

# Dental Hygienist

Program Number: 10-508-1

## Associate in Applied Science Degree

Health-Related Professions Program Cluster

Center of Health & Safety Education

Program offered at Madison Campuses

For information call: (608) 246-6065, (608) 258-2470 or (800) 322-6282 Ext. 6065 or 2470

### About the Program

Under the supervision of a dentist, a dental hygienist inspects the mouth, administers local anesthesia and chemotherapeutic agents, removes stains and deposits from teeth, applies preventive agents, prepares clinical and diagnostic tests, completes dental x-rays and performs many other services related to mouth care. Dental hygienists counsel patients about preventive measures such as nutrition, oral hygiene and dental care.

Dental hygienist graduates are required to successfully complete comprehensive written and clinical examinations given under the direction of the State Dentistry Examining Board, the American Dental Association's Joint Commission on National Dental Examinations and a Regional Dental Testing Service.

### Application Process

To apply for the program, students must submit an application, online or paper. A \$30 application fee (if not previously paid) plus \$5 online fee, high school transcripts or GED/HSED scores, college transcript(s) and COMPASS/ASSET test scores.

### Unique Requirements for Admission

Graduation from an accredited secondary school with a college preparatory course or recognized equivalency test. The applicant will be expected to have better than average grades. An acceptable COMPASS, ACT, SAT, ASSET or equivalent assessment test is required. Applicants must have successfully completed with a grade of C or better, two high school semesters or one college semester of algebra, geometry, chemistry and biology. Applicants must have successfully completed three to four years of English at the high school level or two semesters at the college level with a grade of C or better.

### Program Requirements

Students are required to show evidence of current CPR "Professional Level" certification before beginning the first dental hygiene course. Students must maintain current CPR certification while attending the program. Students must submit a completed Health History form by the first week of the first semester.

### Requirements for Graduation

The student must achieve at least a 2.0 (C) grade in microbiology, chemistry, anatomy, physiology and all dental hygiene and general education courses.

### Program Courses

**10-508-101 Dental Health Safety** 1 credit  
 Prepares dental auxiliary students to respond proactively to dental emergencies, control infection, prevent disease, adhere to OSHA Standards and safely manage hazardous materials. Students also take patient vital signs and collect patient medical/dental histories. CPR certification is a prerequisite; students will be required to show proof of certification before beginning the course. Prerequisites: Students must be currently recognized/ certified in basic life support procedures for health care provider, including cardiopulmonary resuscitation prior to enrollment in this course.

## Curriculum

### FIRST YEAR

		Credits	Hrs/week Lec-Lab
<b>Pre – Dental Hygienist courses:</b>			
The following courses <b>must be completed</b> prior to acceptance into dental courses:			
20-806-206	General Anatomy and Physiology*	4	5-4
20-806-201	General, Organic and Biological Chemistry*	5	4-2
20-806-273	Microbiology*	4	3-2
<b>Semester Total</b>		<b>13</b>	

### First Semester

10-508-101	Dental Health Safety	1	1-0
10-508-102	Oral Anatomy, Embry, Histology	4	4-0
10-508-103	Dental Radiography	2	2-2
10-508-105	Dental Hygiene Process 1	4	2-6
	Elective*	2	E
<b>Semester Total</b>		<b>13</b>	

### Second Semester

10-508-106	Dental Hygiene Process II	4	2-7
10-508-108	Periodontology	3	3-0
10-508-109	Cariology	1	2-0
10-508-110	Nutrition and Oral Health	2	2-0
10-508-113	Dental Materials	2	1-2
20-809-231	Introduction to Psychology* OR	3	3-0
10-809-199	Psychology of Human Relations*	(3)	(3-0)
<b>Semester Total</b>		<b>15</b>	

### SECOND YEAR

#### First Semester

10-508-111	General & Oral Pathology	3	3-0
10-508-112	Dental Hygiene Process III	5	2-14
10-508-114	Dental Pharmacology	2	2-0
10-508-115	Community Dental Health	2	2-0
10-508-116	Dental Pain Management	1	2-14
20-809-203	Introduction to Sociology* OR	3	3-0
10-809-197	Contemporary American Society*	(3)	(3-0)
<b>Semester Total</b>		<b>16</b>	

#### Second Semester

10-508-107	Dental Hygiene Ethics & Professionalism	1	1-0
10-508-117	Dental Hygiene Process IV	4	0-14
20-801-201	English Composition 1* OR	3	3-0
10-801-195	Written Communication*	(3)	(3-0)
20-810-201	Fundamentals of Speech* OR	3	3-0
10-801-198	Speech	(3)	(3-0)
20-809-236	Applied Psychology* OR	3	3-0
20-809-237	Abnormal Psychology* OR	(3)	(3-0)
20-809-233	Developmental Psychology* OR	(3)	(3-0)
20-809-235	Psychology of Personal Adjustment* OR	(3)	(3-0)
<b>Semester Total</b>		<b>14</b>	

\*General Anatomy & Physiology, General, Organic & Bio Chemistry, and Microbiology **must be** taken prior to entering the first-semester Dental Hygienist classes. Other general support classes are strongly encouraged to be taken prior to admission to the program.

Students must have two-person CPR, infant through adult for clinical dental hygiene and licensure exam.

**Note:** A copy of the essential functions necessary to successfully complete the program of study is available upon request from the Center office.

## Program Courses (continued)

**10-508-102 Oral Anatomy, Embryology & Histology 4 credits**

Prepares Dental Hygienist students to apply detailed knowledge about oral anatomy to planning, implementation, assessment, and evaluation of patient care. Students identify distinguishing characteristics of normal and abnormal dental, head, and neck anatomy and its relationship to tooth development, eruption and health.

**10-508-103 Dental Radiography 2 credits**

Prepares dental auxiliary students to operate x-ray units and expose bitewing, periapical, extra oral, and occlusal radiographs. Emphasis is placed on protection against x-ray hazards. Students also process, mount, and evaluate radiographs for diagnostic value. In this course students demonstrate competency on a manikin. In addition, students expose bitewing radiographs on a peer, role-play patient. Students gain further experience in exposing radiographs on patients in the clinical portion of their program. This course also provides the background in radiographic theory required for students to make informed decisions and adjustments.

**10-508-105 Dental Hygiene Process I 4 credits**

Introduces Dental Hygiene students to the basic technical/clinical skills required of practicing Dental Hygienists including use of basic dental equipment, examination of patients, and procedures within the dental unit. Under the direct supervision of an instructor, students integrate hands-on skills with entry-level critical thinking and problem-solving skills. The course also reinforces the application of Dental Health Safety skills.

**10-508-106 Dental Hygiene Process 2 4 credits**

This clinical course builds on and expands the technical/clinical skills student dental hygienists began developing in Dental Hygiene Process I. Under the direct supervision of an instructor, students apply patient care assessment, planning, implementation, and evaluation skills to provide comprehensive care for calculus case type 1 and 2 patients and perio case patients. This also introduces the application of fluoride and desensitizing agents, whole mouth assessments, comprehensive periodontal examinations, application of sealants, and patient classification. Students also begin performing removal of supragingival stain, dental plaque, calcified accretions, and deposits. In addition, they gain further experience in exposing radiographs on patients.

**10-508-107 Dental Hygiene Ethics & Professionalism 1 credit**

Helps student dental hygienists develop and apply high professional and ethical standards. Students apply the laws that govern the practice of dental hygiene to their work with patients, other members of a dental team and the community. Emphasis is placed on maintaining confidentiality and obtaining informed consent. Students enhance their ability to present a professional appearance.

**10-508-108 Periodontology 3 credits**

This course prepares student dental hygienists to assess the periodontal health of patients, plan prevention and treatment of periodontal disease, and to evaluate the effectiveness of periodontal treatment plans. Emphasis is placed on the recognition of the signs and causes of periodontal disease and on selection of treatments modalities that minimize risk and restore periodontal health.

**10-508-109 Cariology 1 credit**

This course focuses on the characteristics and contributing factors of dental decay. Dental Hygiene students help patients minimize caries risk by developing treatment plans, communicating methods to patients, and evaluating treatment results.

**10-508-110 Nutrition and Oral Health 2 credits**

Prepares student dental hygienists to counsel patients about diet and its impact on oral health. Students learn to distinguish between balanced and unbalanced diets and to construct diets that meet the needs of patients with compromised dental/oral health. Students also learn to counsel patients about the effect of eating disorders on dental health.

**10-508-111 General and Oral Pathology 3 credits**

This course prepares the student dental hygienist to determine when to consult, treat or refer clients with various disease, infection or physiological conditions. Students learn to recognize the signs, causes, and implications of common pathological conditions including inflammatory responses, immune disorders, genetic disorders, developmental disorders of tissues and cysts, oral tissue trauma, and neoplasm of the oral cavity.

**10-508-112 Oral Anatomy and Physiology 5 credits**

This clinical course builds on and expands the technical/clinical skills student dental hygienists developed in Dental Hygiene Process II. In consultation with the instructor, students apply independent problem-solving skills in the course of providing comprehensive care for calculus case type 1, 2, and 3 patients and perio case type 0, I, II, and III patients. This also introduces root detoxification using hand and ultra-sonic instruments, a selection of dental implant prophylaxis treatment options, and administration of chemotherapeutic agents. Students also adapt care plans in order to accommodate patients with special needs.

**10-508-113 Dental Materials 2 credits**

Prepares dental auxiliary students to handle and prepare dental materials such as liners, bases, cements, amalgam, resin restorative materials, gypsum products and impression materials. Students also learn to take alginate impressions and clean removable appliances. Prerequisites: completion of, or concurrent enrollment in Dental Health Safety, 10-508-101.

**10-508-114 Dental Pharmacology 2 credits**

Prepares student dental hygienists to select safe and effective patient premedication and within the scope of dental hygiene practice. Students will also learn to recognize potential pharmacological contraindications for specific patients and to take measures to avoid negative impact or alert other members of the dental team to possible negative impact.

**10-508-115 Community Dental Health 2 credits**

This course prepares the Dental Hygienist student to play a proactive role in improving the dental health of community members of all ages. Students perform and interpret dental health research to determine community dental health needs.

**10-508-116 Dental Pain Management 1 credit**

This course prepares the student dental hygienist to work within the scope of dental hygiene practice to manage pain for dental patients. Students learn to prevent and manage common emergencies related to administration of local anesthesia, prepare the armamentarium, and administer local anesthesia. The course also addresses the recommendation of alternative pain control measures.

**10-508-117 Dental Hygiene Process IV 4 credits**

This clinical course builds on and expands the technical/clinical skills student dental hygienists developed in Dental Hygiene Process III. With feedback from the instructor, students manage all aspects of cases in the course of providing comprehensive care for calculus case type 0, 1, 2, and 3 patients and for perio case type 0 I, II, and III patients. Emphasizes maximization of clinical efficiency and effectiveness. Prepares student dental hygienists to demonstrate their clinical skills in a formal examination situation.

## Career Potential:

- **Dental Hygienist**

With additional education and/or work experience, graduates may find employment as:

- **Dental Hygiene Instructor**
- **Public Health Hygienist**
- **Dental Laboratory Technician**
- **Dental Sales Representative**
- **Member of Dental Examining Board**
- **Public School Hygienist**
- **Dental Hygiene Administrator in hospital-type setting**

*More detailed and updated information on this program may be available at: [matcmadison.edu](http://matcmadison.edu). The college reserves the right to make changes in the regulations and courses announced in this publication without notice.*

*Madison Area Technical College provides equal opportunity in education and employment.*

Rev. 05/09