



Course Syllabus
School of Nursing and Health Professions

Course Name:	Dental Materials I
Course & Section Number:	DAS 104-XXX
Meeting Day(s) & Time(s):	
Credits:	2
Contact Hours:	4
Instructor's Name:*	
Office Hours & Location:	
OCC Phone:	
OCC Email:**	

**Please use only Owens email for course communications.

Catalog description:

The student is introduced to a variety of dental materials used in dentistry. The physical and chemical properties of these materials are included. Manipulation and practical application of basic dental materials occurs in laboratory sessions with an emphasis on safety and infection control. The course also covers more complex dental materials and operative procedures.

http://catalog.owens.edu/preview_program.php?catoid=17&poid=5307

Prerequisite/Corequisites:

Co-requisites: DAS102 and DAS103 and DAS104 and DAS 105 all with a 'C' or better and Chair approval

Prerequisites: NONE

Course Materials:

1. Bird, D. and Robinson, D. *Modern Dental Assisting*, 14th Edition. St. Louis, MO: Elsevier, 2023. ISBN-13: 9789323824408
2. Boyd, L. *Dental Instruments: A Pocket Guide*, 8th Edition. St. Louis, MO: Elsevier, 2023. ISBN-13: 970323873901
3. Owens Community College Dental Hygiene Program Procedure and Safety Manual.

*If a **print book, e-book, or access code** is required for class, you can access the Owens Community College e-Campus Bookstore by accessing the online link, called “Find Books” on the course schedule for each course section. See the example below.*

OER and Owens Community College Library Resources (Open Educational Resources are free online materials for instructor and student use. Some OER material may be available in print in the Owens Community College Library.)

Inclusive Access (I.A.) Materials are included in the cost of the course to save students money through lower negotiated rates with publishers. Courses containing I.A. materials will have it noted on the online class schedule. If your course includes I.A. digital materials, you will receive an email with subject line, “Your inclusive Access Materials,” and it will include any codes or digital links.

The email will come to your Owens Community College email from the Owens e-Campus Bookstore on the first day of class, if not before. Be sure to check your spam (junk email) if you do not find it in your inbox. If the email is not in your inbox or spam folder, contact your instructor immediately. You may also see a folder at the top of your course labelled “Course Materials by eCampus.” This folder will contain any needed codes or links to needed materials.

If the I.A. materials also include a printed book or are in print form, the item will be shipped to your address of record automatically based on your enrollment in the course. Please note that some courses do not include printed materials in I.A. and those materials would need to be purchased separately using the link on the course schedule. When you access the Find Books link you will see which items in a course are included in I.A.

What You Will Learn in the Course

Course Objectives:

1. Identify the practical working knowledge of dental liners, bases, and bonding systems.
2. Discuss the Dental Cements used in dentistry.
3. Explain Dental Amalgams used in dentistry.
4. Identify the different types of composites used in dentistry.
5. Discuss the cavity preparation, and matrix systems.

Student Learning Outcomes:

Outcome	Where Assessed
1. List the dental liners, bases, and the ways they affect the application for filling a tooth.	Tests, Quizzes, Skill Evaluations, Daily Grade, Final Exam
2. Discuss the various types of dental cements used in dentistry.	Tests, Quizzes, Skill Evaluations, Daily Grade, Final Exam
3. Evaluate the consistency of dental liners and bases.	Tests, Quizzes, Skill Evaluations, Daily Grade, Final Exam
4. Describe the properties of amalgam and how this is used to restore a tooth.	Tests, Quizzes, Skill Evaluations, Daily Grade, Final Exam
5. Explain the process of composite restorations.	Tests, Quizzes, Skill Evaluations, Daily Grade, Final Exam
6. Organize a tray set up for amalgam, composite, and sealants.	Tests, Quizzes, Skill Evaluations, Daily Grade, Final Exam
7. Compare the different types of matrix systems used in a restorative procedure.	Tests, Quizzes, Skill Evaluations, Daily Grade, Final Exam
8. Discuss the cavity preparation and cavity classifications.	Tests, Quizzes, Skill Evaluations, Daily Grade, Final Exam

Program Outcomes:

Outcome	Where Assessed
1. Students will provide effective communication.	Tests, Quizzes, Skill Evaluations, Daily Grade, Final Exam
2. Students will demonstrate problem solving.	Tests, Quizzes, Skill Evaluations, Daily Grade, Final Exam
3. Students will access, gather and utilize information.	Tests, Quizzes, Skill Evaluations, Daily Grade, Final Exam
4. Students will demonstrate technical competence in Dental Assisting.	Tests, Quizzes, Skill Evaluations, Daily Grade, Final Exam

Technology, Lab, and File Requirements:

Blackboard Online Learning Platform

Laptop and access to internet

Respondus Lockdown Browser: [eLearning - Owens Community College](#)

Academic Support

Disability Services Resource Center: If you have a disability or acquire one, you may be entitled to receive reasonable accommodations intended to assure you an equal opportunity to participate in and benefit from the program. To receive more information or to register for

accommodations, please contact the Disability Resource Center at 567-661-7007, email disability@owens.edu, visit <https://www.owens.edu/disability/>, or stop by College Hall 124.

Tutoring Services: Owens Community College offers academic tutoring and assistance in a variety of subjects including: accounting, computing, economics, mathematics, science, and writing. For more information go to: <https://www.owens.edu/successcenters/>.

Counseling Services: Counseling Services provides assistance to students experiencing personal, educational, interpersonal/relationship, family, social, or psychological difficulties. If you feel you may benefit from this service, please contact them at counselingservices@owens.edu. More information is at <https://www.owens.edu/counseling/>.

Campus and Community Connections: The Center for Campus and Community Connections (College Hall 123) is a walk-in office created to provide retention support through resource stability initiatives and community connections. Go here for more information: <https://www.owens.edu/connection/> or contact connections@owens.edu

Owens Library: The Owens Library offers two locations (Toledo and Findlay) as well as online resources. For more information visit <https://www.owens.edu/library/>.

Students can find more information on campus resources, student support, student life, and security at this [link](#).

General Information

Student Code of Conduct: All students are expected to follow Owens Community College's Student Code of Conduct, which includes academic honesty, encompassing plagiarism. See the Board Policy for more information.

Anti-Discrimination and Harassment & Title IX/Sexual Misconduct: All students, faculty, and staff are expected to follow Owens Community College's Anti-Discrimination and Harassment Policy and the College's Title IX Policy/Sexual Misconduct Procedures and Guidelines. The College strictly prohibits and will not tolerate harassment, discrimination, intimidation, or hostile/offensive working or learning environments.

Religious Accommodations: A student seeking an accommodation for an absence permitted under Ohio's Testing Your Faith Act must provide the instructor with a written email notice with the specific dates for an absence, and must do so not later than fourteen (14) days after the first day of instruction. Alternative accommodations are not retroactive, and no academic penalty will be imposed for an absence under the policy*. The request for an alternative accommodation will be kept confidential. Students with questions about a religious accommodation under Ohio's Testing your Faith Act may contact the College's Office of Academic Affairs: provost@owens.edu. The policy may be found on the Owens website: [3358:11-2-63 Accommodation](#) for a Student Absence for the Observance of Religious Beliefs and Practices Policy

Document Collection: Throughout the semester, your instructors may ask for a variety of

assignments including tests and/or quizzes for student learning of institutional general education competencies or program assessment. Please save all your class materials until the end of the semester.

Classroom Admittance: OCC classes shall only be attended by the officially registered OCC students or perspective students, instructor of record, guest lecturer, or substitute. Visitors are not permitted to be in the classroom and should not be invited to attend or participate in the class. See [FERPA](#) regulations for more information.

Use of AI Tools: This course requires you to complete various assignments that assess your understanding and application of the course content. You are expected to do your own work and cite any sources you use properly. You are not allowed to use any artificial intelligence (AI) tools, such as chatbots, text generators, paraphrasers, summarizers, or solvers, to complete any part of your assignments. Any attempt to use these tools will be considered academic misconduct and will be dealt with according to the Owens Community College academic integrity policy. Students are expected to complete all work independently and without the assistance of AI-generated content. If you have any questions about what constitutes acceptable use of AI tools, please consult with the instructor *before* submitting your work.

Student Responsibilities & Instructor Expectations

Instructor Responsibilities:

- We will treat you and your classmates with dignity and respect.
- We will be flexible to support your individual needs.
- We will provide resources and support for you to be successful.
- We will make ourselves available through multiple communication channels.

Student Responsibilities:

- You will treat us and your peers with dignity and respect, too.
- You will schedule time to complete the work.
- You will tell us what would help you most to overcome barriers.
- You will let us know when life gets in the way or if something is not clear.

Attendance:

1. Attendance for all class/lab is required for success.
2. It is important that you attend every class session. Otherwise, you will miss out on the many learning activities that we will engage in.
3. Any absence or tardiness must be reported to the course instructor.

Absence

1. Owens realizes that circumstances beyond one's control may cause late arrival, early departure, or an absence (serious illness or accident for example).
2. In the event of an unforeseen circumstance, it is the student's responsibly to contact the course instructor immediately and appropriate documentation must be provided to the course instructor within 72 hours of the student's return in order to be eligible for an Excused Absence.

3. In the event of an unforeseen circumstance with documentation, late work is eligible for credit.
4. A planned absence may be requested for certain circumstances. If requested and granted, arrangements for a makeup test or exam must be made with the course director prior to the exam date.
5. An Unexcused Absence for three (3) class sessions may result in the lowering of the final grade by one letter grade. If you have an issue for not being able to attend class on time and/or staying for the entire session, please meet with me to develop a plan so you are able to complete the class materials and lab assignments.

How Grades are Determined and Major Assignments

Evaluation Measure The grade points for the areas of work are as follows.	Student Learning Outcomes Assessed	Value
Tests	1-8	25%
Quizzes	1-8	15%
Skill Evaluations	1-8	25%
Daily Grade	1-8	10%
Final Exam	1-8	25%
Total:		100%

Grading Scale

Grade	Percentage
A	90-100
B	80-89
C	70-79
D	60-69
F	59 or below

Tests (25% of the course grade): Tests will be completed during class time through blackboard. Tests will be completed using *Respondous Lockdown Browser*. Tests will have a specific time frame for completion. It is the student's responsibility to work within this time frame or contact the instructor with any problems encountered with Blackboard within this time frame. Test questions are composed of multiple choices, true or false, and matching questions. **Students who are absent, still must take the test, but will receive a zero if unexcused. If an excused absence arises, it is the student responsibility to make arrangements with the course instructor to make-up the test.**

Quizzes (25% of the course grade): Quizzes will be offered through blackboard, and will have a specific time frame for completion. It is the student's responsibility to work within this time

frame or contact the instructor with any problems encountered with Blackboard within this time frame. Quiz questions are composed of multiple choices, true or false, and matching questions. **Students who do not complete quiz within Blackboard time frame will receive a grade of zero.**

Skill Evaluations (20% of the course grade): Skill evaluations will be done during in-person labs. In the event a student is absent the day of a skill evaluation, it is the student's responsibility to make any necessary arrangements to make it up. Failure to do so, will result in a grade of zero.

Skill Evaluations will be provided the first day of class in the Blackboard shell. A skill evaluation is used to determine the student's level of skill in a particulate procedure or technique. Students are required to attend all lab session, as this is the time devoted to practicing the skills required for practicing in a dental office. Skill Evaluations are graded according to the criteria printed on each evaluation.

Skill Evaluations may be taken a maximum of three (3) times in order to achieve a passing grade. Students will earn the grade of the passing skill evaluation. Please use practice sessions with the lab instructors prior to retaking any skill evaluation.

Daily Grade (10% of the course grade): The daily grade consists of professional attire, respect and character, preparedness, time management, quality of work, team work, infection control, and overall impression in every in-person class/lab session.

If an Unexcused Absence arises, a Daily Grade of 0% will be given for that session.

If an Excused Absence arises a Daily Grade of Exempt will be given for that session.

Classes may utilize the use of student partners, one as the clinician and one as the patient. All students are required to sit as a patient as the task requires.

Final Exam (30% of the course grade): The final exam will be comprehensive and be given during the assigned time during Final Exam Week. This will be 2 parts: lecture and lab.

*** ALL grading criteria must be completed and passed at a 70%, regardless of the earned grade, in order to pass DAS 104 before the last day of the semester.**

Tentative Class Assignments

Week	Topic/ Chapter	Laboratory Activity	Test / Quiz	Skill Evaluations
1 DATE	Course Syllabus Introduction to Dental Materials	Tour Lab Guidelines Scavenger Hunt	Quiz 1	
2 DATE	General Dentistry Chapter 48: General Dentistry	G.V. Black Classification Kahoot G.V. Black Classification Lab Activity	Quiz 2	
3 DATE	Restorative and Esthetic Dental Materials: Properties of Dental Materials and Amalgam Chapter 43 Restorative and Esthetic Materials	Assisting with an Amalgam Restoration: • Tray set-up with instrument ID. • Operating amalgamator • Mixing, placing in carrier, and transferring amalgam	Quiz 3	
4 DATE	Restorative and Esthetic Dental Materials: Composite, Glass Ionomers, and Indirect Restorations Chapter 43 Restorative and Esthetic Materials	Assisting with an Amalgam Restoration: • Tray set-up with instrument ID. • Operating amalgamator • Mixing, placing in carrier, and transferring amalgam Assisting with a Composite Restoration • Tray set-up with instrument ID. • Transferring Composite	Quiz 4	
5	No New Topic	Assisting with a Composite Restoration • Tray set-up with instrument ID.	Test 1	Skill Evaluation

DATE		Transferring Composite		Assisting with an Amalgam Restoration
6 DATE	Cements Chapter 45: Dental Cements	Dental Cements Kahoot Mixing ZOE for cementing Mixing ZOE for base Mix Glass Ionomer Mix Polycarboxylate Mix Zinc Phosphate	Quiz 5	Skill Evaluation Assisting with a Composite Restoration
7 DATE	Bases, Liners, and Bonding Chapter 44: Dental Liners, Bases, and Bonding Systems	Mixing ZOE for cementing Mixing Zinc Oxide for base Mix Glass Ionomer Mix Polycarboxylate Mix Zinc Phosphate	Quiz 6	Instrument ID Quiz
8 DATE	No New Topic		Test 2	Skill Evaluation Mixing ZOE for Base Skill Evaluation Mixing ZOE for Cementing Skill Evaluation Mixing Zinc Phosphate Skill Evaluation

				Mixing polycarboxylate Skill Evaluation Mixing glass ionomer cement
9 DATE	Matrix Systems Chapter 49: Matrix System for Restorative Dentistry	Assemble Tofflemire Other Matrix Systems	Quiz 7	
10 DATE	Rubber Dams Chapter 36: Moisture Control Pages 502-509	Assemble Tofflemire Dental Dam Placement	Quiz 8	
11 DATE	No New Topic	Dental Dam Placement	Test 3	Skill Evaluation Tofflemire
12 DATE	TBD			
13 DATE	Sealants Chapter 59: Sealants	Assisting with a Sealant • Tray Set-up with instrument ID • Transferring during sealant procedure	Quiz 9	Skill Evaluation Dental Dam
14 DATE	No New Topic	Review for Lab Final		Skill Evaluation Assisting with a Sealant
15 DATE	Review for Final	Lab Final		

16	Lecture Final			
DATE				

Disclaimer: The instructor reserves the right to amend this syllabus as deemed necessary and will communicate such amendment to the students in the course. Please note that while unlikely, there is a possibility courses might need to change the delivery method due to external issues like public health concerns, weather issues, etc. If this happens, the college will communicate any changes via email and/or other communication methods.