



DENT-137 – Laboratory Procedures

Health and Human Services

Effective Term & Year: Fall 2026
Course Outline Review Date: 2031-04-01

Program Area: Health

Description:

This course is designed to introduce the student to the dental lab and some of the commonly used pieces of equipment to fabricate and produce various dental products. Studies include different kinds of dental lab materials. Students also learn to work with these materials while they create patient models and custom trays. Students study common fixed direct dental restorations and removable prosthesis, as well as how these are fabricated in the dental lab. Lastly, students cover specific appliances used for such purposes as improved aesthetics and mouth protection.

Program Information:

This course is required for successful completion of the Dental Assistant program.

Delivery Methods: On-campus (Face-to-Face)

Credit Type: College of the Rockies Credits

Credits: 2

Instructional Activity and Hours:

Activity	Hours
Classroom, Directed Studies or Online Instruction	21
Seminar/Tutorials	
Laboratory/Studio	60 *Refer to DENT 154 Course Outline

Practicum/Field Experience

Co-op/Work Experience

Other

Total 81

Course Requisites:

None

Prior Learning and Recognition: No

Course Transfer Credit:

For information about receiving transfer credit for courses taken at either British Columbia or Alberta institutions, please see <https://www.bctransferguide.ca/> or <https://transferalberta.alberta.ca> . For more transfer credit information, please visit <https://www.cotr.bc.ca/Transfer>

All requests for course transfer credit from institutions in British Columbia or elsewhere should go to the College of the Rockies Enrolment Services office.

Textbook Resources:

Textbook selection varies by instructor and may change from year to year. At the Course Outline Effective Date, the following textbooks were in use:

Robinson, D.S. (2024). *Modern dental assisting* (14th ed.). Elsevier.

Bartolomucci Boyd, L.R. (2024). *Dental instruments: A pocket guide* (8th ed.). Elsevier.

DENT 137 Module

Please see the instructor's syllabus or check COTR's online text calculator

<https://textbook.cotr.bc.ca/> for a complete list of the currently required textbooks.

Learning Outcomes:

Upon the successful completion of this course, students will be able to:

- identify and use common laboratory equipment, including maintenance and safety procedures;
- use common laboratory materials;
- describe, manipulate and use gypsum;
- prepare and care for fixed prosthetics;
- prepare and care for removable prosthetics; and
- fabricate and care for custom appliances.

Course Topics:

- Laboratory Equipment
- Laboratory Materials
- Gypsum Products
- Fixed Prosthodontic Procedures
- Removable Prosthodontic Procedures
- Custom Appliance Procedures

Evaluation and Assessments

Assessment Type: On-Campus (face-to-face)

Assessment Type	% of Total Grade
Quizzes, Worksheets and Assignments	30%
Research Assignment	10%
Units 1, 2, and 3	30%
Units 4, 5, and 6	30%
Total	100%

Grade Scheme

A+	A	A-	B+	B	B-	C+	C	C-	D	F
>=95	94-90	89-85	84-80	79-75	74-70					<70

Pass requirements:

An overall average of B- (70%) or higher is required to pass this course.

Evaluation Notes Comments:

CLINICAL:

Elements of DENT 137, particularly course learning outcomes #1-6, correspond to DENT 154 practical objectives:

- Maintain a Dental Laboratory
- Process Diagnostic Casts
- Fabricate Custom Trays
- Fabricate Custom Mouth Guard
- Polish Dentures (Mouth Guard)
- Fabricate Custom Whitening Tray
- Clean Removable Appliances

Exam Attendance:

Students must attend all scheduled exams at the appointed time and place. Instructors may approve an alternate exam to accommodate an illness or personal crisis. Department heads will consider other written requests. Any student who misses a scheduled exam without prior approval will receive a "0" on the exam.

Academic Policies:

College of the Rockies policies related to courses can be found at <https://cotr.bc.ca/about-us/college-policies/> and include the following:

- Policy 2.1.4 Course Audit
- Policy 2.4.1 Credential Framework
- Policy 2.4.3 Students with Documented Disabilities
- Policy 2.4.4 Student Rights, Responsibilities and Conduct
- Policy 2.4.8 Academic Performance
- Policy 2.4.9 Student Feedback and Concerns
- Policy 2.4.11 Storage of Academic Works
- Policy 2.5.3 Student Appeal
- Policy 2.5.5 Prior Learning Assessment and Recognition (PLAR)

Course Changes:

The College of the Rockies updates course outlines regularly to meet changing educational, employment and marketing needs. The instructor will notify students in writing of any updates to this outline during the semester. The instructor reserves the right to revise, add or delete

material while meeting the learning outcomes of this course outline.