
COURSE PREFIX/NO:	DAT 113
COURSE TITLE:	Dental Materials
LECTURE HRS/WK:	3.0
LAB HOURS:	3.0
CREDIT HRS/SEMESTER:	4.0

[Distance Learning Attendance/VA Statement](#)
[Textbook Information](#)

COURSE DESCRIPTION

This course is a study of physical and chemical properties of matter and identification, characteristics and manipulation of dental materials.

COURSE COMPETENCIES

Upon successful completion of this course, the student will be able to perform the following objectives stated in each module:

Module I – Introduction & Properties of Dental Materials

1. Identify and demonstrate the use and care of dental office laboratory equipment.
2. Demonstrate proper storage and inventory control of dental materials used in the dental office.
3. Adhere to the safety and infection control policies of the dental materials lab.
4. Demonstrate professionalism in dress, conduct, and attitude.
5. Define the general physical properties of dental materials.

Module II – Bases, Liners & Cements

6. Identify, manipulate, and state the properties of bases and varnishes.
7. Identify, manipulate, and state the properties of cements used in operative dentistry and dental specialties.

Module III – Impression Materials, Gypsum & Waxes

8. Identify, manipulate, and state the properties of dental impression materials and dental waxes.
9. Identify and manipulate gypsum material products to pour and trim study models.

Module IV – Metals & Esthetic Materials

10. Identify, manipulate, and state the properties of the various restorative materials used in operative dentistry.
11. Identify the different alloys and metals used in construction of dental prosthetics.

12. Discuss the preparation of gold foil for dental restorations.
13. Identify laboratory preparations for casting of dental prosthetics.
14. Discuss the properties and manipulation of porcelains.

Module V – Preventive Dental Materials

15. Identify and demonstrate the use of the various preventive dental materials available.
16. Identify and manipulate acrylic material products to construct custom trays, bleaching trays and temporary coverings.
17. Identify the various abrasives used in dentistry.

COURSE REQUIREMENTS

In order to successfully complete DAT 113, the student is required to fulfill the following requirements:

1. Attend lecture and lab sessions. The student is responsible for all information covered in any session.
2. Complete all reading assignments. The student is responsible for all information in reading assignments and exams regardless of extent of discussion in class.
3. Perform all laboratory performance tasks with a minimum average grade of 70.
4. Complete all written tests with a minimum average grade of 70.
5. Turn in all assigned lab projects on due date
6. Contact instructor prior to class/lab for unavoidable absences.
7. Students who are absent from a class more than 10 percent of the hours assigned may be withdrawn. Three absences constitute one absence.

METHODS OF INSTRUCTION

Lectures	PowerPoint Presentation/ Videos
Reading Assignments	Demonstrations
Discussions	Laboratory Applications

LAB REQUIREMENTS

1. It is imperative that the student attends all lab sessions. New material along with a demonstration will be conducted each week. The lab sessions will begin promptly.
2. Students will be evaluated on laboratory skills using performance check sheets. These check sheets (check-off sheets) may be available in D2L. Each student will complete each task individually in the presence of a laboratory instructor.
3. Students are not allowed in the dental materials lab without the supervision of an instructor.

GRADING

The final grading scale for DAT 113 is as follows:

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

Disabilities Statement: Any student who feels s/he may need an accommodation based on the impact of a disability should contact the Special Resources Offices (SR) at 803-327-8007 in the 300 area of Student Services. The SRO coordinates reasonable accommodations for students with documented disabilities.