

PROVISIONAL PROSTHODONTIC THEORY

Course Manual

2nd Edition

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Introduction

Provisional Prosthodontic Theory and the companion course, Provisional Prosthodontic Clinical, are written for registered and licensed certified dental assistants. Registered and licensed dental hygienists are also eligible and welcome to take these courses.

Historically in BC, certified dental assistants were regulated by the College of Dental Surgeons of British Columbia through legislation outlined in the Dentists Act. In 1995, the Dentists Act was amended to include the addition of the following five prosthodontic clinical procedures that form the basis of this course:

- Fabricate provisional restorations,
- Try-in provisional restorations and adjust occlusion outside the mouth,
- Cement provisional restorations,
- Remove provisional cement,
- Remove provisional restorations.

Then, in April of 2009 the Dentists Act was revoked and the Health Professional Act Dentists Regulation was endorsed. Under the CDSBC Bylaws, the services a CDA can perform with the prosthodontic module designation are as follows:

- Fabricating and trying-in provisional restorations intra-orally, including intra-coronal direct provisionals, and adjusting occlusion extra-orally, followed by assessment by a dentist before cementation;
- Temporary cementation of provisional restorations and removal of temporary cement followed by assessment by a dentist;
- Performing non-surgical gingival retraction techniques excluding the use of epinephrine;
- Removing temporary and permanent cements using an appropriate hand instrument and excluding the use of dental handpieces;
- Removing provisional restorations.

Certified dental assistants and hygienists who have successfully completed *Provisional*Prosthodontic Theory and Provisional Prosthodontic Clinical and have been recognized by the College of Dental Surgeons may legally perform these procedures as authorized and under the

supervision of a dentist who is in the office/facility and who is available at all times while the service is being provided.

Provisional Prosthodontic Theory

The theory course provides a background in prosthodontics for the provisional prosthodontic procedures. The information for the course is divided into four units. Unit 1 is a self-assessment review of the prosthodontic knowledge that was presented in your formal dental education program. The review gives you an opportunity to refresh your understanding of prosthodontic fundamentals, procedures and materials, and ensures that all learners have a similar baseline knowledge. Unit 2 is written in the form of a case study. You follow a dental team and patient through the procedures required for a single-unit crown and learn the theory that supports each step of the procedure. In Unit 3, this knowledge for the single-unit crown is applied to a three-unit fixed partial denture. In Unit 4, you will again apply your knowledge to an intra-coronal direct provisional. Delegated prosthodontic duties are emphasized in Units 2, 3 and 4.

Provisional Prosthodontic Clinical

Provisional Prosthodontic Clinical has three phases; phase 1 is the clinical sessions and assignments, phase 2 is the dental office practicum and assignments, and phase 3 is a post-course summary session.

Post-Clinical Dental Office Assignments

The majority of time in the clinical sessions will be taken up with hands-on experience. You will practice prosthodontic skills in simulated clinic or laboratory settings that are as realistic as possible. You will practice assembling the armamentarium, manipulating the materials, performing procedural steps, and self-evaluating your work. The intent is to provide relevant experiences that prepare you for the clinical assignments and help you transfer your newly acquired clinical skills to dental office practice. The emphasis is on learners working at their own pace through the procedural steps of all the competencies. Instructors assess your performance and, by the end of the course, you will be evaluated on all clinical skills and should feel well-prepared for the dental office assignments.

Post-Clinical Dental Office Assignments

As part of the requirements for the clinical course, you must, in co-operation with your sponsoring dentist, schedule patients for specific prosthodontic procedures. One patient will require a single-unit provisional crown, another patient a three-unit provisional fixed partial denture (FPD) and finally, a patient that requires either an inlay or onlay. The dentist evaluates your performance to a basic level of competence, according to criteria in evaluation forms. These forms are similar to the ones used by instructors in the clinical sessions. You have three months to finish the dental office assignments and evaluations.

Post-Summary Session

The purpose of the summary session is to provide a discussion forum for you and other participants in your clinical course to share dental office assignment experiences obtain feedback from the instructor, and problem solve any outstanding questions of difficulties. Depending on the location of the participants and instructor, the summary session may take place in a classroom, online or be a teleconference.

Your Course Package

Your course package is made up of the following components:

Course Manual

Read this Course Manual carefully; it contains important information on course materials and procedures and will familiarize you with what you must do to successfully complete the course. Once you have read the manual, you will be ready to start Unit 1 of the course.

Course Study Guide

The study guide contains the four course units. The units guide you through the learning materials, providing commentary and information and directing you to readings in the textbook, review questions, practice exercises, self-tests, and the assignment at the end of Unit 4.

Textbook

The textbook is an important component of both the theory course and clinical course. References to the information and illustrations in the text are made throughout the theory course, and the illustrations will be invaluable for understanding the clinical work. Information in the readings is tested on the unit self-tests and on the final examination. The textbook for this course is:

Contemporary Fixed Prosthodontics. 5th ed.

Practice Exercises and Assignment

There are fourteen practice exercises that must be signed by your sponsoring dentist and submitted to your instructor at the end of the *Provisional Prosthodontic Theory* course. The practice exercises are worth 5% of your total grade, and you must complete all of them to be eligible to pass the course. In additional to the practice exercises, there is one assignment for this course, which you submit to your instructor for marking. The assignment is worth 40% of your final grade.

Learning Outcomes

Upon completion of both *Provisional Prosthodontic Theory* and *Provisional Prosthodontic Clinical*, the CDA will be able to perform delegated prosthodontic duties in a clinical dental setting, practising as a professional according to acceptable standards of dental care.

Course Content

The following topics will be covered in this course:

Fundamentals of Fixed Prosthodontic

Principles of tooth preparation

Review of periodontal aspects

Single crowns

Fixed partial dentures

Intra-coronal direct provisionals

Finish lines, designs, and locations

Non- surgical gingival retraction

Occlusion

Tooth morphology

Treatment sequencing

Patient management

Pre-treatment Preparation

Impression materials

Custom trays

Diagnostic casts

Aesthetic evaluation

Matrix fabrication for Provisional Restorations

Select and assess matrix

Matrix prep

Preparation of casts

Creating a pontic

Fabrication of Direct and Indirect Provisionals

Note: The theory component includes a number of techniques and materials; the clinical, however, will be limited.

Selection of materials

Techniques and instrumentation for fabricating and handling Provisionals

Provisionals for endodontically treated teeth

Provisionals for implant cases

Shade modifications

Cautions

Alternative provisional techniques

Evaluating the Provisional

Fit

Form

Function

Aesthetics

Retention

Finishing and polishing of provisionals

Placement and Removal of Retraction Cord

Precautions

Techniques for non-surgical retraction

Taking and Removal of Final Impression

Principles of taking

Principles of removal

Inspection of impression

Material factors affecting impression removal

Care, disinfection, and storage of impression

Risks in removal



Prevention of complications

Treatment of Tooth Prior to Cementation

Procedural steps

Rationale for treating tooth prior to cementation

Isolation

Debridement

Antibacterial agents

Surface preparation

Temporary Cement

Materials

Retentive properties

Influence of planned final cement

Aesthetics and cementing material choices

Manipulation of materials and prep of provisional Application of cement

Cementing Provisional

Procedural steps

Removing cord

Cementing technique

Evaluation of placement

Recheck of occlusion

Removal of Provisional Cement/Permanent Cement

Review periodontal tissue

Instrumentation

Complications of cement removal

Irrigation and polishing

Final check

Removal of Provisionals

Cautions

Need for aesthetics

Instrumentation for removal

Preparation of tooth for final cementation

Instructions to Patient

Oral aids

Managing problems

Written communication

How to Work through the Course

To begin the course, open the Course Study Guide and answer the review questions in Unit 1, then work through Unit 2 on a single-unit crown, Unit 3 on a three-unit fixed partial denture and Unit 4 on an Intra-coronal direct provisional. Units 2, 3 and 4 direct you to readings, study questions, practice exercises, a self-test, an assignment, and ultimately the final examination. Each of these components of the course is discussed below. Together, this information tells you how to progress through the course. But remember, if you have trouble getting started or making headway with a task, contact your instructor at once. It is your instructor's job to help you, so don't hesitate to ask for assistance.

Course Units

The unit materials are like the lectures for a classroom college course. Unit 1 is a set of review questions covering the prosthodontic information that you studied in your formal dental assisting or dental hygiene education program. Do these questions carefully and check your answers. With Units 2, 3 and 4, work sequentially through the learning activities for each unit. The basic repeating pattern of the unit sections are commentary, readings in the textbook, in-text study questions, and practice exercises. At the end of the unit there is a self-test. After you complete the four units there is an assignment.

Refer to the timetable to pace your study through the units and keep you on track.

Readings

Each unit contains unit commentaries and readings from the course textbook. The following tips should help your comprehension and evaluation of the material you read in this course:

The textbook readings for a section are listed at the beginning of the section. These
readings also appear throughout the section where the specific topic is being discussed.
You may wish to read the text pages when they are first listed to get a general idea of the
topics. Then later in the section, when you are referred to specific tables, figures, and
pages, study the material more closely.

- 2. Organize your time. If possible, it is best to read a section or text reading in one sitting.
- 3. Be an active reader. The course units and textbook are your possessions, so you are at liberty to write in them or mark them up as you please. Use a pencil or felt marker to underscore main points. Put question marks beside difficult or confusing passages and exclamation marks beside passages you find particularly important. Write short comments in the margins as you go. If you prefer to leave your book pages unmarked, make your notations on Post-it notes.
- 4. Take notes. Make notes in a journal while reading, or after you have finished a reading, go through the marked passages and marginalia and make notes in the journal. This exercise forces you to summarize the information and consolidate what you have learned. Your journal notes can prove useful for the assignment and when studying for the final examination.

Study Questions

Study questions are embedded through the unit learning materials, and space is given for your responses. Answers are given under the answer space. We recommend that you do these questions as you work through the units, making sure that you don't read the answers before trying the questions. Check your answers immediately, correcting them as necessary. These questions are intended to get you thinking about responding to the procedures and theory you are studying.

Practice Exercises

Practice exercises are provided throughout Units 2, 3 and 4 to help you integrate theory with clinical practice. The exercises are to be signed by your sponsoring dentist and evaluated by your course instructor at the completion of the course.

Self-Tests

A self-test is included at the end of each of Units 2, 3 and 4. These tests are a review of all the material in the unit. Answers are found at the back of the *Course Study Guide*. It is important that you conscientiously work through the self-tests; they are your check on how well you are learning the course materials. In addition, the tests prepare you for the final examination.

Assignment

In this course there is one assignment to be completed after you have finished Unit 4. The assignment is in a case study format, which gives you an opportunity to apply your understanding of the theory to a typical practical case. The assignment is evaluated by your course instructor and counts 40% toward your final grade.

Final Examination

At the end of the theory course, you will take a two-hour final examination that is worth 55% of your total grade. You will receive from your institution instructions for registering for the final examination. Please pay close attention to these procedures; it is important that you follow them. In preparing for the exam, review the whole course. Study the unit objectives, key terms, unit discussions, readings, study questions, and self-tests. If you know all this material, you shouldn't have difficulty with the exam. The exam will be made up of questions similar in format to those in the self-tests.

Evaluation

Several evaluation mechanisms are built into the theory course:

- 1. Self-assessment in the form of a review of prosthodontics covered in previous dental education programs, practice exercises, and unit self-tests, all of which prepare you for the assignment and final exam.
- 2. Dentist assessment of completion of in-office assisting tasks and practice exercises.
- 3. Institutional evaluation by means of a written assignment and final examination. Formal marks for the theory course are apportioned as follows:

Practice exercises	5%
Assignment	40%
Final examination	55%
	100%

To be eligible to pass this course:

- 1. You must complete and submit all practice exercises and the assignment.
- 2. You must achieve a minimum overall grade of 75%.
- 3. You must achieve a minimum passing grade of 75% on the final examination.

A Note on the Course Writers and Course Consultant

Fern Hubbard, Course Writer (original)

Fern graduated from the University of British Columbia's dental hygiene program in 1973. She received a BA from the University of Winnipeg in 1979 and a MEd in curriculum studies from the University of Victoria in 1991. Her career focus has been allied dental education. Fern has been an instructor for dental hygiene and dental assisting programs in Manitoba and BC, and since 1989 she has worked primarily on curriculum consulting and development projects with a variety of provincial, national, and international educational programs and regulatory bodies. She also maintained clinical practice until 1995, working in general, prosthodontic and periodontal practices.

Margaret Dennett, Course Writer / Consultant (original)

Margaret is an instructor in the dental assisting and dental reception program at Vancouver Community College. She is a CDA with an advanced instructor's diploma and has a BEd from the University of Alberta. Margaret has worked in dentistry for almost twenty years, both with general practitioners and specialists. Prosthodontics and restorative dentistry are her main areas of interest, and she has spent nine years working in this dental specialty. Margaret is active in her professional association and in the development and teaching of continuing education. Her writing includes articles for the American Association for Adult and Continuing Education and a number of course units for the dental assisting program at the Open Learning Agency.

Catherine Baranow, Course Writer / Update

Catherine is an instructor in the Certified Dental Assistant Program at Okanagan College. She is a CDA with an Instructor Diploma and a MEd from Simon Fraser University. Her Master of Education focused on curriculum development and leadership. Catherine has been a CDA for over 30 years and has worked in general and speciality practices as well as with Interior Health and Sales before teaching in the CDA program. Catherine has been involved with the

Prosthodontic Module since the pilot project in 1997. She has taught the module on an on-going basis, chaired the prosthodontics working committee and continues to advocate for this additional CDA designation.

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