

Washtenaw Community College Comprehensive Report

DEN 112 Dental Materials Effective Term: Fall 2023

Course Cover

College: Health Sciences

Division: Health Sciences

Department: Allied Health

Discipline: Dental Assisting

Course Number: 112

Org Number: 15100

Full Course Title: Dental Materials

Transcript Title: Dental Materials

Is Consultation with other department(s) required: No

Publish in the Following: College Catalog , Time Schedule , Web Page

Reason for Submission: Three Year Review / Assessment Report

Change Information:

Course description

Outcomes/Assessment

Objectives/Evaluation

Rationale: Make language in all dental assisting courses consistent and meet accreditation requirements/standards. Updated: course description, objectives and assessment tool language

Proposed Start Semester: Fall 2023

Course Description: In this course, dental assisting students will be introduced to various materials used in dentistry. Students will learn the purpose, use and properties of these dental materials. The manipulation, practical application and adherence to Occupational Safety and Health Administration (OSHA) regulations and Center for Disease Control (CDC) guidelines will be emphasized.

Course Credit Hours

Variable hours: Yes

Credits: 0 – 3

Lecture Hours: Instructor: 30 **Student:** 30

Lab: Instructor: 45 **Student:** 45

Clinical: Instructor: 0 **Student:** 0

Total Contact Hours: Instructor: 0 to 75 **Student:** 0 to 75

Repeatable for Credit: NO

Grading Methods: Letter Grades

Audit

Are lectures, labs, or clinicals offered as separate sections?: YES (separate sections)

College-Level Reading and Writing

College-level Reading & Writing

College-Level Math

Requisites

Prerequisite

Admission to Dental Assisting program

Prerequisite

DEN 102 minimum grade "C"; may enroll concurrently

General Education**Request Course Transfer**

Proposed For:

Student Learning Outcomes

1. Identify concepts and principles related to the properties and uses of common dental materials.

Assessment 1

Assessment Tool: Outcome-related final exam questions

Assessment Date: Winter 2025

Assessment Cycle: Every Three Years

Course section(s)/other population: All

Number students to be assessed: All

How the assessment will be scored: Answer key

Standard of success to be used for this assessment: 80% or more of the students will score 80% or higher on outcome-related questions.

Who will score and analyze the data: Departmental faculty

2. Manipulate dental materials while applying safety and infection control regulations/guidelines.

Assessment 1

Assessment Tool: Outcome-related validations

Assessment Date: Winter 2025

Assessment Cycle: Every Three Years

Course section(s)/other population: All

Number students to be assessed: All

How the assessment will be scored: Departmentally-developed rubric

Standard of success to be used for this assessment: 85% or more of students will score at 85% or higher on their first attempt.

Who will score and analyze the data: Departmental faculty

3. Produce clinically acceptable laboratory projects while applying safety and infection control regulations/guidelines.

Assessment 1

Assessment Tool: Outcome-related evaluation

Assessment Date: Winter 2025

Assessment Cycle: Every Three Years

Course section(s)/other population: All

Number students to be assessed: All

How the assessment will be scored: Departmentally-developed rubric

Standard of success to be used for this assessment: 80% or more of students will score 80% or higher on their first attempt

Who will score and analyze the data: Departmental Faculty

Course Objectives

1. Identify the basic chemical and physical properties of dental materials including, but not limited to, gypsum, restorative materials, dental cements, impressions materials, custom tray materials and waxes.
2. Identify various indirect and direct restorative materials and functions.
3. Identify the various categories of impression materials and their use.
4. Identify variables that will affect the desired outcomes when manipulating dental materials.
5. Identify the purpose and fabrication method for diagnostic models.

6. Identify the purpose and fabrication method for custom trays.
7. Identify proper handling of hazardous materials.
8. Identify and practice OSHA regulations and CDC guidelines as they relate to the dental lab.
9. Identify and operate laboratory equipment.
10. Demonstrate proper manipulation of dental cements.
11. Demonstrate proper manipulation of impression materials.
12. Obtain diagnostic impressions.
13. Produce a diagnostic model(s), custom trays, mouth guard, whitening trays, and stint(s).
14. Demonstrate the use of polishing and finishing devices and materials on a variety of appliances.
15. Demonstrate the ability to work as a team player and manage time effectively.
16. Identify cavity classifications for direct restorations.

New Resources for Course

Course Textbooks/Resources

Textbooks

Bird and Robinson. *Modern Dental Assisting*, 12th ed. Mosby, 2018

Hatrack. *Dental Materials*, ed. Elsevier, 2016

Manuals

Periodicals

Software

Equipment/Facilities

Level III classroom

Other: Dental Lab

<u>Reviewer</u>	<u>Action</u>	<u>Date</u>
Faculty Preparer: <i>Jodi Neuman</i>	<i>Faculty Preparer</i>	<i>Jan 03, 2023</i>
Department Chair/Area Director: <i>Kristina Sprague</i>	<i>Recommend Approval</i>	<i>Jan 03, 2023</i>
Dean: <i>Shari Lambert</i>	<i>Recommend Approval</i>	<i>Jan 18, 2023</i>
Curriculum Committee Chair: <i>Randy Van Wagnen</i>	<i>Recommend Approval</i>	<i>Feb 17, 2023</i>
Assessment Committee Chair: <i>Shawn Deron</i>	<i>Recommend Approval</i>	<i>Feb 17, 2023</i>
Vice President for Instruction: <i>Victor Vega</i>	<i>Approve</i>	<i>Feb 18, 2023</i>

Washtenaw Community College Comprehensive Report

DEN 112 Dental Materials Effective Term: Winter 2018

Course Cover

Division: Health Sciences

Department: Allied Health

Discipline: Dental Assisting

Course Number: 112

Org Number: 15100

Full Course Title: Dental Materials

Transcript Title: Dental Materials

Is Consultation with other department(s) required: No

Publish in the Following: College Catalog , Time Schedule , Web Page

Reason for Submission: Three Year Review / Assessment Report

Change Information:

Course discipline code & number

Course description

Pre-requisite, co-requisite, or enrollment restrictions

Outcomes/Assessment

Objectives/Evaluation

Rationale: Changes to the course description and objectives to better reflect activities involved in the course.

Proposed Start Semester: Winter 2018

Course Description: In this course the dental assisting students will be introduced to various materials used in dentistry. The student will learn the purpose, use and properties of these dental materials. The manipulation, practical application and adherence to OSHA regulations and CDC guidelines will be emphasized.

Course Credit Hours

Variable hours: Yes

Credits: 0 – 3

Lecture Hours: Instructor: 30 **Student:** 30

Lab: Instructor: 45 **Student:** 45

Clinical: Instructor: 0 **Student:** 0

Total Contact Hours: Instructor: 0 to 75 **Student:** 0 to 75

Repeatable for Credit: NO

Grading Methods: Letter Grades

Audit

Are lectures, labs, or clinicals offered as separate sections?: YES (separate sections)

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College-level Reading & Writing

College-Level Math

Requisites

Prerequisite

Admission to Dental Assisting program

Prerequisite

DEN 102 minimum grade "C"; may enroll concurrently

General Education

Request Course Transfer

Proposed For:

Student Learning Outcomes

1. Identify concepts and principles related to the properties and uses of common dental materials.

Assessment 1

Assessment Tool: Final exam

Assessment Date: Winter 2020

Assessment Cycle: Every Three Years

Course section(s)/other population: All

Number students to be assessed: All

How the assessment will be scored: Items scored against answer key.

Standard of success to be used for this assessment: 80% or more of the students will correctly answer each item. Items with scores lower than 80% will be targeted for review. 80% of the students will score 80% overall.

Who will score and analyze the data: Faculty assigned to teach the course will analyze the data.

2. Manipulate dental materials and produce clinically acceptable laboratory projects utilizing outlined safety and infection control guidelines.

Assessment 1

Assessment Tool: Laboratory evaluations/validations.

Assessment Date: Winter 2020

Assessment Cycle: Every Three Years

Course section(s)/other population: All

Number students to be assessed: All

How the assessment will be scored: Departmentally-developed rubric.

Standard of success to be used for this assessment: 85% or more of students will score 85% or higher on their first attempt.

Who will score and analyze the data: Departmental faculty will score and analyze the data.

Course Objectives

1. Identify the basic chemical and physical properties of dental materials including, but not limited to, gypsum, restorative materials, dental cements, impressions materials, custom tray materials and waxes.
2. Identify various indirect and direct restorative materials and functions.
3. Identify the various categories of impression materials and their use.
4. Identify variables that will affect the desired outcomes when manipulating dental materials.
5. Identify the purpose and fabrication method for diagnostic models.
6. Identify the purpose and fabrication method for custom trays.
7. Identify proper handling of hazardous materials.
8. Identify and practice OSHA regulations and CDC guidelines as they relate to the dental lab.
9. Identify and operate laboratory equipment.
10. Demonstrate proper manipulation of dental cements.
11. Demonstrate proper manipulation of impression materials.

12. Obtain diagnostic impressions.
13. Produce a diagnostic model(s), custom trays, mouth guard, whitening trays, and stint(s).
14. Demonstrate the use of polishing and finishing devices and materials on a variety of appliances.
15. Demonstrate the manipulation of a variety of restorative materials.
16. Demonstrate the ability to work as a team player and manage time effectively.

New Resources for Course

Course Textbooks/Resources

Textbooks

Bird and Robinson. *Modern Dental Assisting*, 12th ed. Mosby, 2018

Hatrick. *Dental Materials*, ed. Elsevier, 2016

Manuals

Periodicals

Software

Equipment/Facilities

Level III classroom

Other: Dental Lab

<u>Reviewer</u>	<u>Action</u>	<u>Date</u>
Faculty Preparer: <i>Kristina Sprague</i>	<i>Faculty Preparer</i>	<i>Apr 27, 2017</i>
Department Chair/Area Director: <i>Connie Foster</i>	<i>Recommend Approval</i>	<i>May 09, 2017</i>
Dean: <i>Valerie Greaves</i>	<i>Recommend Approval</i>	<i>May 10, 2017</i>
Curriculum Committee Chair: <i>Lisa Veasey</i>	<i>Recommend Approval</i>	<i>Aug 31, 2017</i>
Assessment Committee Chair: <i>Michelle Garey</i>	<i>Recommend Approval</i>	<i>Sep 06, 2017</i>
Vice President for Instruction: <i>Kimberly Hurns</i>	<i>Approve</i>	<i>Sep 07, 2017</i>