

الباب الثالث  
مراحل التعليم

University requirements (10 credit hours)

Compulsory courses (8 credit hours )

Credit Hours	Course Title	Course code
2	Russian language (I)	RL 106
2	Russian language (II)	RL 116
2	English language (I)	EL 107
1	English language (II)	EL 117
1	Scientific thinking	ST 207

Elective courses (2 credit hours ) ; only two courses are selected

Credit Hours	Course	Course code
1	Political science	ELA 208
1	Impact of technology on society	ELB 208
1	History of Egypt	ELC 208
1	Profession relationships	ELD 208
1	Natural resources	ELE 208
1	Science of law	ELF 208
1	Technical writing	ELG 208



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First Year

Semester One

Credit Hours	Practical	Theoretical	Course Title	Course Code
3	2	2	Anatomy (I)	ANA 101
3	2	2	Physiology (I)	PHY 101
3	2	2	Dental anatomy and physiology (I)	DAP 101
3	2	2	General Histology	GHT 111
3	2	2	Biochemistry	BIO 111
2	---	2	Russian language (I)	RL 106
2	---	2	English language (I)	EL 107
19	5	14		

Semester Two

Credit Hours	Practical	Theoretical	Course Title	Course Code
3	2	2	Anatomy (II)	ANA 102
3	2	2	Physiology (II)	PHY 102
3	2	2	Dental anatomy and physiology (II)	DAP 102
3	2	2	General Pathology	GPA 112
3	2	2	Microbiology and immunology	MBI 112
1	---	1	Physics	PHC 112
2	---	2	Russian language (II)	RL 116
1	---	1	English language (II)	EL 117
19	5	14		



Second Year

Semester One

Credit Hours	Practical	Theoretical	Course Title	Course Code
3	2	2	Oral Histology and embryology (I)	OHE 201
2	2	1	Conservative dentistry (I)	CDT 201
2	2	1	Removable Prosthodontics (I)	PRS 201
3	2	2	Pharmacology	PHA 211
3	2	2	Bioscience	BSC 211
2	---	2	Basic Dental Material	BDM 212
1	---	1	Occlusion (I)	OCC 211
1	---	1	Elective course	
17	0	12		

Semester Two

Credit Hours	Practical	Theoretical	Course Title	Course Code
3	2	2	Oral Histology and embryology (II)	OHE 202
2	2	1	Conservative dentistry (II)	CDT202
2	2	1	Removable Prosthodontics (II)	PRS 202
2	2	1	Applied Dental Materials (I)	ADM 301
2	2	1	Infection Control/CPR	INC 212
1	--	1	Cariology	CAR 212
2	---	2	Dental public health	DPH 212
1	---	1	Scientific Thinking	ST 207
1	---		Elective course	
16	5			



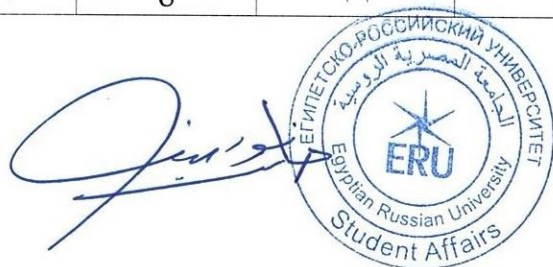

Third year

Semester One

Credit Hours	Practical	Theoretical	Course Title	Course Code
3	4	1	Fixed Prosthodontics (I)	FPR 301
2	2	1	Conservative dentistry (III)	CDT 301
2	2	1	Removable Prosthodontics(III)	PRS 301
4	2	3	Oral Pathology (I)	OPA 301
3	2	2	Oral diagnosis and orofacial Pain (I)	ODG 301
2	2	1	Applied Dental Materials (II)	ADM 302
3	2	2	General Medicine	GMD 211
2	2	1	Oral and maxillofacial radiology (I)	RDG 301
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Semester Two

Credit Hours	Practical	Theoretical	Course Title	Course Code
3	4	1	Fixed Prosthodontics (II)	FPR 302
2	2	1	Conservative dentistry (IV)	CDT 302
2	2	1	Removable Prosthodontics(IV)	PRS 302
4	2	3	Oral Pathology (II)	OPA 302
3	2	2	Oral diagnosis and orofacial Pain (II)	ODG 302
3	2	2	General Surgery	GSG 212
2	2	1	Dental anesthesia	DAN 312
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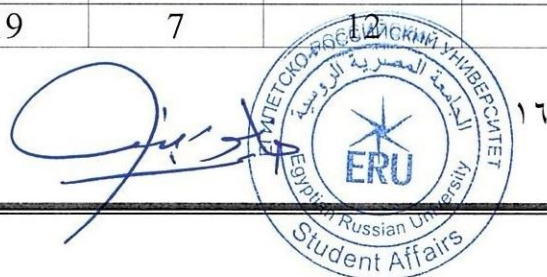
Fourth year

Semester One

Credit Hours	Practical	Theoretical	Course Title	Course Code
2	3	1	Fixed Prosthodontics (III)	FPR 401
2	3	1	Conservative dentistry (V)	CDC 401
2	3	1	Removable Prosthodontics(V)	PRS 401
2	2	1	Orthodontics (I)	ORT 501
2	2	1	Endodontic (I)	END 401
4	2	3	Oral medicine and periodontology(I)	OMP 401
3	2	2	Oral and maxillofacial Surgery (I)	OMS 401
3	2	2	Oral and maxillofacial radiology (II)	RDG 401
20	8	12		

Semester Two

Credit Hours	Practical	Theoretical	Course Title	Course Code
2	3	1	Fixed Prosthodontics( IV)	FPR 402
2	3	1	Conservative dentistry (VI)	CDC 402
2	2	1	Removable Prosthodontics (VI)	PRS 402
2	2	1	Orthodontics (II)	ORT 502
3	3	2	Endodontic (II)	END 402
4	2	3	Oral medicine and periodontology (II)	OMP 402
3	2	2	Oral and maxillofacial Surgery (II)	OMS 402
1	---	1	Occlusion (II)	OCC 412
19	7			



Fifth Year  
Semester One

Credit Hours	Practical	Theoretical	Course Title	Course Code
2	2	1	Pediatric dentistry (I)	PED 501
3	2	2	Fixed Prosthodontics (V)	FPR 501
3	2	2	Conservative dentistry (VII)	CDC 501
3	2	2	Removable Prosthodontics (VII)	PRS 501
2	2	1	Endodontic (III)	END 501
3	2	2	Oral medicine and periodontology (III)	OMP 501
3	2	2	Oral and maxillofacial Surgery (III)	OMS 501
1	---	1	Implantology	IMP 511
20	7	13		

Semester Two

Credit Hours	Practical	Theoretical	Course Title	Course Code
3	2	2	Pediatric dentistry (II)	PED 502
3	2	2	Fixed Prosthodontics (VI)	FPR 502
3	2	2	Conservative dentistry (VIII)	CDC 502
3	2	2	Removable Prosthodontics (VIII)	PRS 502
2	2	1	Endodontic (IV)	END 502
3	2	2	Oral medicine and periodontology (IV)	OMP 502
3	2	2	Oral and maxillofacial Surgery (IV)	OMS 502
1	---	1	Esthetic dentistry	EST 512
21	7	14		

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## **Course description**

### **Biochemistry (BIO 111)**

This course aims to identify properly the biochemical knowledge related to their profession as dentists and how to deal with it Upon completion of the course, the students should be able to :

Develop knowledge about, bioenergetics, carbohydrate metabolism, lipid metabolism, chemistry and metabolism of nucleotides & nucleic acid, protein metabolism, vitamins, vitagens ,provitamins, vitamers, minerals, biochemistry of teeth and saliva, endocrinology, enzymology, tumor markers& plasma protein .

### **General pathology (GPA 112)**

This course aims to acquisition of basic knowledge of general pathology to dental students .it also aims to make students familiar with the basic disease patterns and their underlying mechanisms within a specific organ. It provides students with essential knowledge for their subsequent clinical careers.

Upon completion of the course, the students should be able to :

Develop knowledge about, introduction to pathology, inflammation, cell injury and tissue, irreversible cell injury (cell death), repair, deposits, neoplasia , environmental and vitamin deficiency diseases , circulatory disturbances , tumor emboli .

### **Anatomy (ANA 101,102)**

Upon completion of the course, the students should be able to :

Master the terms of anatomy as anatomical positions, head and neck, different body systems (skeletal, muscular, cardiovascular, respiratory nervous, gastrointestinal and genitourinary).



## **Dental anatomy and physiology (DAP 101, 102)**

Upon completion of course, the students should be able to :

Develop detailed information about the tooth morphology and physiology, premolars, permanent molars, difference between permanent and deciduous teeth, deciduous dentition, and teeth at different ages, physiologic form of the teeth and peridontium, arrangement and occlusion of teeth.

## **Microbiology (MBI 112)**

This course aims to teach students the basic concepts of microbiology: bacterial, viral and fungal morphology, metabolism, physiology, genetics, and induced diseases, especially endemic in the locality: their transmission, laboratory diagnosis, treatment, prophylaxis and control and their molecular biology.

## **General histology (GHT 111)**

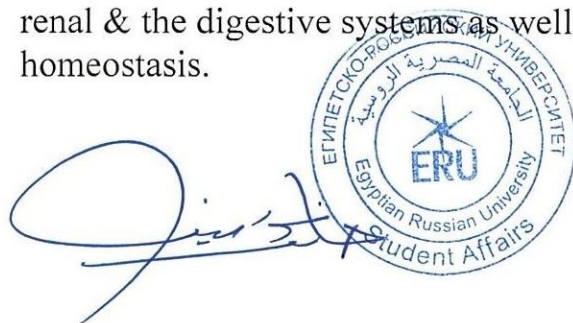
Upon completion of the course, the students should be able to:

Develop knowledge & skills to distinguish the microscopic structure of different body tissues & systems. the students develop knowledge about introduction in histology , the cell , epithelial tissues , connective tissue proper ,cartilage , bone , blood , muscle tissue , nervous tissue ,vascular system , lymphatic system ,reticuloendothelial system, skin , digestive system I( oral activity ),digestive system II (salivary glands, pancreas, liver ) ,endocrine glands.

## **General Physiology (PHY 101,102)**

Upon completion of the course, the students should be able to:

Develop knowledge about functions of different body systems and explore in details the functions of the endocrinal, the reproductive, the nervous, the renal & the digestive systems as well as their integration to achieve homeostasis.





Furthermore, students should be able to integrate physiological data & mechanisms with the ongoing basic sciences: anatomy, histology & biochemistry and their clinical applications.

### **Russian language (RL 116,106)**

The aim of the course is to help the students gain the proper skills in reading, writing, and understanding, listening and comprehending Russian language as well as speaking. It also aims at getting the students to learn some specialized terminology that are related to the field of dentistry. In addition to being able to know the culture of the Russian society.

### **English language (EL 107,117)**

Prepare students to handle reading academic text books and understand the scientific article and synthesizing what they read.

It prepares the students for writing an academic scientific essay and a practical report.

### **Physics (PHC 112 )**

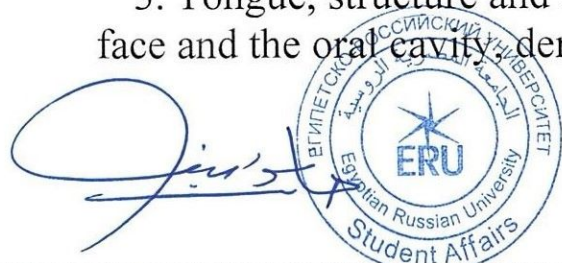
This course provides the students with a presentation of basic concepts of physics and strengthens the understanding of the concepts and principles through a broad range of interesting application to the real world.

### **Bioscience (BSC 211)**

1. Botany: viruses, bacteria-actinomycetes –blue green algae –fungi pteridophyta –gymnosperms and angiosperms, cytoplasm and its physical and chemical properties, enzymes .Genetics: introduction to comparative dental anatomy.

2. Lips in different vertebrates, structure of the gum

3. Tongue, structure and function, palate, developments of the face and the oral cavity; derivatives of the visceral skeletons,



development of the jaw, and growth of the skull, dentition, and teeth pattern in general vertebrates, evolution of teeth embryology

Development of oral cavity, development of oral cavity (human), cases of abnormalities of oral cavity, dentomaxillary facial abnormalities, dentomaxillary abnormalities.

### **Oral Histology & Embryology (OHE 201,202)**

Upon completion of the course, the students should be able to:

Develop detailed information about the development, structure, and function of teeth and associated tissues.

### **Pharmacology ( PHA 211 )**

This course will help students for clear understanding of the essentials about commonly used drugs in dental practice in terms of pharmacokinetics, mode of action, therapeutic uses and side effects.

### **Removable Prosthodontics I,II (PRS 201,202)**

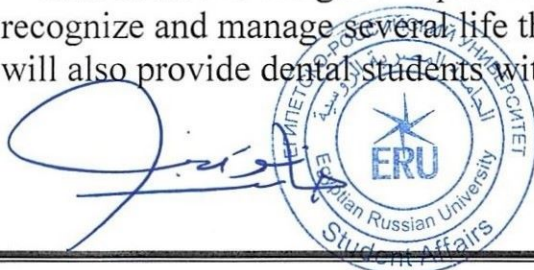
This course is designed to teach the students the anatomy and physiology in relation to complete denture construction. Different impression materials and techniques together with occlusal blocks are demonstrated. Different steps for denture processing, relining, rebasing and repair are covered.

### **Dental public health (DPH 212)**

This course is designed to emphasize the different epidemiological studies used in dentistry, sampling procedures indices for different oral conditions as well as to recognize dental needs and demands for the community. By the end of this course the student will be able to plan different oral health programs.

### **Infection control/CPR (INC 212 )**

This course is designed to provide health care professionals the ability to recognize and manage several life threatening emergencies. The converse will also provide dental students with the basic fundamental standards for



control of infection in dental practices and identification and prevention of occupational health hazards.

### **Basic Dental Materials (BDM 211)**

Upon completion of the course, the students should fully understand The basic science of dental materials including physical, chemical, mechanical and biological properties and apply it on different materials used in various dental applications.

### **Conservative dentistry I,II (CDT 201,202)**

This course is designed to study the introduction to operative dentistry, different lesions and cavity classification. It also teaches the students the histology of enamel and dentin in relation to operative dentistry as well as different instruments, principles to tooth preparation and principles of adhesion

### **General Surgery ( GSG 212 )**

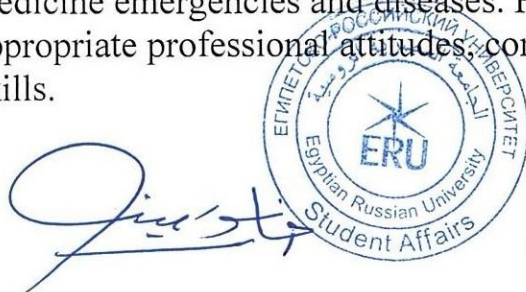
Upon completion of the course, students should be able to:

Have an appropriate knowledge, and skills, which enable them to obtain a detailed history from patients with surgical problems, to carry out proper clinical examination, and to define the appropriate management plan. It also provides the student with the knowledge and skills needed for initial management of various surgical Problems.

### **General Medicine ( GMD 211 )**

Upon completion of the course, the student should be able to:

Have an appropriate background covering the common important internal medicine emergencies and diseases. He/she should also develop an appropriate professional attitudes, communication and problem solving skills.



## **Cariology (CAR 212)**

This course is designed to study the introduction to Cariology, his to pathology of enamel and dentin caries, its classification and macro morphology. It includes also the theories and etiology of caries, dental plaque hypo thesis; caries risk assessment and assessment of rampant caries.

## **Occlusion I (OCC 201)**

This course is designed to study normal occlusion, key of occlusion, centric and eccentric relation, masticatory muscles as well as canine, group functions and incisal guidance.

## **Conservative dentistry (III, IV) (CDT 301,302)**

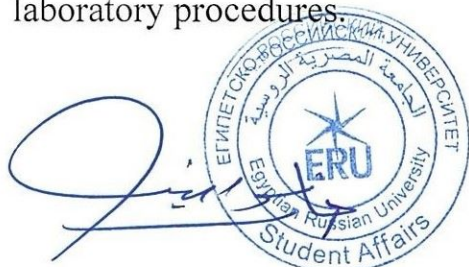
This course is designed to study class II cavity preparation and insertion of amalgam, class I, II, III, V cavity preparations and insertion of resin composite. It includes chapters for GI restorations, adhesions and adhesives. It also includes the biological influence of cavity preparation and restoration as well as different bases and liners used in operative dentistry.

## **Fixed Prosthodontics I, II (FPR 301,302)**

This course is designed to teach the students the principles of tooth preparation together with the laboratory steps for completion of final restoration.

## **Removable Prosthodontics III, IV (PRS 301,302 )**

This course is designed to teach the students the classification of different designs of partial dentures dentine base, occlusal rests and major connectors. Direct and indirect retainers will be explained together with the associated laboratory procedures.



## **Applied Dental Materials I,II( ADM 301,302)**

Upon completion of the course, the students should fully comprehend the types, composition, setting reaction, properties, advantages, disadvantages, manipulation, applications and modified types of different materials used in various dental applications.

## **Oral Pathology I,II(OPA 301,302)**

Upon completion of the course, the student should be able to:

Identify causes, pathogenesis, effect and management of various diseases affecting oral and maxillofacial regions. The course is designed to enable the students to diagnose different diseases using clinical, radiographic, microscopic features as well as other laboratory investigations.

## **Oral and maxillofacial radiology I,II (RDG 301,401)**

This course is designed to teach the students the basic principles of X-Ray generation and different radiological devices used in the dental field. The student should also be able to identify radiographic picture of normal and pathologic condition of oral cavity and surrounding structures. Training on processing and developing methods will be covered.

## **Oral Diagnosis and Orofacial pain I,II(ODG 301,302)**

Upon completion of this course, the student should develop knowledge and perfect methods of history taking and patient evaluation both medically and dentally as well as techniques of both extra oral and intraoral examination. Develop knowledge, describe and identify causes of orofacial pain and their management. Be Oriented with the emergencies in the dental field and their management and Develop knowledge about different diagnostic laboratory procedures.



## **Dental anesthesia (DAN 312)**

Upon completion of the course, student should be able to describe the different techniques of local anesthesia for practice of different dental treatments. Student should also identify the indications and principles of general anesthesia and its applications for dental treatments. Student should develop practical skills in delivering different local anesthetic techniques.

## **Conservative dentistry (V,VI ) (CDC 401,402)**

This course is designed to study patient assessment and treatment plans as well as control of fluid and care of gingival tissues. It includes also chapters for management of non-carious tooth defects deep caries and badly broken down. Failure and management of failed restorations as well as health and occupational hazards related to operative dentistry will be convened.

## **Fixed Prosthodontics III, IV ( FPR 401,402 )**

This course is designed to teach the student the clinical application of tooth preparation, periodontal consideration, impression making and cementation of final restorations. Diagnosis and management of failures in fixed Prosthodontics will be covered.

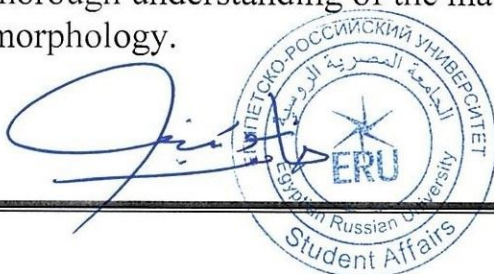
## **Removable Prosthodontics V,VI (PRS 401,402 )**

This course is designed to teach the students the clinical steps for treatment planning, impression making & jaw relation recording until the denture insertion. Also the different clinical steps for restoring partially edentulous patients will be covered in this course.

## **Endodontic I,II( END 401,402 )**

Upon completion of the course, the student should be able to:

Develop knowledge and psychomotor skills in performing clinical steps of root canal treatment perfectly. These procedures are associated with thorough understanding of the macroscopic anatomy of pulp space morphology.



## **Oral Medicine and Periodontology I, II ( OMP 401,402 )**

Upon completion of this course, the student should be able to differentiate between lesions affecting the tongue and manifestations of occupational diseases. Develop knowledge about the different ulcerative, white and red lesions of the oral mucosa as well as the hematological diseases, the pigmented and exophytic lesions affecting the oral mucosa & the salivary gland diseases. Acquire knowledge about local predisposing and systemic modifying factors that contribute to periodontal diseases. Learn how to diagnosis and treat different periodontal diseases and develop skills in control of dental plaque as well as performing periodontal surgeries.

## **Oral and maxillofacial surgery (OMS 401,402)**

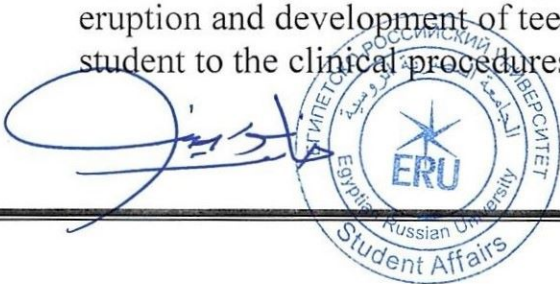
Upon completion of this course student should know the principles of exodontia, surgical exodontia, and management of impacted teeth. Student should also identify the significance of patient medical condition in designing the treatment plan and management of possible complications. Student should also recognize the diagnosis and management of some oral and maxillofacial surgical conditions such as maxillary sinus and salivary glands disorders and pre prosthetic surgical procedures. Student should demonstrate clinical skills in the practice of delivering local anesthesia and teeth extraction.

## **Occlusion II ( OCC 402 )**

This course is designed to teach students how to record centric relation. The course will include disturbance in occlusion and its treatment.

## **Pediatric dentistry (I,II) ( PED 501,502 )**

This course is designed to prepare the student to deal with child dental patient. It will include the oral examination process in children from all aspects as well as anticipatory guidance and management. An outlook on eruption and development of teeth will be included and will introduce the student to the clinical procedures that the pediatric dentist faces in the clinic.



Restoration techniques, management of deep caries, traumatic injuries, space maintenance problems and oral surgery are included as well as management of children with special health care needs.

### **Orthodontics I,II ( ORT 401,402 )**

Upon completion of the course, the student should be able to:

Easily diagnose any deviation from normal growth and development of the orofacial structures, and outline the possible treatment procedures being aware of the consequences of neglecting it. Also can contribute perfectly in preventing and intercepting any deviation from normality using removable appliances.

### **Implantology ( IMP 511 )**

Upon completion of this course student should recognize the principles of diagnosis and treatment planning for implant based dental rehabilitation. Student should also be able to identify the basic surgical and steps for implants based dental rehabilitation.

### **Esthetic Dentistry (EST 512 )**

This course is designed to give the student a firm foundation in the science and principles of esthetic dentistry the course will help the student to learn simple to extensive smile reconstruction by the needs of teeth winking, direct composite restorations and porcelain laminable veneers.

