A5 Measurement (money, time, temperature, length, area, volume)
- A6 Geometry (angles, Pythagorean theory)
- A7 Computation in Context (whole numbers, decimals, fractions, algebraic operations)
- A8 Estimation (rounding, estimation)
- L1 Usage (pronoun, tense, subject/verb agreement, adjective, adverb)
- L2 Sentence Formation (fragments, run-on, clarity)
- L3 Paragraph Development (topic sentence, supporting sentence, sequence)
- L4 Capitalization (proper noun, titles)
- L5 Punctuation (comma, semicolon)
- L6 Writing Conventions (quotation marks, apostrophe, parts of a letter)
- S1 Vowel (short, long)
- S2 Consonant (variant spelling, silent letter)
- S3 Structural Unit (root, suffix)

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*21<sup>st</sup> Century Skills*

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- CS1 Global Awareness
- CS2 Financial, Economic, Business, and Entrepreneurial Literacy
- CS3 Civic Literacy
- CS4 Health Literacy
- CS5 Environmental Literacy
- CS6 Creativity and Innovation
- CS7 Critical Thinking and Problem Solving
- CS8 Communication and Collaboration
- CS9 Information Literacy
- CS10 Media Literacy
- CS11 ICT Literacy
- CS12 Flexibility and Adaptability
- CS13 Initiative and Self-Direction
- CS14 Social and Cross-Cultural Skills
- CS16 Leadership and Responsibility
- CS15 Productivity and Accountability

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**SUGGESTED REFERENCES**

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References listed in the Recommended Tool and Equipment section.

**Course Name:** Dental Hygiene Seminar IV

**Course Abbreviation:** DHT 2941

**Classification:** Career-Technical Core

**Description:** This course provides the student the opportunity to discuss the written registry exam, the clinical simulation exam format, and professional development. (1 sch: 1 hr. lecture)

**Prerequisite:** Dental Hygiene Seminar III (DHT 2931)

<b>Competencies and Suggested Objectives</b>	
1. Participate in leadership activities.	<ul style="list-style-type: none"> <li>a. Develop progressive leadership skills.</li> <li>b. Establish professional goals.</li> <li>c. Utilize group dynamics as a means of enhancing professional growth.</li> <li>d. Participate in professional activities.</li> </ul>
2. Explain written registry exam format.	<ul style="list-style-type: none"> <li>a. Complete mock exams.</li> <li>b. Discuss exam content areas.</li> <li>c. Discuss test taking strategies.</li> </ul>
3. Explain clinical simulation exam format.	<ul style="list-style-type: none"> <li>a. Complete clinical simulation.</li> <li>b. Discuss exam content areas.</li> <li>c. Discuss test taking strategies.</li> <li>d. Develop case studies.</li> <li>e. Develop care plans.</li> <li>f. Critique care plans.</li> </ul>

## STANDARDS

### *Standards Based on the Commission on Dental Accreditation*

- DH1 General education content must include oral and written communications, psychology, and sociology.
- DH2 Biomedical science content must include content in anatomy, physiology, chemistry, biochemistry, microbiology, immunology, general pathology, nutrition, and pharmacology.
- DH3 Dental sciences content must include
- DH3A tooth morphology,
  - DH3B head, neck and oral anatomy,
  - DH3C oral embryology and histology,
  - DH3D oral pathology,
  - DH3E radiography,
  - DH3F periodontology,
  - DH3G pain management, and

- DH3H dental materials.
- DH4 Dental hygiene science content must include
  - DH4A oral health education and preventive counseling,
  - DH4B health promotion,
  - DH4C patient management,
  - DH4D clinical dental hygiene,
  - DH4E provision of services for and management of patients with special needs,
  - DH4F community dental/oral health,
  - DH4G medical and dental emergencies including basic life support,
  - DH4H legal and ethical aspects of dental hygiene practice,
  - DH4I infection and hazard control management, and
  - DH4J the provision of oral health care services to patients with blood borne infectious diseases.

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### *Related Academic Standards*

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- R1 Interpret Graphic Information (forms, maps, reference sources)
- R2 Words in Context (same and opposite meaning)
- R3 Recall Information (details, sequence)
- R4 Construct Meaning (main idea, summary/paraphrase, compare/contrast, cause/effect)
- R5 Evaluate/Extend Meaning (fact/opinion, predict outcomes, point of view)
- M1 Addition of Whole Numbers (no regrouping, regrouping)
- M2 Subtraction of Whole Numbers (no regrouping, regrouping)
- M3 Multiplication of Whole Numbers (no regrouping, regrouping)
- M4 Division of Whole Numbers (no remainder, remainder)
- M5 Decimals (addition, subtraction, multiplication, division)
- M6 Fractions (addition, subtraction, multiplication, division)
- M7 Integers (addition, subtraction, multiplication, division)
- M8 Percents
- M9 Algebraic Operations
- A1 Numeration (ordering, place value, scientific notation)
- A2 Number Theory (ratio, proportion)
- A3 Data Interpretation (graph, table, chart, diagram)
- A4 Pre-Algebra and Algebra (equations, inequality)
- A5 Measurement (money, time, temperature, length, area, volume)
- A6 Geometry (angles, Pythagorean theory)
- A7 Computation in Context (whole numbers, decimals, fractions, algebraic operations)
- A8 Estimation (rounding, estimation)
- L1 Usage (pronoun, tense, subject/verb agreement, adjective, adverb)
- L2 Sentence Formation (fragments, run-on, clarity)
- L3 Paragraph Development (topic sentence, supporting sentence, sequence)
- L4 Capitalization (proper noun, titles)
- L5 Punctuation (comma, semicolon)
- L6 Writing Conventions (quotation marks, apostrophe, parts of a letter)
- S1 Vowel (short, long)
- S2 Consonant (variant spelling, silent letter)

S3 Structural Unit (root, suffix)

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*21<sup>st</sup> Century Skills*

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- CS1 Global Awareness
- CS2 Financial, Economic, Business, and Entrepreneurial Literacy
- CS3 Civic Literacy
- CS4 Health Literacy
- CS5 Environmental Literacy
- CS6 Creativity and Innovation
- CS7 Critical Thinking and Problem Solving
- CS8 Communication and Collaboration
- CS9 Information Literacy
- CS10 Media Literacy
- CS11 ICT Literacy
- CS12 Flexibility and Adaptability
- CS13 Initiative and Self-Direction
- CS14 Social and Cross-Cultural Skills
- CS16 Leadership and Responsibility
- CS15 Productivity and Accountability

### **SUGGESTED REFERENCES**

References listed in the Recommended Tool and Equipment section.



## Recommended Tools and Equipment

### CAPITALIZED ITEMS

1. Air Polishing Unit (1 per 5 students)
2. Autoclave, Steam (1 per 5 students)
3. Cart, Stainless Steel with Shelves (1 per student)
4. Cleaner, Ultrasonic (1 per 4 students)
5. Computer w/Monitor (1 per 4 students)
6. Dental Chair (1 per operator)
7. Dental Light (1 per operator)
8. Film Developer for Daylight (1 per program)
9. Handpiece, Slow Speed (1 per student)
10. Instrument/Handpiece Cart (1 per operator)
11. Intraoral 35 mm Camera (1 per program)
12. Intraoral Video Camera (1 per program)
13. Light Curing Unit (1 per 2 students)
14. Manikin, X-ray, Adult (1 per x-ray room)
15. Manikin, X-ray, Mixed (1 per x-ray room)
16. Mechanical Spatulator (1 per program)
17. Microscope, Phase w/Monitor (1 per program)
18. OSHA Compliance System (1 per program)
19. Printer, Laser (1 per 2 computers)
20. Probe, Electronic Periodontal (2 per program)
21. Scaler, Sonic (1 per 5 students)
22. Spore Test Incubators (1 per program)
23. Stool, Operator (1 per operator)
24. Tank, Oxygen (2 per program)
25. Tester, Pulp Vitality (1 per 5 students)
26. Trimmer Model (1 per 5 students)
27. Ultrasonic Scaler (1 per 3 students)
28. Vacuum Forming Machine (1 per program)
29. Vibrator, Dental Office (1 per program)
30. X-ray Automatic Film Processor (1 per program)
31. X-ray Extra-Oral Machine (1 per program)
32. X-ray Pano Apron (1 per x-ray room)
33. X-ray Processing Tanks (1 per program)
34. X-ray Intra-Oral Unit (1 per x-ray room)
35. X-ray View Box (1 per operator and 1 per x-ray room)
36. Nitrous Oxide Machine (1 per program)
37. Automated External Defibrillator (1 per program)

## NON-CAPITALIZED ITEMS

1. Bench Mount (1 per student)
2. Chair Mount (1 per chair)
3. Dentiform (1 per student)
4. Emergency Medical Kit (1 per program)
5. Engine, Bench with Handpiece (1 per 5 students)
6. Film Duplicator (1 per program)
7. Handpiece, High Speed (1 per 3 students)
8. Lathe (1 per 5 students)
9. Screen, Extra-Oral Rare Earth (1 per program)
10. Amalgam Instruments (1 per 5 students)
11. Articulator, Hinged (1 per 5 students)
12. Boley Gauge (2 per program)
13. Bowl, Lab Mixing, Medium (1 per student)
14. Bowl, Lab Mixing, Large (1 per student)
15. Burners (2 per program)
16. Carver, Roach (2 per program)
17. Cassette, Instrument (2 per student)
18. Eye Wash (1 per lab)
19. Holder, Cotton Roll (1 per operatory)
20. Irrigator, Intra-Oral (1 per 5 students)
21. Knife, Lab (1 per student)
22. Mirror, Mouth (2 per student)
23. Mirror, Hand (1 per student)
24. Prophy Angle (1 per student)
25. Slab, Glass Mixing (1 per 3 students)
26. Spatula, Plaster (1 per student)
27. Sphygmomanometer (1 per 2 students and 1 per operatory)
28. Spill Kit (1 per program)
29. Splash Hood with Lucite Shield (1 per lathe)
30. Stethoscope (1 per student)
31. Syringe, Aspirating (1 per 5 students)
32. Thermometer, Digital (1 per operatory)
33. Tray, Impression, Perforated (Maxillary & Mandibular), Small Set (2 per program)
34. Tray, Impression, Perforated (Maxillary & Mandibular), Medium Set (2 per program)
35. Tray, Impression, Perforated (Maxillary & Mandibular), Large Set (2 per program)
36. Ultrasonic Insert #1 (1 per 3 students)
37. Ultrasonic Insert #3 (1 per 3 students)
38. Ultrasonic Insert #7 (1 per 3 students)
39. Ultrasonic Insert #10 (1 per 3 students)
40. Ultrasonic Insert EWPP (1 per 3 students)
41. Ultrasonic Insert PzR (1 per 3 students)
42. Ultrasonic Insert PzL (1 per 3 students)
43. X-ray Apron w/Thyroid Collar, Adult (1 per x-ray room and 1 per program)
44. X-ray Apron w/Thyroid Collar, Pediatric (1 per x-ray room and 1 per program)

45. X-ray Darkroom Light (1 per darkroom)
46. X-ray Film Hanger (1 per student)
47. X-ray Film Holders (1 per 2 students)
48. X-ray PID, 16" (1 per program)
49. X-ray Thermometer, Floating (1 per program)
50. Model, 2.5 x Natural Size Teeth Model (1 per 5 students)
51. Model, Developmental, Newborn (1 per 5 students)
52. Model, Developmental, Child/Adolescent (1 per 5 students)
53. Model, Developmental, Adult (1 per 5 students)
54. Skulls, Plastic Human (1 per 2 students)
55. Skull, Sagittally Sectioned (1 per 2 students)
56. Screen, Projector (1 per program)
57. Model, Malocclusion (1 per 5 students)
58. Stethoscope, Teaching (1 per program)
59. Teeth, Individual Synthetic (6 sets per program)

#### RECOMMENDED INSTRUCTIONAL AIDS

It is recommended that instructors have access to the following items:

Suggested References (1 per program except where otherwise noted):

*American Dental Association regulatory compliance manual*. Updated annually by the American Dental Association.

Commission on Dental Accreditation. (2010). *Accreditation standards for dental hygiene education programs*. Chicago: American Dental Association.

Darby, M. L. (Ed.). (2006). *Mosby's comprehensive review of dental hygiene* (6<sup>th</sup> ed.). St. Louis, MO: Mosby.

Darby, M. L., & Walsh, M. M. (Eds.). (2009). *Dental hygiene: Theory and practice* (3<sup>rd</sup> ed.). Philadelphia, PA: Saunders.

Fehrenbach, M.J., & Weiner, J. (2008). *Saunders review of dental hygiene* (2<sup>nd</sup> ed.). Philadelphia, PA: Saunders.

Gage, T. W., & Pickett, F. A. (2010). *Mosby's dental drug reference* (9<sup>th</sup> ed.). St. Louis, MO: Mosby.

Harris, N. O., Garcia-Godoy, F., & Nathe, C.N. (2008). *Primary preventative dentistry* (7<sup>th</sup> ed.). Upper Saddle River, NJ: Prentice Hall.

Langlais, R.P., Miller, C. S., & Nield-Gehrig, J.S. (2009). *Color atlas of common oral diseases* (4<sup>th</sup> ed.). Hagerstown, MD: Lippincott Williams & Wilkins.

Little, J. W., Falace, D. A., Miller, C.S., & Rhodus, N.L. (2007). *Dental management of the medically compromised patient* (7<sup>th</sup> ed.). St. Louis, MO: Mosby.

Malamed, S. F. (2007). *Medical emergencies in the dental office* (6<sup>th</sup> ed.). St. Louis, MO: Mosby.

Mosby. (2008). *Mosby's dictionary of medicine, nursing, and health professions* (8<sup>th</sup> ed.). St. Louis, MO: Author.

2009 *Physicians' desk reference for nonprescription drugs, dietary supplements, and herbs*. (2009). Montvale, NJ: Thomson Reuters.

Venes, D. ( Ed.). (2009). *Taber's cyclopedic medical dictionary* (21<sup>st</sup> ed.). Philadelphia, PA: F.A. Davis.

Videos/DVDs (1 per program unless otherwise noted):

OSHA Guidelines

Polishing

Ultrasonic Scaling

Sealants

Fluoride

Extra-oral/Intra-oral

Vital Signs

Instrumentation

Sharpening

Patient Operator Position

Radiology Techniques

Managing Implants

Software (1 per program unless otherwise noted):

Board Review (Published by Saunders)

Slide Sets (1 per program unless otherwise noted):

Atlas of Histology

Basic Human Histology Set

Oral Cavity

Teeth and Their Function

Oral Pathology for the Dental Hygienist

ADA Oral Pathology

## Appendix A: 2010 Accreditation Standards for Dental Hygiene Education Programs<sup>1</sup>

- DH1 General education content must include oral and written communications, psychology, and sociology.
- DH2 Biomedical science content must include content in anatomy, physiology, chemistry, biochemistry, microbiology, immunology, general pathology, nutrition, and pharmacology.
- DH3 Dental sciences content must include
  - DH3A tooth morphology,
  - DH3B head, neck and oral anatomy,
  - DH3C oral embryology and histology,
  - DH3D oral pathology,
  - DH3E radiography,
  - DH3F periodontology,
  - DH3G pain management, and
  - DH3H dental materials.
- DH4 Dental hygiene science content must include
  - DH4A oral health education and preventive counseling
  - DH4B health promotion
  - DH4C patient management
  - DH4D clinical dental hygiene
  - DH4E provision of services for and management of patients with special needs
  - DH4F community dental/oral health
  - DH4G medical and dental emergencies, including basic life support
  - DH4H legal and ethical aspects of dental hygiene practice
  - DH4I infection and hazard control management and
  - DH4J the provision of oral health care services to patients with blood-borne infectious diseases.

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<sup>1</sup> Commission on Dental Accreditation. (2010). *Accreditation standards for dental hygiene education programs*. Chicago, IL: American Dental Association.

## Appendix B: Related Academic Standards<sup>2</sup>

### Reading

- R1 Interpret Graphic Information (forms, maps, reference sources)
- R2 Words in Context (same and opposite meaning)
- R3 Recall Information (details, sequence)
- R4 Construct Meaning (main idea, summary/paraphrase, compare/contrast, cause/effect)
- R5 Evaluate/Extend Meaning (fact/opinion, predict outcomes, point of view)

### Mathematics Computation

- M1 Addition of Whole Numbers (no regrouping, regrouping)
- M2 Subtraction of Whole Numbers (no regrouping, regrouping)
- M3 Multiplication of Whole Numbers (no regrouping, regrouping)
- M4 Division of Whole Numbers (no remainder, remainder)
- M5 Decimals (addition, subtraction, multiplication, division)
- M6 Fractions (addition, subtraction, multiplication, division)
- M7 Integers (addition, subtraction, multiplication, division)
- M8 Percents
- M9 Algebraic Operations

### Applied Mathematics

- A1 Numeration (ordering, place value, scientific notation)
- A2 Number Theory (ratio, proportion)
- A3 Data Interpretation (graph, table, chart, diagram)
- A4 Pre-Algebra and Algebra (equations, inequality)
- A5 Measurement (money, time, temperature, length, area, volume)
- A6 Geometry (angles, Pythagorean theory)
- A7 Computation in Context (whole numbers, decimals, fractions, algebraic operations)
- A8 Estimation (rounding, estimation)

### Language

- L1 Usage (pronoun, tense, subject/verb agreement, adjective, adverb)
- L2 Sentence Formation (fragments, run-on, clarity)
- L3 Paragraph Development (topic sentence, supporting sentence, sequence)
- L4 Capitalization (proper noun, titles)
- L5 Punctuation (comma, semicolon)
- L6 Writing Conventions (quotation marks, apostrophe, parts of a letter)

### Spelling

- S1 Vowel (short, long)
- S2 Consonant (variant spelling, silent letter)
- S3 Structural Unit (root, suffix)

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<sup>2</sup> CTB/McGraw-Hill LLC. (2005). *Tests of adult basic education, Forms 7 and 8*. Monterey, CA: Author. Reproduced with permission of CTB/McGraw-Hill LLC. TABE is a registered trademark of The McGraw-Hill Companies, Inc. Copyright © 2005 by CTB/McGraw-Hill LLC. Reproduction of this material is permitted for educational purposes only.

## Appendix C: 21<sup>st</sup> Century Skills<sup>3</sup>

### CSS1-21<sup>st</sup> Century Themes

#### CS1 Global Awareness

1. Using 21st century skills to understand and address global issues
2. Learning from and working collaboratively with individuals representing diverse cultures, religions, and lifestyles in a spirit of mutual respect and open dialogue in personal, work, and community contexts
3. Understanding other nations and cultures, including the use of non-English languages

#### CS2 Financial, Economic, Business and Entrepreneurial Literacy

1. Knowing how to make appropriate personal economic choices
2. Understanding the role of the economy in society
3. Using entrepreneurial skills to enhance workplace productivity and career options

#### CS3 Civic Literacy

1. Participating effectively in civic life through knowing how to stay informed and understanding governmental processes
2. Exercising the rights and obligations of citizenship at local, state, national, and global levels
3. Understanding the local and global implications of civic decisions

#### CS4 Health Literacy

1. Obtaining, interpreting, and understanding basic health information and services and using such information and services in ways that enhance health
2. Understanding preventive physical and mental health measures, including proper diet, nutrition, exercise, risk avoidance, and stress reduction
3. Using available information to make appropriate health-related decisions
4. Establishing and monitoring personal and family health goals
5. Understanding national and international public health and safety issues

#### CS5 Environmental Literacy

1. Demonstrate knowledge and understanding of the environment and the circumstances and conditions affecting it, particularly as relates to air, climate, land, food, energy, water and ecosystems
2. Demonstrate knowledge and understanding of society's impact on the natural world (e.g., population growth, population development, resource consumption rate, etc.)
3. Investigate and analyze environmental issues, and make accurate conclusions about effective solutions
4. Take individual and collective action towards addressing environmental challenges (e.g., participating in global actions, designing solutions that inspire action on environmental issues)

### CSS2-Learning and Innovation Skills

#### CS6 Creativity and Innovation

1. Think Creatively
2. Work Creatively with Others
3. Implement Innovations

#### CS7 Critical Thinking and Problem Solving

1. Reason Effectively
2. Use Systems Thinking
3. Make Judgments and Decisions
4. Solve Problems

#### CS8 Communication and Collaboration

1. Communicate Clearly
2. Collaborate with Others

<sup>3</sup> 21<sup>st</sup> century skills. (n.d.). Washington, DC: Partnership for 21<sup>st</sup> Century Skills.

### CSS3-Information, Media and Technology Skills

**CS9 Information Literacy**

1. Access and Evaluate Information
2. Use and Manage Information

**CS10 Media Literacy**

1. Analyze Media
2. Create Media Products

**CS11 ICT Literacy**

1. Apply Technology Effectively

### CSS4-Life and Career Skills

**CS12 Flexibility and Adaptability**

1. Adapt to Change
2. Be Flexible

**CS13 Initiative and Self-Direction**

1. Manage Goals and Time
2. Work Independently
3. Be Self-directed Learners

**CS14 Social and Cross-Cultural Skills**

1. Interact Effectively with Others
2. Work Effectively in Diverse Teams

**CS15 Productivity and Accountability**

1. Manage Projects
2. Produce Results

**CS16 Leadership and Responsibility**

1. Guide and Lead Others
2. Be Responsible to Others