Prosthodontics

Introduction

Department of Prosthodontics is one out of 13 departments of the school. It is a clinical department and the largest in terms of curriculum budget, physical space and the number of academic staff.

Since nine years ago, two separate departments of Removable Prosthodontics and Fixed Prosthodontics were two main departments that were involved in the prosthodontic services and treatments. However, recognizing the complexity of modern treatments pertaining to prosthodontics field, patient care and staff development, the two departments have been merged. At the same time different areas involving new services have been established as sections including maxillofacial prosthetics, TMJ and implants.

Primary Aim

The aim of Prosthodontic curriculum is to enable students to manage prosthodontic patients with minimal supervision. As such, students are expected to develop the necessary core skills for gathering diagnostic information, developing a sequential treatment plan, and performing basic prosthodontic procedures by using sound clinical judgments. The Prosthodontics curriculum is organized to provide an overview of Removable Prosthodontics (complete and partially edentulous patients), Fixed Prosthodontics. It also includes an integrated introductory course in Implant Dentistry. This course is a continuum of the ongoing Prosthodontic series of courses, extending from the Pre-clinical through the clinical experience. Each lecture will be structured to provide a review of the basic fundamentals of the lecture topic, a discussion of the application of these fundamentals to patient treatment, and an update on the latest technological advances/treatment modalities.

Main objectives

Upon completion of Prosthodontic courses, students are expected to develop following competencies:

- To conduct a structured interview with the patient (and/or patient companies) to define patients' chief complaints and needs.
- To take a complete medical and dental history.
- To perform extraoral and intraoral examination
- To fill the patient's record in details.
- To formulate a sequential treatment plan.

- To fabricate Fixed Prostheses in the range of single unit crown(PFM and all-ceramic), three-unit PFM bridge.
- To fabricate tooth-supported and RPDs
- To fabricate simple and moderately difficult complete dentures.

To accomplish our aim and objectives, the Prosthodontics courses (theory and clinical) are offered as follows.

Theoretical credits begin from the second year and continue to senior year. Preclinical teaching includes Anatomy and morphology of dentition, complete denture (basics), Removable partial denture (basics), Fixed partial dentures (basics). Clinical teaching is provided on a rotational basis.

Theoretical courses include teaching materials related to knowledge and cognitive competencies mapped in the competency document of National Competencies Documents for undergraduate students.

Theoretical courses are mainly lecture-based and traditionally held in the morning. The subjects include removable complete dentures, removable partial denture, fixed partial denture, dental materials applied in prosthodontics treatments, in addition to certain multidisciplinary courses such as implant dentistry, Diagnosis and treatment of TMJ disorders.

Theory based courses integrated with practical application are held in pre-clinic and phantom laboratories.

Phantom and clinical training of students is taken from 3rd to 6th semesters, under the supervision of 18 academic staffs.

The average attending/student ratio is 1 to 4 in the clinic and 1 to 14 in the preclinical courses.

The whole curriculum is a requirement-based one. Likewise, in our department students are required to do specific treatment on appropriate patients (including removable complete denture, removable partial denture, and single crown over a cast post and three-unit bridge). In addition, students should attend a multidisciplinary integrated clinical course over two semesters in their senior year, in which they are given patients and are responsible for all the dental treatments. This course is held in a separate multidisciplinary clinic with attending from Operative, Endodontics, periodontics and prosthodontics departments. Another horizontal integrated multidisciplinary clinical course is Diagnosis and treatment of TMDs which is held in our department with attends from OMF Surgery, and OMF Medicine departments.

The Department of Prosthodontics consists of three full professors, seven associate professors and 14 assistant professors all of whom are actively engaged in theoretical and clinical courses of undergraduate, postgraduate and fellowship programs.

In addition, there are two staffs for patient reception, two secretaries, 10 nurses,one dental technician.

There are 54 dental units in the department and each student treats his/her patient on his/her own unit.

Hours in the Curriculum and distribution of hours throughout semesters, trimesters, modules, years

	2nd year		3rd year		4th year		5th year		6th year	
	credit	hours	credit	hours	credit	hours	credit	hours	credit	hours
Lectures	1	17	1	17	3	51	2	34	2	34
Preclinical courses	2	34	4	136	2	68				
Clinical courses			2	68	4	136	6	204	4.5	153
Seminar				Each morning during their clinical rotations		Each morning during their clinical rotations		Each morning during their clinical rotations		Each morning during their clinical rotations

Methods of Learning / Teaching

- **Theoretical knowledge**

All theory classes are mainly lecture based, though it is recommended to follow interactive methods as much as possible.

- **Clinical training**

Clinical courses are offered following procedural teaching methods and supervising. The clinical teaching is spiral in essence. It follows that first clinical rotations (courses) are started with easier procedures and treatments then progressed into the more difficult cases toward senior years.

Assessment Methods

	Midterm exam	Final exam
Theory*	40%	60%

	Entering exam	Clinical activity	Round up exam
Clinical course*	15%	65%	20%

*Assessment methods in all clinical courses are similar, the content is adjusted accordingly.

Strengths

- All academic staff (faculty members) are top-ranked National Board certified prosthodontists.
- All younger academic members complete a comprehensive course on medical education major topics such as teaching/learning methods and assessment approaches during their first year of work.
- The broad spectrum of prosthodontics field can attract everyone with diverse interest.
- The same reason opens up good research activity and projects evident by high publication rate of our colleagues in the department.
- A good blend of well experienced (over 15 years of work experience) and younger colleagues (less than 10 years of work experience)

Weaknesses

- The long and multi steps procedures occasionally frustrate students.
- Several internal and external factors decreased patient pool of the school.
- Low wage of academic staff and restricted rules about opening private office decreased the interest of new graduates to stay in the academic life.

Innovation and Best Practices

- Attempts are made to organize an assessment committee to increase the quality of exams.
- Several research projects have been conducted to improve clinical assessment of students.
- Providing opportunities for younger colleagues to pursue further education as fellowship on their own interest and department needs.

In clinical teaching, students are required:

- To give morning seminars to review the clinical and lab procedures involving treatment of their patients.
- To be on duty as emergency student for daily examination and screening of the patients who walk-in to our department under supervision of faculties. In addition, they are required to select a patient who needs a comprehensive multidisciplinary treatment plan and provide a Power Point presentation for morning clinical round. We believe that such presentation enhances students' critical thinking and problem solving skills.

Plans for Future Changes

- To implement more efficient and fair clinical assessment system for students
- To encourage academic staff to go for sabbatical courses to expand their skills and experiments and develop communication of our colleagues with recognized universities.
- To include virtual educational aid for our teaching and assessment system