



**Course Syllabus
SEMESTER
School of Nursing and Health Professions**

<i>Course Name:</i>	Dental Materials II
<i>Course & Section Number:</i>	DAS 107-XXX Lecture/Lab
<i>Meeting Day(s) & Time(s):</i>	Lecture: Lab:
<i>Credits:</i>	3
<i>Contact Hours:</i>	4
<i>Text:</i>	
<i>Instructor's Name:*</i>	
<i>Office Hours & Location:</i>	
<i>OCC Phone:***</i>	
<i>OCC Email:**</i>	
<i>Additional Contact Information:</i>	

*Please call me (name); it is my preferred name. If you have a preferred name, please let me know so I can use it.

****Please use only Owens email for course communications.**

*****Cell for emergencies only.**

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 in the laboratory sessions with an emphasis on safety and infection control is enforced. This course covers the complex dental materials used in the dental office.

Prerequisite/Corequisites:

Corequisites: DAS 106, DAS 108 and DAS 109

Prerequisites: DAS 101, DAS 102, DAS 103, DAS 104 and DAS 105

Course Materials:

Boyd, L. Dental Instruments: A Pocket Guide, 8th Edition. St. Louis, MO: Elsevier, 2023. ISBN13: 9780323873901

Owens Community College Dental Hygiene Program Procedure and Safety Manual.

Robinson, D. Modern Dental Assisting, 14th Edition. St. Louis, MO: Elsevier, 2024. ISBN13: 9780323824408

Reference Materials:

Eakle, W. S., Bastin, K. Dental Materials Clinical Applications for Dental Assistants and Dental Hygienists, 5th Edition. Philadelphia, PA: Saunders, 2025. ISBN13: 9780443114496

*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.)

What You Will Learn in the Course

Course Objectives:

This intermediate course will:

1. Introduce professional decision making based on properties of dental materials.
2. Demonstrating current, acceptable aseptic and safety procedures in both laboratory and clinical settings when using a given material, instrument or equipment or providing therapeutic or preventive services.
3. Introduce and demonstrate the implementation and evaluation of dental materials (impressions, models, prosthetics, amalgam-lecture only, composite, sealants, oral appliances, cements, whitening materials, custom mouth guards/sealant trays, specialty material).

Student Learning Outcomes:

Students will:

1. Discuss the types of impressions, retraction cord, final impression for fixed and removable prosthetics.
2. Describe the types of impression trays and their characteristics of use, and the gypsum products used to make molds of the teeth.
3. Demonstrate:
 - Mixing Alginate and Taking Impressions
 - Pouring up a Model
 - Trimming and Finishing Models
 - Custom Impression Trays (Thermoplastic Beads)
 - PVS Impression and Bite Registration
 - Temporary Crown Fabrication
 - Mouthguard and Bleaching Tray fabrication
4. Explain the importance of an occlusal registration and describe its use in a procedure.
5. Discuss the safety precautions that should be taken in the dental laboratory.

Outcome	Where Assessed
SLO #1-5	Test
SLO #1-5	Quiz
SLO #1-5	Homework
SLO #3 and #5	Skill Evaluations
SLO #5	Daily Grade
SLO #1-5	Final Exam

Technology, Lab, and File Requirements:

Laptop, desktop computer, access to internet, **Respondus**

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 permits you to use artificial intelligence (AI) tools, such as chatbots, text generators, paraphrasers, summarizers, or solvers, to get guidance on assignments, as long as you do so in an ethical and responsible manner. Essentially, you can think of these tools as ways

to help you learn but not to entirely create work for assignments like discussion board posts, essays, presentation slides, and so on. AI is more like your tutor or TA, not a replacement for your independent thinking.

This means that you must:

- Not use AI tools to replace your own thinking or analysis or to avoid engaging with the course content.
- Cite or explain any AI tools you use. Provide the name of the AI tool, the date of access, the URL of the interface, and the specific prompt or query you used to generate the output.
- Be transparent and honest about how you used the AI tool and how it contributed to your assignment. Explain what you learned from the AI tool, how you verified its accuracy and reliability, how you integrated its output with your own work, and how you acknowledged its limitations and biases.

You are accountable for any mistakes or errors made by the AI tool. Always check and edit the output before submitting your work. If you discover any inaccuracies or inconsistencies in the output after submission, notify the instructor immediately and correct them as soon as possible.

Using AI tools in an unethical or irresponsible manner, such as copying or paraphrasing the output without citation or transparency, using the output as your own work without verification or integration, or using the output to misrepresent your knowledge or skills, is considered a form of academic dishonesty and will result in a zero grade for the assignment and possible disciplinary action. If you have any questions about what constitutes ethical and responsible use of AI tools, please consult with the instructor **before** submitting your work.

NOTE: Some instructors will also list specific acceptable and unacceptable uses or include a statement like “All written assignments, projects, and exams must be completed independently.”

Student Responsibilities & Instructor Expectations

Instructor Expectations:

- 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.

Classroom Environment:

- 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:

- **Attendance for all scheduled class sessions is mandatory** and highly recommended.
 - The student is expected to arrive on time and attend the entire class time.
 - Any absence or tardiness must be reported to the course instructor.
- **Definitions**
 - **Late or Tardy:** arriving more than 1 minute past the scheduled time for a course to begin
 - Three “tardy days” and/or partial attendance will be construed as one undocumented absence.
 - Tardiness is disrupting to faculty and other students in the class.
 - Students who repeatedly miss classes or attend partial classes jeopardize their success in the program.
 - **Excused Absence:** sick with physician excuse, court date, ODHA/ADHA Annual Session, immediate family funeral
 - Documentation is needed within 72 hours of the student’s return otherwise it is considered an unexcused absence
 - **Unexcused Absence:** sick with no physician excuse, weddings, other absences. Attending class virtually without a physician excuse will be considered unexcused.
 - One unexcused absence per semester
 - Second unexcused absence will lower course grade by 5%
 - Third unexcused absence will lower grade by 10%.
 - Consideration will be given on a case-by-case basis.
- **Clinic/Lab/Lecture material missed due to absence or tardiness:**
 - Students are responsible for the material presented in any lecture or lab session from which the student has been absent or late. It is the student's responsibility to contact the instructor for missed material due to tardiness or absence.
 - Class time cannot be made up. Reasonable consideration will be given to certain **emergency** situations.
- **Late or Absence during any quiz, test, or exam:**
 - If a student arrives or logs in late for a quiz, test, or exam the student may take whatever time is left, but no additional time will be allotted.
 - If a student is absent during an exam, they will receive a 0.

- In the event of extreme circumstance (serious illness or accident for example) a documented absence will be considered but not guaranteed.
 - In the event of an extenuating circumstance, it is the student's responsibility to contact the course instructor immediately.
 - Appropriate documentation must be provided to the course instructor in a reasonable period of time.
 - Owens realizes that circumstances beyond one's control may occasionally cause a late arrival or early departure; the student may avoid being penalized for being absent or late with appropriate documentation.
- Planned absence during any test, quiz or exam:
 - Arrangements for a makeup exam must be made with the course director PRIOR to the exam date and retake must occur within 48 hours. It is up to the course instructor to deny or grant this request.

Lab Attire:

Proper attire for lab is required for every lab session. Students may be **DISMISSED** from lab for improper attire. Infection control procedures will be followed for all laboratory work. Clinical attire will be worn, and all infection control procedures observed when working with student partners in clinic.

Preparation:

The student is expected to spend 4-8 hours per week in preparation for class. It is assumed that the student has read the material BEFORE each class meeting. Dental materials should be reviewed to ensure safe procedures are being followed. Please refer to Owens Community College Catalog 2011-2012 Academic Assistance and Support on-line.

Dental Assisting Program Technology & Academic Integrity Policy:

Cell Phone & Electronic Device Policy

To promote a professional learning environment and ensure patient safety, **cell phones and personal electronic devices are not permitted** during labs or **clinical sessions**.

Policy Details:

- Cell phones, smart watches, tablets, earbuds, and similar personal devices **must be silenced and stored out of sight** at all times.

- Devices may **not** be used during lectures, labs, or clinic sessions unless **explicitly authorized by faculty** for instructional purposes.
- Phones may not be kept on desks, laps, pockets, or clinical countertops.
- **Photography, video, or audio recording** is strictly prohibited in lab and clinical areas unless prior written approval is granted by faculty.
- In clinical settings, personal devices pose **HIPAA, infection control, and professionalism concerns** and are therefore prohibited.

Violations:

- Violations could result in an informal resolution, coaching & formal written warning, corrective action assignment, or immediate permanent dismissal from all health programs (see Academic/Professional Standards Student Incident Report).
-

Examination & Quiz Technology Policy

To ensure academic integrity, **no personal electronic devices are permitted during exams or quizzes.**

Policy Details:

- Cell phones, smart watches, fitness trackers, earbuds, and any other electronic devices must be:
 - Powered off
 - Stored in a designated area away from the testing space
 - Devices may not be on the student's person during testing.
 - Only program-approved materials explicitly authorized by faculty may be used.
 - Faculty may require students to place phones face-down at the front of the room or in secure storage.

Violation of this policy will be treated as academic misconduct, regardless of whether the device is actively used.

Academic Integrity & Cheating Policy

The Dental Assisting Program maintains a **zero-tolerance policy for cheating**.

Cheating includes, but is not limited to:

- Possession or use of unauthorized materials during exams or quizzes
- Use of electronic devices or smart technology during testing
- Sharing or receiving test questions or answers
- Copying from another student or allowing another student to copy
- Using artificial intelligence, online resources, or stored information during assessments unless explicitly permitted
- Attempting to alter grades or exam records

Consequences:

- Immediate failure of the exam or quiz
- Possible failure of the course
- Referral for disciplinary action per institutional and program policies
- Repeated or severe violations may result in **dismissal from the program**
- Violations could result in an informal resolution, coaching & formal written warning, corrective action assignment, or immediate permanent dismissal from all health programs (see Academic/Professional Standards Student Incident Report).

Professional Expectations

As future healthcare professionals, students are expected to demonstrate behavior consistent with the ethical and professional standards of the dental hygiene profession. Failure to comply with program policies reflects unprofessional conduct and may impact academic standing and clinical eligibility.

How Grades are Determined and Major Assignments

The final course grade is to be computed using the following weights:

Evaluation Measure	Value	Student Learning Outcome Assessed
Tests:	30%	#1-5
Quizzes:	20%	#1-5
Skill Evaluations:	15%	#3 and #5
Daily Grade:	10%	#5
Homework:	5%	#1-5
Final Exam:	20%	#1-5

Grading Scale:

Grade	Points
A	90-100
B	80-89
C	70-79
D	60-69
F	0-59

NOTE: Both a D and F are considered a failing grade; requiring the student to repeat the course.

Grading Procedure:

Grades will be calculated on the following scale:

90% and Above	A
80% to Less than 90%	B
70% to Less than 80%	C
60% to Less than 70%	D
Less Than 60%	F

Skill Evaluations (10)

- SE 1 – Mixing Alginate and Taking a Mandibular Impression
- SE 2 – Mixing Alginate and Taking a Maxillary Impression
- SE 3 – Pouring a Model and Making a Base

- SE 4 – Trimming and Finishing Models
- SE 5 – Custom Impression Trays (Thermoplastic Beads)
- SE 6 – PVS Impression
- SE 7 – PVS Bite Registration
- SE 8 – Temporary Crown Fabrication
- SE 9 – Mouthguard
- SE 10 – Bleaching Tray

Quizzes (20%): Quizzes will be taken on blackboard during the student's own time using Respondus. The course calendar lists Quiz dates. Quizzes will open Tuesday following class at 7:20pm and will be due the following DATE at TIME. Quizzes can include multiple choice, T/F, matching, slide identification, and case study questions.

- Any late Quiz will result in a zero
- If a student fails a Quiz, the original failing grade is the recorded grade.
- If a failing grade is recorded, students are required to pass the same quiz in order to remain in the course.
- The retake must be successfully completed within ONE WEEK of receiving the failing grade. It is the student's responsibility to set the retake up with the instructor.
- Any retakes are not recorded in the final grade.
- After the second attempt, the student must have remediation with the Department Chair prior to the third attempt (within one week).
- Failure of the third attempt will result in failure of the course.

Tests (30%): Tests will be taken during class time using Respondus. Tests will include multiple choice, T/F, matching, slide identification, and case study questions.

- If a student fails a Test, the original failing grade is the recorded grade.
- If a failing grade is recorded, students are required to pass the same test in order to remain in the course.
- The retake must be successfully completed within ONE WEEK of receiving the failing grade. It is the student's responsibility to set the retake up with the instructor.
- Any retakes are not recorded in the final grade.
- After the second attempt, the student must have remediation with the Department Chair prior to the third attempt (within one week).
- Failure of the third attempt will result in failure of the course.

Skill Evaluations (15%):

- Students must pass all skill evaluations to pass the course.

- Passing criteria for each skill evaluation is listed on each evaluation. A scale of: Satisfactory, Improvable, and Unacceptable is used to measure proficiency.
- If an Unacceptable (U) is given, the student must retake the skill evaluation, regardless of the earned grade.
- Dental Materials Skill Evaluations: Passing requirements are on each skill evaluation / 3 attempts maximum. Retaken skill evaluations will be subjected to a retake deduction from the earned grade (second attempt: -10%, third attempt: -20%). Students must pass each skill evaluation by the third attempt in order to pass DAS 107.

Homework (5%):

- Any late assignment will result in a zero grade.
- All assignments are required and must be submitted to pass DAS 107 regardless of the earned grade.
- Assignments must be submitted on blackboard; no emailed assignments will be accepted unless otherwise discussed.
- Most, if not all, assignments are due **Mondays** at 11:59pm, unless otherwise noted.
- The course calendar will list each homework assignment.

Daily Grade (10%):

- Daily Grade measures your overall professional appearance, professionalism, time management, attitude, etc. for every class.
- Failure to assist in clinic/lab will result in reduction of daily grade.
 - All students are required to sit as a patient as the task requires. It is important for students to understand and feel the patient's perspective or point of view. Students will work on each other.

Tentative Class Assignments:

DAS 107 Course Calendar				
Week	Lecture Topic	Assignment	Quiz/Test	Lab
1 DATE	Review Syllabus Introduction to Dental Materials (Eakle, W. S., Bastin, K. Dental Materials Clinical Applications for Dental Assistants and Dental Hygienists, 5th Edition. Philadelphia, PA: Saunders, 2025. ISBN13: 9780443114496) Chapter 46: Impression Materials and Techniques (pg. 692-705)	Intro to Dental Materials Homework Due DATE at TIME Chapter 46 Homework Due DATE at TIME	Quiz 1 Due DATE at TIME	Lab Activity: General Handling and Safety of Dental Materials in the Dental Office PPT Lab Guidelines Scavenger Hunt: Get to know the lab Instructor demo of alginate impression on typodont

				Students will take max/mand impressions on typodont
2 DATE	Chapter 43: Restorative and Esthetic Dental Materials			Lab Activity: Students will practice taking max and mand impressions on student partners in clinic (practice set)
3 DATE	Chapter 16: Gypsum and Wax Products (Eakle, W. S., Bastin, K. Dental Materials Clinical Applications for Dental Assistants and Dental Hygienists, 5th Edition. Philadelphia, PA: Saunders, 2025. ISBN13: 9780443114496)	Gypsum and Wax Products Worksheet Due DATE at TIME	Quiz 2 Due DATE at TIME	Lab Activity: Students will complete Skill Eval 1 and 2: Taking a Max/Mand Impression on student partners (SE set)
4 DATE	No New Topic – Test 1 (bring laptops or arrange to sign out a chrome book)		Test 1 Over Ch. 43, 46, and 47.	Lab Activity: Instructor demo mixing and pouring up gypsum model/base Students will mix and pour up gypsum model/base of their student partners max and mand impressions (practice set)
5 DATE	Chapter 53: Dental Implants (pg. 809-819)	Dental Implants Worksheet Due DATE at TIME	Quiz 3 Due DATE at TIME	Lab Activity: Students will complete Skill Eval 3: Pouring up gypsum model & base of their student partners max and mand impressions (SE set)
6 DATE	Specialty Materials	Discussion Board Due DATE at TIME		Lab Activity: Instructor demo trimming model Students will practice trimming models (practice set)
7 DATE	Chapter 50: Fixed Prosthodontics (pg. 765-777) Chapter 52: Removable Prosthodontics (pg. 794-808)	Prosthesis Worksheet Due DATE at TIME	Quiz 4 Due DATE at TIME	Lab Activity: Students will complete Skill Eval 4: Trimming (SE set)
8 DATE	No New Topic – Test 2 (bring laptops or arrange to sign out a chrome book)		Test 2	Lab Activity: Elastomeric Impression Materials Instructor demo fabrication of custom impression tray on typodont

				Students will practice fabrication of custom impression trays on typodonts
9 DATE	TBD			
10 DATE	Chapter 51: Provisional Coverage (pg. 784-792)	Provisional Coverage Worksheet Due DATE at TIME	Quiz 5 Due DATE at TIME	Lab Activity: Students will complete Skill Eval 5: Custom Impression Trays Instructor demo PVS bite registration and PVS impression Students will practice PVS bite registration on typodont and PVS impression
11 DATE	Chapter 60: Orthodontics (pg. 923-940) *Chapter 57: Pediatric Dentistry (pg. 891, see "Sports Safety" paragraph)	Ortho Worksheet Due DATE at TIME	Quiz 6 Due DATE at TIME	Lab Activity: Students who still need to complete Skill Eval 5: Custom Impression Trays will finish today Instructor demo PVS bite registration and PVS impression Students will practice PVS bite registration on typodont and PVS impression
12 DATE	No New Topic – Test 3 (bring laptops or arrange to sign out a chrome book)		Test 3	Lab Activity: Students will complete Skill Eval 6: PVS Impression and Skill Eval 7: PVS Bite Registration Instructor demo temporary crown fabrication Students will practice temporary crown fabrication Students will complete Skill Eval 8: Temporary Crown Fabrication (if student is ready to complete today) Instructor will demo mouthguard/whitening tray construction Students will practice mouthguard/whitening tray construction
13 DATE	Chapter 43: Restorative and Esthetic Dental Materials (pg. 657-659, "Tooth Whitening")	Tooth Whitening Worksheet Due DATE at TIME	Quiz 7 Due DATE at TIME	Lab Activity: Students will complete Skill Eval 8: Temporary Crown Fabrication Instructor will demo mouthguard/whitening tray construction

				Students will practice mouthguard/whitening tray construction Students will complete Skill Eval 9 and 10: Making a Mouth Guard and Whitening Tray
14 DATE	Chapter 48: General Dentistry (pg. 734-743)	General Dentistry Worksheet Due DATE at TIME	Quiz 8 Due DATE at TIME	Lab Activity: Students will complete Skill Eval 9 and 10: Making a Mouth Guard and Whitening Tray Review Session Skill Evaluation Redo's
15 DATE	Final Exam! (bring laptops or arrange to sign out a chrome book)		Final Exam	Open Lab (immediately following completion of final exam) Skill Evaluation Redo's All Lab Assignments and Skill Evaluations must be completed
16 DATE	Exam Retakes if needed			Open Lab if needed

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.