



Course Curriculum for the Master of Clinical Dentistry Degree/ Prosthodontics

Course Curriculum for the Master of Clinical Dentistry Degree /Prosthodontics is awarded by the Faculty of Graduate Studies at Jordan University of Science and Technology (JUST) upon the fulfillment of the following requirements:

1. Compliance with the J.U.S.T. Master Degree regulations approved by the Council of Deans (No. 4/2012) dated 24/1/2012.
2. Successful completion of (45) credit hours.

First: Compulsory Requirements (32) hours as follows:

A. Theoretical Requirements (9) credit hours as follows:-

Course Code	Course Name	Credit Hours
Dent 706	Dental Implantology	2
Dent 709	Research Methodology and Biostatistics	3
Dent 765	Advanced Prosthodontics 1	2
Dent 766	Advanced Prosthodontics 2	2

B. Clinical Requirements (23) credit hours as follows:-

Course Code	Course Name	Credit Hours
Dent 761L	Laboratory Training in Prosthodontics	1
Dent 761A	Clinical Training in Prosthodontics 1	1
Dent 761B	Clinical Training in Prosthodontics 2	3
Dent 761C	Clinical Training in Prosthodontics 3	3
Dent 762A	Clinical Training in Prosthodontics 4	3
Dent 762B	Clinical Training in Prosthodontics 5	3
Dent 762C	Clinical Training in Prosthodontics 6	3
Dent 763A	Clinical Training in Prosthodontics 7	3
Dent 763B	Clinical Training in Prosthodontics 8	3
Dent 763C*	Clinical Training in Prosthodontics 9	0

* Pass or Fail

Second:- Elective Theory Requirements (4) credit hours as follows:

Course Code	Course Name	Credit Hours
Dent 702	Advanced Oral and Maxillofacial Radiology	1
Dent 703	Advanced Pharmacology in Dentistry	1
Dent 705	Occlusion and Temporomandibular Joint	1
Dent 764	Advanced Dental Materials in Prosthodontics	1
Dent 767	Geriatric Dentistry	2
Dent 768	Current Topics in Prosthodontics	2
Dent 788	Medical Problems in Dentistry	2

Third: Master Thesis (Dent 799): total of 9 credit hours as follows:

Course Code	Course Name	Credit Hours
Dent 799 A	Master Thesis	9
Dent 799 B	Master Thesis	6
Dent 799 C	Master Thesis	3
Dent 799 D	Master Thesis	0

Course Description Prosthodontics

Dent 702 Advanced Oral and Maxillofacial Radiology: (1 Credit Hour)

This course consists of a series of lectures that deal with the fundamental of the production and interaction of x-rays. This is followed by the basics of radiation biology and radiation protection, production of the radiograph (physics, chemistry and technique), vision and perception. Additionally, the appearance of normal and pathologic tissues and structures on the radiographs will be covered. The various imaging methods of investigation will be also discussed such as Cone Beam CT and MRI, ...etc.

Dent 703 Advanced Pharmacology in Dentistry: (1 Credit Hour)

This course provides students with information on pharmaceutical agents used in dentistry and their applications.

Dent 705 Occlusion and Temporomandibular Joint: (1 Credit Hour)

This course is designed to provide students with a clear picture of how the masticatory system functions and the role of a harmonious occlusion in maintaining the health of this system. Also it aims to provide students with the basic knowledge of anatomy of the masticatory system, mandibular movement, determinants of occlusion and occlusal schemes. Occlusal diseases and masticatory system dysfunctions will also be covered in this course to help students diagnose and treat patients who suffer from these diseases.

Dent 706 Dental Implantology: (2 Credit Hours)

The course includes lectures on all aspect of dental implantology including surgical and prosthetic aspects. It will cover history of implantology, dental materials included in dental implants, the basic science of osseointegration, the surgical, prosthetic and restorative considerations for the partially and fully edentulous patient, and the occlusal considerations of implant treatment.

Dent 709 Research Methodology and Biostatistics: (3 Credit Hours)

This course describes the scientific methods of conducting research and study design. In addition, it aids students in planning clinical and laboratory studies as well as the critical evaluation of scientific studies. This course will include collection of data, the use of statistical analysis in the area of the scientific research to achieve sound scientific conclusions.

Dent 761L laboratory Training in Prosthodontics: (1 Credit Hour)

This practical course aims at providing the students with the basic preclinical training in fixed and removable prosthodontics necessary for establishing high standards needed for patient care.

Dent 761A Clinical Training in Prosthodontics 1: (1 Credit Hour)

This is the first clinical course in which students will be exposed to patients requiring various prosthodontic treatment. They are required to take detailed medical and dental history and perform thorough clinical examination. The students will start to

formulate comprehensive treatment plans and to treat patients requiring simple removable and fixed dental prosthesis.

Dent 761B Clinical Training in Prosthodontics 2: (3 Credit Hour)

In this clinical course students will continue treating patients with more complex treatment plans. The skills and time management of the students should be improved. They should also develop an understanding of occlusion in their overall treatment.

Dent 761C Clinical Training in Prosthodontics 3: (3 Credit Hours)

This course is a carry-on of the first two courses. Most of the first year cases should be finished by the end of this course.

Dent 762 A, B, C Clinical Training in Prosthodontics 4,5,6: (3,3,3 Credit Hours, respectively)

The clinical skills and logical thinking in order to formulate and execute treatment plans will be further developed in these courses. The student should start treating advanced cases such as: management of difficult removable cases, management of tooth wear, increasing the vertical dimension, management of aesthetics, use of all ceramic restorations, and perform treatments requiring dental implants. The student should start managing TMD patients, perform maintenance of previously treated cases and develop the self confidence in establishing proper treatment plans.

Dent 763 A, B, C Clinical Training in Prosthodontics 7,8,9: (3,3,0 Credit Hours, respectively)

In these courses the students should be able to formulate treatment plans based on scientific evidence on their own. The use of reorganized approach and conformative approach in the management of full mouth rehabilitation should be developed to an advanced level. They should also start treating cases requiring maxillofacial prosthesis. Students should finish most of their cases and arrange for the transfer of their unfinished cases to their colleagues.

Dent 764 Advanced Dental Materials in Prosthodontics: (1 Credit Hour)

This theoretical course aims at providing the students with the basic science of materials used in Posthodontics such as: acrylics, gypsum, porcelain, all-ceramic materials, alloys, titanium, hard and soft lining materials, and cements etc. The course will discuss the composition, handling characteristics, mechanical and physical properties of these materials and how it affects their use in practice.

Dent 765 Advanced Prosthodontics 1: (2 Credit Hours)

This is a theoretical course that covers diagnosis and management of patients in need for removable dental prosthesis, principles of different impression techniques for complete dentures, jaw registration, mouth preparation, teeth selection, occlusion and precession attachments. It also gives an insight into the various methods used in the management of advanced removable prosthodontics, fitting of different types of dentures and managing post insertion problems. The role of dental implants in removable prosthodontics will also be covered.

Dent 766 Advanced Prosthodontics 2 : (2 Credit Hours)

This is a theoretical course covers diagnosis and management of patients in need for fixed dental prosthesis. It also covers the principles of tooth preparation, impression

techniques, soft tissue management, restoration of endodontically treated teeth, adhesives, metal free restorations and laboratory procedures in fixed prosthodontics.

Dent 767 Geriatric Dentistry: (2 Credit Hours)

This is a theoretical course that covers information related to diagnosis and treatment of dental and oral diseases affecting the elderly, in addition to management of loss of teeth, and the need for special care for this age group of patients.

Dent 768 Current topics in Prosthodontics: (2 Credit Hours)

A theoretical course that includes revision and discussion of the most recent publications in fixed and removable prosthodontics, through assigning different topics to the students for presentation and then engaged in group discussion.

Dent 788 Medical Problems in Dentistry: (2 Credit Hours)

This course is designed to bring the student to the current knowledge on the general diseases that the dental patient might suffer from and their signs in the oral and maxillofacial region and their effect on dental and oral treatment.

Dent 799 Master Thesis: (9 Credit Hours)

A topic for the thesis will be chosen for the student where she/he is expected to work under the supervision of one academic staff from the university. The student is expected to conduct and write up the thesis and defense his work at the end of his study.

**Study Plan
Prosthodontics**

First Year

First semester

Course Code	Course Name	Credit Hours
Dent 709	Research Methodology and Biostatistics	3
Dent 761A	Clinical Training in Prosthodontics 1	1
Dent 761L	Laboratory Training in Prosthodontics	1
Dent 765	Advanced Prosthodontics 1	2
	Total	7

Second semester

Course Code	Course Name	Credit Hours
Dent	Elective	1
Dent	Elective	1
Dent 761B	Clinical Training in Prosthodontics 2	3
Dent 766	Advanced Prosthodontics 2	2
	Total	7

Third semester

Course Code	Course Name	Credit Hours
Dent 761C	Clinical Training in Prosthodontics 3	3
	Total	3

Second Year

First semester

Course Code	Course Name	Credit Hours
Dent 706	Dental Implantology	2
Dent 762A	Clinical Training in Prosthodontics 4	3
Dent	Elective	2
	Total	7

Second semester

Course Code	Course Name	Credit Hours
Dent 762B	Clinical Training in Prosthodontics 5	3
Dent 799C	Master Thesis	3
	Total	6

Third semester

Course Code	Course Name	Credit Hours
Dent 762C	Clinical Training in Prosthodontics 6	3
Dent 799C	Master Thesis	3
	Total	6

Third Year

First semester

Course Code	Course Name	Credit Hours
Dent 763A	Clinical Training in Prosthodontics 7	3
Dent 799C	Master Thesis	3
	Total	3

Second semester

Course Code	Course Name	Credit Hours
Dent 763B	Clinical Training in Prosthodontics 8	3
Dent 799D	Master Thesis	0
	Total	3

Third semester

Course Code	Course Name	Credit Hours
Dent 763C	Clinical Training in Prosthodontics 9	0
Dent 799D	Master Thesis	0