University: Future University .

Faculty: Oral and Dental Medicine.

Department: Prosthodontics.

Program specification

(Academic year 2016/2017

A. Basic information:

1. Program Name: Master of prosthetic dentistry.
2. Nature of the program: (Single)
3. Department responsible for the program: Prosthodontics Department
4. Departments sharing in the program:
    - Oral biology and Oral Pathology
    - General supplementary sciences,
    - Oral medicine, periodontology, diagnosis and Radiology
    - Conservative dentistry.
5. Program coordinator: Prof. Hussein El Charkawi
6. Internal evaluator: Ass. Professor Mohamed Farouk
7. External evaluator: Prof. Hamdy Abou El Fotouh
8. Date of approval of the specification: 21/3/2016. Faculty council (47)
9. Date of approval of the program: 23/12 /2013. Ministry of higher education. No# (4794)

B. professional Information:

1. Overall aims of the program:

1/1. Master the application of the basics and methodologies of scientific research and the use of its various tools in prosthodontics.

1/2.Use critically the diagnostic clinical, laboratory and radiographic modalities and its use in prosthodontics.

1/3.Apply specialized prosthodontic knowledge and integrate it with relevant knowledge in dental practice.

1/4.Master the Classical and advanced issues in prosthodontic procedures.

1/5.Identify and solve prosthodontic problems and how to manage and improve skills of treatment.

1/6.Use appropriate technological means to serve his professional practice in prosthodontic and implantology.

1/7.Communicate effectively and be able to lead teams.

1/8.Make decision in different medical emergencies in dental practice.

1/9. Utilize and maintain the available resources for the development of capable oral and maxillofacial surgeon with a strong background in dental protocol.

1/10.Show awareness of his role in the development of society and the preservation of the environment in the light of global and regional changes.

1/11. Show commitment to integrity, credibility and adherence to the rules of prosthodontics in health care.

1/12.Improve academic and clinical skills to be able to engage with continuous education.

2. Intended learning outcomes of the program:

2/A Knowledge and understanding:

By the end of the master program of prosthodontics, the graduate should be able to

2.A.1 Discuss the theories and fundamentals related to prosthodontics as well as related basic sciences.

2.A.2 Demonstrate the mutual influence between professional practice and its reflection on the environment.

2.A.3 recognize clinical and scientific knowledge to establish research techniques in the field of prosthodontics.

2.A.4 Recognize ethical and legal principles of professional practice in prosthodontics and dental practice.

2.A.5 Identify principles and basics of quality in professional practice in prosthodontics

2.A.6 discuss the basics and ethics of scientific research.

2/B intellectual skills:

By the end of the master program of prosthodontics, the graduate should be able to:

2.B.1. Analyse, evaluate information and measurement from different diagnostic modalities in prosthodontics for problem solving.

2.B.2. Solve specialized problems using recent diagnostic tools.

2.B.3. Link different knowledge to assess possible prognosis of different treatment modalities.

2.B.4. Conduct a research study and / or write a systematic scientific study on a research problem.

2.B.5. Assess risks in different treatment modalities in oral & maxillofacial prothesis.

2.B.6. Plan for the development of performance prosthodontics and undertake restorative treatment to advanced standards.

2.B.7. Make professional decisions in management of prosthodontic problems.

2/C practical and clinical Skills:

By the end of the master program of prosthodontics, the graduate should be able to

2.C.1. Manage different problems using basic and modern professional skills.

2.C.2. Apply basic and modern professional skills in implantology and bone grafting techniques.

2.C.3. Write and evaluate professional reports and prescriptions.

2.C.4. Evaluate existing methods and tools in prosthodontics.

2/D General and transferrable Skills:

By the end of the master program of prosthodontics, the graduate should be able to:

2.d.1. Communicate effectively with patients, dental auxiliaries and lab technicians.

2. d.2. Use of information technology to serve professional practice.

2.d.3 Identification of personal learning needs and perform self-assessment.

2.d.4 Use of different sources for access to information and knowledge.

2.d.5 Develop rules and indicators for evaluating the performance of dental auxiliaries and lab technicians.

2.d.6 Work in a team, leading teams in different professional contexts.

2.d.7 Manage time manage efficiently.

3. Program academic standards: (ARS)

Academic standards of master degree program of prosthodontics.

Approved in department council no (3) on 2/2/2016

Approved in faculty council no (40) on 10/8/2015

4. References standards:

a. Academic reference standards ARS , master program (March 2009) issued by NAQAAE

b. external reference standards (bench mark). None

5. Program Structure and contents:

A. Duration of Program: minimum 2 years.

- 1st part : 2 semesters : 1 year
- 2nd part: 2 semesters: 1 year.
- Thesis: minimum 1 year after completion of 1st part

B. Structure of the Program:

Number of hours / number of units: total ٦٦ theoretical ٣٠ practical and clinical ٤٠

Compulsory ٥٠ selective ٠ elective ٤ Thesis ١٢

Basic science courses ٢٦ credit hour ٣٩ %

Social and Human Sciences courses: - credit hour %

Specialization courses: ٢٤ credit hour ٣٦ %

Elective Courses 4 credit hour ٧ %

Field training: - credit hour - %

Thesis: ١٢ credit hour ١٨ %

C) Program levels

First part: Passage required 26 Unit distributed as follows:

Compulsory 26. Selective 0. Elective 2.

Second part: Passage.24 Unit distributed as follows:

Compulsory 24. Selective.0. Elective 2

Program Courses:

1st part (1st. semester)

A - compulsory:

Course Code	Course Name	credit hour	Number of weekly hours	
			Practical	Theoretical
601	Oral pathology	3	2	2
603	Oral histology and embryology	3	2	2
605	General anatomy	3	2	2
611	Oral radiology	2	2	1
615	biomaterials	2	2	1

B. Selective: Not applicable.

C. Elective: 1 or 2 out of 14 elective courses.

1st part (2nd. semester)

A - compulsory:

Course Code	Course Name	credit hour	Number of weekly hours	
			Practical	Theoretical
602	Oral pathology	3	2	2
604	Oral histology and embryology	3	2	2
606	General anatomy	3	2	2
612	Oral radiology	2	2	1
616	Biomaterials	2	2	1

B. Selective: Not applicable.

C. Elective: 1 or 2 out of 14 elective courses

2nd part (1st. semester)

A - compulsory:

Course Code	Course Name	credit hour	Number of weekly hours	
			Practical	Theoretical
761	Occlusion	1	0	1
769	Complete denture prosthodontics	5	4	3
771	Maxillofacial prosthodontics	2	2	1
773	Partial denture prosthodontics	4	4	2

B. Selective: Not applicable.

C. Elective: 1 or 2 out of 14 elective courses.

2nd part (2nd. semester)

A - compulsory:

Course Code	Course Name	credit hour	Number of weekly hours	
			Practical	Theoretical
762	Occlusion	1	0	1
770	Complete denture prosthodontics	5	4	3
772	Maxillofacial prosthodontics	2	2	1
774	Partial denture prosthodontics	4	4	2

B. Selective: Not applicable.

C. Elective: 1 or 2 out of 14 elective courses

Student chooses 2 Elective courses (4 credit hours) out of the following courses during first or second part.

Passage of the 4 credit hours should be done any time within the program year.

Course Code	Course Name	credit hour
623	Biochemistry	2
629	Implantology	2
632	Laser applications	2
634	Dental emergency	2

7- Program admission and requirements:

١. أن يكون المتقدم حاصلا على درجة البكالوريوس فى طب وجراحة الفم والأسنان من إحدى كليات طب الأسنان بجمهورية مصر العربية أو على درجة معادلة لها من قبل المجلس الأعلى للجامعات بتقدير جيد على الأقل فى التقدير العام وجيد فى مادة التخصص المراد الالتحاق بدراستها. ويجوز قبول لدراسة الماجستير الطلاب الحاصلين على دبلوم التخصص المراد الالتحاق به بتقدير عام جيد على الأقل وجيد جدا فى مادة التخصص

٢. يجوز كذلك القبول فى الفروع الأكاديمية بالشروط نفسها فى البند السابق من هذه المادة على الوجه التالى :-

أ- ماجستير بثالوجيا وماجستير بيولوجيا الفم من الحاصلين على دبلوم التخصص الإكلينيكى لطب الفم وعلاج اللثة.

ب- ماجستير خواص المواد من الحاصلين على دبلوم التخصص الإكلينيكي للاستعاضة الصناعية للأسنان أو للعلاج التحفظى للأسنان أو التيجان و الجسور أو علاج الجذور.

٣. أن يكون قد مضى سنتين على الأقل من تاريخ التخرج بشرط أن يكون قد أمضى السنة الاجبارية للتدريب (الامتياز)

٤. موافقة جهة العمل للمتقدم على قيده لدرجة الماجستير وكذلك موافقتها على تفرغ الطالب طوال مدة الدراسة.

٥. موافقة مجلس القسم المختص.

٦. أن يقدم الطالب طلبا متضمنا جميع المستندات المذكورة فى بنود هذه المادة باسم السيد الدكتور عميد الكلية خلال المدة من أول يوليو حتى نهايته من العام المراد القيد به لهذه الدرجة، ولا تقبل أى إستثناءات بعد هذا التاريخ مهما كانت الأسباب، وبالنسبة للأجانب تطبق القواعد المعمول بها من قبل المجلس الاعلي للجامعة.

٧. يشترط ان يكون الطالب غير مقيد باي درجة من درجات الدراسات العليا.

8. Rules governing the completion of the program:

١. أن يتابع الطالب بصفة مرضية جميع المقررات الدراسية المنصوص عليها في اللائحة حسب كل تخصص وان يحقق نسبة حضور لاتقل عن ٧٥% في كل مقرر و الا حرم من دخول الامتحان في ذلك المقرر.

٢. أن يؤدي الطالب جميع المتطلبات الدراسية التي يحددها مجلس كل قسم من المقررات الدراسة المقرر دراستها في اللائحة و الا حرم من دخول الامتحان في ذلك المقرر.

٣. يشترط لنجاح الطالب اجتياز جميع الامتحانات المقررة المنصوص عليها في اللائحة حسب كل تخصص طبقا لنظام الساعات المعتمدة.

٤. يشترط لنجاح الطالب في اي مقرر من السنة الدراسية الاولي (الجزء الاول) ان يحصل علي درجة لا تقل عن ٦٠% من النهاية العظمي لمجموع الدرجات في المقرر، و علي الايقل ما يحصل علية في الامتحان التحريري و الشفهي و العملي عن ٦٠% من النهاية العظمي لمجموع الدرجات في المقرر) كل امتحان علي حدة.

٥. يشترط لنجاح الطالب في اي مقرر من السنة الدراسية الثانية (الجزء الثاني) ان يحصل علي درجة لا تقل عن ٦٠% من النهاية العظمي لمجموع الدرجات في المقرر، و علي الايقل ما يحصل علية في الامتحان التحريري و الشفهي و العملي و الاكلينيكي عن ٦٠% من النهاية العظمي لمجموع الدرجات في المقرر (كل امتحان علي حدة).

٦. يعد الطالب راسبا اذا تغيب عن دخول اي امتحان او جزء منة بدون عذر قهري يقبلة مجلس الكلية تبعا لما هو محدد بقرارات الجامعة.

٧. يكون الطالب الراسب في احد جزئي درجة الماجستير (الاول و الثاني) فيما رسب فية من مقررات فقط.

٨. يمكن للطالب الراسب فى بعض مقررات فصل دراسى أن يدرس بعض مقررات الفصل الدراسى التالى على أن يقوم بأداء إمتحانات مواد الرسوب مع إمتحانات الفصل التالى.

9–Students Assessment Methods:

Intended learning outcomes	Methods	م
Knowledge and understanding intellectual skills	Written examination	1
Knowledge and understanding intellectual skills General and transferrable Skills	Oral examination	2
Knowledge and understanding intellectual skills practical / clinical Skills General and transferrable Skills	Practical / clinical examination	3
Knowledge and understanding intellectual skills practical / clinical Skills General and transferrable Skills	Thesis	4

10- Evaluation of the program:

Evaluator	Tools	Sample
Internal evaluator **(s)مقييم داخلى**	• **Focus group discussion** • **Meetings** • **Questionnaire**	**Reports1-2**
External Evaluator **(s)مقييم خارجى**	• **Reviewing according to external evaluator** • **Checklist reportof NAQAA.**	**1-2 Reports**
Senior student **(s) طلاب السنة النهائية**	**مقابلات , استبيان**	**جميع الطلبة**
Alumni**الخريجون**	**مقابلات ،استبيان**	**لا تقل عن ٥٠% من خريجي أخر ٣ دفعات**
Stakeholder **(s) أصحاب العمل**	**مقابلات ،استبيان**	**عينة ممثلة لجميع جهات العمل**
Others **طرق أخرى**	**none**	

11- Teaching and learning strategies:

a. **Active learning**
b. **Outcome- based learning**
c. **Problem-based learning**

الملاحق :

ملحق ١: program Academic standard

ملحق ٢:المعايير القياسية العامة للدراسات العليا الصادرة عن الهيئة.

ملحق ٣: مصفوفة المعايير الأكاديمية للبرنامج مع المعايير القياسية للدراسات العليا الصادرة عن الهيئة.

ملحق ٤: مصفوفة البرنامج مع المعايير الأكاديمية للبرنامج.

ملحق ٥: مصفوفة اهداف ونواتج تعلم البرنامج

ملحق ٦: مصفوفة المقررات مع البرنامج Program-Courses ILOs Matrix

ملحق ٧: توصيف المقررات

ملحق ١ : program Academic standard

Academic Reference Standards (ARS)

For

Prosthetic dentistry

MS. Program

Faculty of Oral and Dental Medicine in Egypt

Academic Reference Standards (ARS) for master program of Prosthetic Dentistry

The Attributes of master program of Prosthetic Dentistry Graduates:

The graduates of master program of Prosthetic Dentistry should be able to:

1.1. Master the application of the basics and methodologies of scientific research in the field of prosthodontics and the use of its various tools.

1.2. Apply the analytical and critical thinkingand use it in prosthodontics.

1.3. Apply specialized prosthodontic knowledge and integrate it with relevant knowledge in dental practice.

1.4. Master the Classical and advanced issues and problems in prosthodontic procedures.

1.5. Identify and solve prosthodontic problems and how to manage and improve skills of treatment.

1.6. Use appropriate technological means to serve his professional practice in Prosthodontics and Implantology.

1.7. Communicate effectively and be able to lead teams.

1.8. Take decision in different medical emergencies in dental practice.

1.9. Utilize and maintain the available resources for the development of capable oral and maxillofacial prosthodontist with a strong background in dental protocol.

1.10. Show awareness of his role in the development of society and the preservation of the environment in the light of global and regional changes.

1.11. Show commitment to integrity, credibility and adherence to the rules of prosthodontics in health care.

1.12. Improve academic and clinical skills to be able to engage with continuous education.

1. **General Reference Standards:**

A. Knowledge and Understanding

By the end of the program, Prosthetic Dentistry master graduates should be able to:

A.1. Discuss the theories, fundamentals and the proper technological means to serve his professional practice related to prosthodontics as well as related basic science.

A.2. Demonstrate the mutual influence between professional practice and its reflection on the environment.

A.3. Demonstrate scientific development in diagnose and management of prosthodontics disorders.

A.4. Apply ethical and legal principles of professional practice in prosthodontics and dental practice.

A.5. Identify principles and basics of quality in professional practice in prosthodontics.

A.6. Conduct the basics and ethics of scientific research**.**

B. Intellectual Skills

By the end of the program the prosthetic Dentistry master degree graduates should be able to:

B.1. Analyze, evaluate information and measurement from different diagnostic modalities in prosthodontics for problem solving.

B.2. Solve specialized problems with sufficient recent and diagnostic tools.

B.3. Link different knowledge to differentiate between different modalities.

B.4. Conduct a research study and / or write a systematic scientific study on a research problem.

B.5. Assess risks in different treatment modalities in prosthodontics.

B.6. Plan for the development for performance in prosthodontics.

B.7. Take professional decisions in management of prosthodontic problems.

C. Practical and Professional Skills

By the end of the program, Prosthetic Dentistry master graduates should be able to:

C.1. Manage different problems using basic and modern professional skills.

C.2. Apply basic and modern professional skills in Implantology and bone grafting techniques.

C.3. Write and evaluating professional reports and prescriptions.

C.4. Evaluate of existing methods and tools in prosthodontics.

D. General and Transferable Skills

By the end of the program, Prosthetic Dentistry master graduates should be able to:

D.1. Communicate effectively with patients, dental auxiliaries and lab technicians.

D.2. Use of information technology to serve professional practice.

D.3. Identify personal learning needs and perform self-assessment.

D.4. Use of different sources for access to information and knowledge.

D.5. Develop rules and indicators for evaluating the performance of dental auxiliaries and lab technicians.

D.6. Work in a team, leading teams in different professional contexts.

D.7. Manage time efficiently.

D.8. Carry out self-learning and continuous educations.

ملحق ٢ :المعايير القياسية العامة للدراسات العليا الصادرة عن الهيئة.

برامج الماجستير

١- مواصفات الخريج :

خريج برنامج الماجستير في أي تخصص يجب أن يكون قادرا على:

١,١ إجادة تطبيق أساسيات ومنهجيات البحث العلمي واستخدامأدواته المختلفة.

٢,١ تطبيق المنهج التحليلي واستخدامه في مجال التخصص.

٣,١ تطبيق المعارف المتخصصة ودمجها مع المعارف ذات العلاقة في ممارسته المهنية.

٤,١ إظهار وعيا بالمشاكل الجارية والرؤى الحديثة في مجال التخصص.

٥,١ تحديد المشكلات المهنية و إيجاد حلولا لها.

٦,١ إتقان نطاق مناسب من المهارات المهنية المتخصصة، واستخدام الوسائل التكنولوجية المناسبة بما يخدم ممارسته المهنية.

٧,١ التواصل بفاعلية والقدرة على قيادة فرق العمل.

٨,١ اتخاذ القرار في سياقات مهنية مختلفة.

٩,١ توظيف الموارد المتاحة بما يحقق أعلي استفادة والحفاظ عليها.

١٠,١ إظهار الوعي بدوره في تنمية المجتمع والحفاظ على البيئة في ضوء المتغيرات العالمية والإقليمية.

١١,١ التصرف بما يعكس الالتزام بالنزاهة والمصداقية والالتزام بقواعد المهنة.

١٢,١ تنمية ذاته أكاديميا ومهنيا وقادرا علي التعلم المستمر.

٢- المعايير القياسية العامة:

٢. ١ المعرفة والفهم :

بانتهاء دراسة برنامج الماجستير يجب أن يكون الخريج على فهم و دراية بكل من:

١,١,٢ النظرياتوالأساسيات المتعلقة بمجال التعلم وكذا في المجالات ذات العلاقة.

٢,١,٢ التأثير المتبادل بين الممارسة المهنية وانعكاسها علي البيئة.

٣,١,٢ التطورات العلمية في مجال التخصص.

٤,١,٢ المبادئ الأخلاقية والقانونية للممارسة المهنية في مجال التخصص.

٥,١,٢ مبادئ وأساسيات الجودة في الممارسة المهنية في مجال التخصص.

٦,١,٢ أساسيات وأخلاقيات البحث العلمي.

٢. ٢ المهارات الذهنية :

بانتهاء دراسة برنامج الماجستيريجب أن يكون الخريج قادرا على:

١,٢,٢ تحليل وتقييم المعلومات في مجال التخصص والقياس عليها لحل المشاكل.

٢,٢,٢ حل المشاكل المتخصصة مع عدم توافر بعض المعطيات.

٣,٢,٢ الربط بين المعارف المختلفة لحل المشاكل المهنية.

٤,٢,٢ إجراء دراسة بحثية و/أو كتابة دراسة علمية منهجية حول مشكلة بحثية.

٥,٢,٢ تقييم المخاطر في الممارسات المهنية في مجال التخصص.

٦,٢,٢ التخطيط لتطوير الأداء في مجال التخصص.

٧,٢,٢ اتخاذ القرارات المهنية في سياقات مهنية متنوعة.

٢. ٣ المهارات المهنية :

بانتهاء دراسة برنامج الماجستيريجب أن يكون الخريج قادرا على:

١,٣,٢ إتقان المهارات المهنية الأساسية والحديثة في مجال التخصص.

٢,٣,٢ كتابة و تقييمالتقارير المهنية.

٣,٣,٢ تقييم الطرق والأدوات القائمة في مجال التخصص.

٢. ٤ المهارات العامة والمنتقلة :

بانتهاء دراسة برنامج الماجستيريجب أن يكون الخريج قادرا على:

١,٤,٢ التواصل الفعال بأنواعه المختلفة.

٢,٤,٢ استخدام تكنولوجيا المعلومات بما يخدم الممارسة المهنية.

٣,٤,٢ التقييم الذاتي وتحديد احتياجاته التعلمية الشخصية.

٤,٤,٢ استخدام المصادر المختلفة للحصول على المعلومات والمعارف.

٥,٤,٢ وضع قواعد ومؤشرات تقييم أداء الآخرين.

٦,٤,٢ العمل في فريق، وقيادة فرق في سياقات مهنية مختلفة.

٧,٤,٢ إدارة الوقت بكفاءة.

٨,٤,٢ التعلم الذاتي والمستمر.

- **ملحق ٣: مصفوفةالمعايير الأكاديمية للبرنامج مع المعايير القياسية للدراسات العليا الصادرة عن الهيئة.**
- **مواصفات الخريج:**

مواصفات الخريج بالمعايير القياسية العامة لبرامج الدراسات العليا(درجة الماجستير) ARSالهيئة	مواصفات الخريج بالمعايير الأكاديمية للبرنامج Graduate attributes of the program
١,١ إجادة تطبيق أساسيات ومنهجيات البحث العلمي واستخدام أدواته المختلفة.	١,١
٢,١ تطبيق المنهج التحليلي واستخدامه في مجال التخصص.	١,٢
٣,١ تطبيق المعارف المتخصصة ودمجها مع المعارف ذات العلاقة في ممارسته المهنية.	١,٣
٤,١ إظهار وعيا بالمشاكل الجارية والرؤى الحديثة في مجال التخصص.	١,٤
٥,١ تحديد المشكلات المهنية و إيجاد حلولا لها.	١,٥
٦,١ إتقان نطاق مناسب من المهارات المهنية المتخصصة، واستخدام الوسائل التكنولوجية المناسبة بما يخدم ممارسته المهنية.	١,٦
٧,١ التواصل بفاعلية والقدرة على قيادة فرق العمل.	١,٧
٨,١ اتخاذ القرار في سياقات مهنية مختلفة.	١,٨
٩,١ توظيف الموارد المتاحة بما يحقق أعلي استفادة والحفاظ عليها.	١,٩
١٠,١ إظهار الوعي بدوره في تنمية المجتمع والحفاظ على البيئة في ضوء المتغيرات العالمية والإقليمية.	١,١٠
١١,١ التصرف بما يعكس الالتزام بالنزاهة والمصداقية والالتزام بقواعد المهنة.	١,١١
١٢,١ تنمية ذاته أكاديميا ومهنيا وقادرا علي التعلم المستمر.	١,١٢

أ ـ المعرفة والفهم:

المعايير القياسية العامة (Generic) لبرامج الدراسات العليا (درجة الماجستير)	المعايير الأكاديمية للبرنامج
٧,١,٢ النظريات والأساسيات المتعلقة بمجال التعلم وكذا في المجالات ذات العلاقة.	2.A.1
٨,١,٢ التأثير المتبادل بين الممارسة المهنية وانعكاسها علي البيئة.	2.A.2
٩,١,٢ التطورات العلمية في مجال التخصص.	2.A.3
١٠,١,٢ المبادئ الأخلاقية والقانونية للممارسة المهنية في مجال التخصص.	2.A.4
١١,١,٢ مبادئ وأساسيات الجودة في الممارسة المهنية في مجال التخصص.	2.A.5
١٢,١,٢ أساسيات وأخلاقيات البحث العلمي.	2.A.6

ب ـ المهارات الذهنية :

المعايير القياسية العامة (Generic) لبرامج الدراسات العليا (درجة الماجستير)	المعايير الأكاديمية للبرنامج
٨,٢,٢ تحليل وتقييم المعلومات في مجال التخصص والقياس عليها لحل المشاكل.	2.B.1
٩,٢,٢ حل المشاكل المتخصصة مع عدم توافر بعض المعطيات.	2.B.2
١٠,٢,٢ الربط بين المعارف المختلفة لحل المشاكل المهنية.	2.B.3
١١,٢,٢ إجراء دراسة بحثية و/أو كتابة دراسة علمية منهجية حول مشكلة بحثية.	2.B.4
١٢,٢,٢ تقييم المخاطر في الممارسات المهنية في مجال التخصص.	2.B.5
١٣,٢,٢ التخطيط لتطوير الأداء في مجال التخصص.	2.B.6
١٤,٢,٢ اتخاذ القرارات المهنية في سياقات مهنية متنوعة.	2.B.7

ج. مهارات مهنية وعملية :

المعايير القياسية العامة (Generic) لبرامج الدراسات العليا (درجة الماجستير)	المعايير الأكاديمية للبرنامج
٤,٣,٢ إتقان المهارات المهنية الأساسية والحديثة في مجال التخصص.	2.C.1-2.C.2
٥,٣,٢ كتابة و تقييم التقارير المهنية.	2.C.3
٦,٣,٢ تقييم الطرق والأدوات القائمة في مجال التخصص.	2.C.4

د . مهارات عامة و منتقلة :

المعايير القياسية العامة (Generic) لبرامج الدراسات العليا (درجة الماجستير)	المعايير الأكاديمية للبرنامج
٩,٤,٢ التواصل الفعال بأنواعه المختلفة.	2.d.1
١٠,٤,٢ استخدام تكنولوجيا المعلومات بما يخدم الممارسة المهنية.	2.d.2
١١,٤,٢ التقييم الذاتي وتحديد احتياجاته التعلمية الشخصية.	2.d.3
١٢,٤,٢ استخدام المصادر المختلفة للحصول على المعلومات والمعارف.	2.d.4
١٣,٤,٢ وضع قواعد ومؤشرات تقييم أداء الآخرين.	2.d.5
١٤,٤,٢ العمل في فريق، وقيادة فرق في سياقات مهنية مختلفة.	2.d.6
١٥,٤,٢ إدارة الوقت بكفاءة.	2.d.7
١٦,٤,٢ التعلم الذاتي والمستمر.	2.d.8

ملحق ٤: مصفوفة البرنامج مع المعايير الأكاديمية للبرنامج.

Over all Aims of the program **أهداف البرنامج**	**مواصفات الخريج** **ARSالبرنامج**
1/1.Master the application of the basics and methodologies of scientific research and the use of its various tools in prosthodontics.	1.1. Master the application of the basics and methodologies of scientific research in the field of prosthodontics and the use of its various tools.
1/2.use critically the diagnostic clinical, laboratory and radiographic modalities and its use in prosthodontics.	1.2. Apply the analytical and critical thinking and use it in prosthodontics
1/3.Apply prosthodontic knowledge and integrate it with pathological, histological anatomical and radiological knowledge in dental practice.	1.3. Apply specialized prosthodontic knowledge and integrate it with relevant knowledge in dental practice.
1/4.Master the conventional and digital implant in prosthodontic procedures.	1.4. Master the Classical and advanced issues in prosthodontic procedures.
1/5.Resolve problems in various prosthodontic challenges and enhance the skills and management of the candidate.	1.5. Identify and solve prosthodontic problems and how to manage and improve skills of treatment.
1/6.Utilize the proper technological means to serve his professional practice in prosthodontics, maxillofacial prosthodontics and implant dentistry.	1.6. Use appropriate technological means to serve his professional practice in Prosthodontics and Implantology.
1/7.Communicate effectively and improve the leadership skills.	1.7. Communicate effectively and be able to lead teams.
1/8.Take decision in different dental emergency situations and management of medically compromised patients.	1.8. Take decision in different medical emergencies in dental practice.
1/9. Develop and resolve the existing resources for the improvement of capable oral and maxillofacial prosthodontist with a strong experience in dental protocol.	1.9. Utilize and maintain the available resources for the development of capable oral and maxillofacial prosthodontist with a strong background in dental protocol.
1/10.Display responsibility of his role in the progress of society and the preservation of the environment in the light of global and regional changes.	1.10 .Show awareness of his role in the development of society and the preservation of the environment in the light of global and regional changes.
1/11. Show obligation to integrity, trustworthiness and adherence to the rules of prosthodontics in health care.	1.11 Show commitment to integrity, credibility and adherence to the rules of prosthodontics in health care.

1/12.Enhance theoretical and clinical skills to be able to participate with continuous education.	1.12 Improve academic and clinical skills to be able to engage with continuous education.

نواتج تعلم البرنامج Knowledge & understanding												Knowledge & understanding المعايير الأكاديمية البرنامج ARS
المعرفه و الفهم												
						2.a.6	2.a.5	2.a.4	2.a.3	2.a.2.	2.a.1.	
											√	A.1.
										√		A.2.
									√			A.3.
								√				A.4.
							√					A.5.
						√						A.6.

المعايير الأكاديمية للبرنامج المهارات الذهنية البرنامج ARS	نواتج تعلم البرنامج Intellectual skills										
	2.b.1.	2.b.2.	2.b.3	2.b.4	2.b.5	2.b.6	2.b.7				
B.1.	√										
B.2.		√									
B.3.			√								
B.4.				√							
B.5..					√						
B.6.						√					
B.7.							√				

المعايير الأكاديمية للبرنامج المهارات المهنية البرنامج ARS	نواتج تعلم البرنامج Practical/Professional skills										
	2.c.1.	2.c.2.	2.c.3	2.c.4							
C.1.	√										
C.2.		√									
C.3.			√								
C.4.				√							

المعايير الأكاديمية للبرنامج المهارات العامة والمنتقلة البرنامج ARS	نواتج تعلم البرنامج General and transferable skill										
	2.d.1.	2.d.2.	2.d.3	2.d.4	2.d.5	2.d.6	2.d.7	2.d.8			
D.1.	√										
D.2.		√									
D.3..			√								
D.4.				√							
D.5.					√						
D.6.						√					
D.7..							√				
D.8..								√			

ملحق ٥: مصفوفة اهداف ونواتج تعلم البرنامج

Program aims	نواتج تعلم البرنامج Knowledge & understanding											
	المعرفه و الفهم											
	2.a.1.	2.a.2.	2.a.3	2.a.4	2.a.5	2.a.6						
1.1			√		√							
1.2	√		√						ملحق ٦: مصفوفة المقررات مع البرنامج Program-Courses ILOs Matrix			
1.3			√									
1.4			√									
1.5			√									
1.6	√											
1.7												
1.8												
1.9												
1.10												

												1.11
										√		1.12

نواتج تعلم البرنامج											Program aims
Intellectual skills											
			2.b.8	2.b.7	2.b.6	2.b.5	2.b.4	2.b.3	2.b.2.	2.b.1.	
										√	*1.1*
									√		1.2
										√	1.3
									√		1.4
									√		1.5
											1.6
											1.7
											1.8
								√			1.9
											1.10
											1.11
				√							1.12

نواتج تعلم البرنامج											Program aims
Practical/Professional skills											
					2.c.7	2.c.6	2.c.5	2.c.4	2.c.3	2.c.2.	2.c.1.	
												1.1
												1.2
												1.3

ملحق ٦: مصفوفة المقررات مع البرنامج Program-Courses ILOs Matrix

Knowledge & Understanding المعارف										ILOs All Courses & codes / Courses	
		2.a.8	2.a.7	2.a.6	2.a.5	2.a.4	2.a.3	2.a.2	2.a.1		
							√		√	601/602	**Oral Pathology**
							√		√	603/604	**Oral Histology &Embryology**
									√	605/606	**General anatomy**
							√		√	611/612	**Oral Radiology**
									√	615/616	**Biomaterials**
							√		√	761/762	**Occlusion**
					√		√	√	√	769/770	**Complete denture**
						√	√		√	771/772	**Maxillofacial Prosthodontics**
					√		√		√	773/774	**Partial denture Prosthodontics**

Intellectual skills مهارات ذهنيه										ILOs All Courses & codes	
			2.b.7	2.b.6	2.b.5	2.b.4	2.b.3	2.b.2	2.b.1		
										601/602	**Oral Pathology**
										603/604	**Oral Histology &Embryology**
										605/606	**General anatomy**
									√	611/612	**Oral Radiology**
									√	615/616	**Biomaterials**
			√	√	√	√	√	√		761/762	**Occlusion**
			√	√	√	√	√	√	√	769/770	**Complete denture**
			√	√	√	√	√	√	√	771/772	**Maxillofacial Prosthodontics**
			√	√	√	√	√	√	√	773/774	**Partial denture Prosthodontics**

Practical & Clinical Skills مهارات عملية و مهنية										ILOs All Courses & codes Courses	
						2.c.4	2.c.3	2.c.2	2.c.1		
										601/602	**Oral Pathology**
										603/604	**Oral Histology& Embryology**
										605/606	**General anatomy**
										611/612	**Oral Radiology**
										615/616	**Biomaterials**
									√	761/762	**Occlusion**
						√	√		√	769/770	**Complete denture**
						√	√		√	771/772	**Maxillofacial Prosthodontics**
						√	√	√	√	773/774	**Partial denture Prosthodontics**

General and transferable مهارات عامة										ILOs All Courses & codes Courses	
a.10	a.9	2.d.8	2.d.7	2.d.6	2.d.5	2.d.4	2.d.3	2.d.2	2.d.1		
		√	√	√		√	√	√		601/602	**Oral Pathology**
		√	√	√		√	√	√		603/604	**Oral Histology& Embryology**
		√	√	√		√	√	√		605/606	**General anatomy**
		√	√	√		√	√	√		611/612	**Oral Radiology**
		√	√	√		√	√	√		615/616	**Biomaterials**
		√	√	√	√	√	√	√		761/762	**Occlusion**
		√	√	√	√	√	√	√	√	769/770	**Complete denture**
		√	√	√	√	√	√	√	√	771/772	**Maxillofacial Prosthodontics**
		√	√	√	√	√	√	√	√	773/774	**Partial denture Prosthodontics**

ملحق رقم ٧: توصيف المقررات

First part courses

University: Future University in Egypt
Faculty: Faculty of Oral and Dental Medicine
Department*: oral biology and oral pathology department*

Course Specification

1- Basic Information		
Course Title: oral pathology	**Course Code:601**	**Level: 1st part master`s degree**
Master degree in: All specialties	***Credit Hours: 3Theoretical:2 Practical:2***	

2- Aim of the course:	1. To explain all structural, morphological and numerical alterations affecting hard dental tissues. 2. To understand the biological process of dental caries and the role of bacteria, CHO and saliva. 3. To classify different types of pulp inflammation.
3- Intended Learning Outcomes of Course (ILO): **By the end of the course, post graduate student should be able to:**	
a) Knowledge and understanding :	a.1 Discuss basic oral pathological terminology that may be encountered by all specialists in the dental practice. a.2 Classify developmental disturbances affecting the shape, structure and number of teeth. a.3 Explain the biological process of dental caries and the role of bacteria, CHO and saliva. a.4 Categorize types of pulp diseases. a.5 Identify the clinical signs & symptoms of pulp inflammation
b) Intellectual Skills:	b1- Differentiate between the developmental disturbances affecting shape, structure and number of teeth. b2- Connect between factors affecting dental caries (bacteria, CHO and saliva) and caries progression. b3- Distinguish between different types of pulpitis according to the clinical signs and symptoms and classify them into focal reversible pulpitis, acute and chronic pulpitis.

c) Professional and Practical Skills:	c1- Rank the structural and morphological defects affecting teeth. c2- Evaluate dental caries and its sequalae c3- Prioritize types of pulpitis based on clinical signs and symptoms and plan the treatment of each.
d) General and transferable skills	d1- Demonstrate appropriate professional attitudes and behavior in dealing with staff members & helping personnel . d2- Communicate effectively both verbally and in writing with other health care professionals to maximize patient benefits and minimize the risk of errors. d3- Apply the information technology as a means of communication for data collection and analysis and for life – long learning . d4- Identify the socioeconomic , cultural , geographical & occupational factors that may influence etiology of oral pathological conditions and the impact of disease on the community

4- Course Contents:	• Developmental disturbances affecting the number and size of teeth. • Developmental disturbances affecting the shape, structure of teeth and eruption disorders. • Dental caries - Etiology, role of bacteria, CHO and saliva. - Pathology of dental caries. • Pulp diseases:- - Etiology and classification. - Focal reversible pulpitis - Acute and chronic pulpitis.
5- Teaching and Learning Methods	• Lectures with discussions (interactive lectures), Data show presentation, brain storming, • practical sessions: Microscopic slides: • Demonstration using computer projection • Discussion and practice of the skill of identification of microscopic slides.

6- Teaching and Learning Methods for special needs students	Individual (one on one classes with one of the TA`s or lecturers during hours agreed upon by the student and the staff members)
7- Student Assessment	
a) Assessment Methods	• written examination to assess knowledge and understanding and assessment of general intellectual skills • Multiple choice questions to assess knowledge and understanding and assessment of general intellectual skills • Oral examination to assess knowledge and understanding (and assessment of practical skills & assessment of general intellectual skills) • Practical examination to assess knowledge and understanding and assessment of practical skills and assessment of general intellectual skills
b) Assessment Schedule	Midterm written exam Final written exam (at the end of the semester) Final practical exam (at the end of the semester) Final oral exam(at the end of the semester)
c) Weighting of Assessment	Midterm written exam (30 marks of 150) Final written exam (60 marks of 150) Final practical exam (30 marks of 150) Final oral exam (30 marks of 150)
8- list of References	
a) Course Notes	The lecture notes are available (based on the latest edition of `oral and maxillofacial pathology / Neville)
b) Essential Books (Text Books)	Brad Neville, Doglas d. dam, Carl allen, et al 2015, Oral and Maxillofacial pathology 4th ed., Sanders.
c) Recommended Books	Colored Atlas of oral pathology
d) Scientific periodicals, bulletins, etc…..	

Course Coordinator: Dr. Adham Hussein Fahmy
Head of Department: Prof. Rehab Abdulmoneim
Date: / 3 /2016

University: Future University in Egypt.
Faculty: Faculty of Oral and Dental Medicine
Department: oral biology and oral pathology department

Course Specification

1- Basic Information		
Course Title: Oral histology 1	**Course Code: 603**	**Level:1st part – 1st semester**
Master degree in: **Orthodontics** **Fixed prosthetic dentistry** **Operative dentistry Prosthetic dentistry** **Oral and maxillofacial surgery**	**Credit Hours: 3** **Theoretical:2** **Practical:2**	
2- Aim of the course:	• To keep pace with recent advances and to provide an expanded knowledge about histology, embryology and physiology of tooth, enamel and dentine. • To serve as a basis for understanding the clinical courses such as oral pathology, oral surgery and oral medicine	
3- Intended Learning Outcomes of Course (ILO) : **By the end of the course, post graduate student should be able to:**		
a) Knowledge and understanding:	▪ Identify embryogenesis & histology of dento-alveloar complex. ▪ Describe the structure and the function of some different hard dental and para-dental tissues. ▪ Recall the life cycle of the tooth starting from development to eruption and subsequent shedding. ▪ Explain the clinical significance associated with certain dental hard and oral structures. ▪ Describe the histological age changes of some dental and para-dental oral tissues.	
b) Intellectual Skills:	1. Predict the different stages of tooth development. 2. Differentiate between the different oral and dental tissues. 3. Distinguish any age changes or abnormalities that might affect some normal dental and oral tissues.	

c) Professional and Practical Skills:	1. Interpret the different dental & para-dental tissues. 2. Draw the histological structure of some hard dental tissues and para- dental soft tissues.
d) General and transferable skills	1. Communicate effectively with colleagues and interact in teamwork. 2. Demonstrate appropriate professional attitude and behavior in different situations. 3. Manage time effectively.

4- Course Contents:	• Tooth development • Enamel • Dentin • Periodontal ligament • Bone Tissue and Alveolar process • Salivary Glands and Saliva • Oral Mucosa Membrane
5- Teaching and Learning Methods	1- Interactive lectures: including power point data show, videos and brain storming. 2- Practical and small group sessions: Each practical session is preceded by slide demonstration, description and drawing of oral tissues. 3- Class discussions. 4- Drawing in the practical books under supervision of the responsible staff members.
6- Teaching and Learning Methods for special needs students	Direct observation Individual teaching

7- Student Assessment	
a) Assessment Methods	1- Written examination to assess knowledge and understanding and intellectual skills. 2- Oral examination to assess knowledge and understanding and intellectual skills and attitude. 3- Practical examination to assess practical skills & intellectual skills & general skills. 4- Practical book to assess practical skills. 5- Research assignments. 6- Presentations and seminars .
b) Assessment Schedule	Final term
c) Weighting of Assessment	Final term Examination 90 Oral Examination 30 Practical Examination 30 Total 150

7- List of References	
a) Course Notes	*Department handouts
b) Essential Books (Text Books)	Mary Bath-Balogh, Margaret J. Fehrenbach, Dental Embryology Histology and anatomy. Ten Cate's Oral Histology Development, Structure and Function.
c) Recommended Books	----------
d) Scientific periodicals, bulletins, etc…..	Websites related to the study subject: Science direct- Pub Med

Course Coordinator: Rehab Abdul Moneim
Head of Department: Rehab Abdul Moneim
Date: / 3 /2016

University: Future University in Egypt.

Faculty: Faculty of Oral and Dental Medicine
Department: general supplementary sciences

Course Specification

1- Basic Information		
Course Title: Anatomy of head	***Course Code: 605***	***Level: Part I, First semester***
Master degree in: All specialties except public health	***Credit Hours: Theoretical: 2 Practical: 1***	
2- Aim of the course:	• To apply anatomical facts while examining the living subject to reach the proper diagnosis. • To identify the different surface markings of head with determining the position of muscles and their actions and the course of nerves and vessels. • To interpret the normal anatomical structures of head on radiographs of different regions of head. • To get familiar with normal patterns of paranasal sinuses of the widely used radiographs and CT of sinuses. • To provide appropriate ethical and professional education necessary for dealing with cadavers. • To correlate anatomical facts with its clinical application.	
3- Intended Learning Outcomes of Course (ILO) : By the end of the course, post graduate student should be able to:		
a. Knowledge and understanding :	1- Discuss the basic principles of the structure of different muscles, nerves, vessels, and glands of head. 2- Describe the surface landmarks of the underlying bony features of skull and mandible 3- Point out the basic features of muscles, nerves, vessels and glands of the head. 4- Outline major clinical applications in the core syllabus of anatomical facts.	

b. Intellectual Skills:	a. Correlate anatomy of different parts of head with the surface markings in determining the position or course of internal structures of the head. b. Discuss the clinical significance of muscle actions and results of injury of nerves and vessels of the head.
c. Professional and Practical Skills:	1- Apply the learned anatomical facts while examining living subject to reach the proper diagnosis. 2- Identify the different muscles, glands, major vessels and nerves in human cadavers. 3- Interpret radiograph and C.T images.
d. General and transferable skills	1- Maintain honesty and integrity in all interactions with teachers, colleagues, patients and others with whom dentists/oral surgeons must interact with in their professional lives. 2- Appreciate their role as well as the necessity of seeking the collaboration of other workers on as needed basis. 3- Take responsibility towards all work rules and regulations. 4- Maintain emotional stability in all unusual stressful situations.

4- Course Contents:	• Skull: General and particular features: - Bones forming the skull (name, position and parts of each)- Major foramina and fissures with structures passing, clinical points as commonly fractured areas: (3 hours) • Mandible: Parts, features, muscles and ligaments attached to it, nerves, vessels and glands related. Foramina in the mandible with passing structures. Common sites of fracture.: (1 hour). • Scalp: definition, layers, nerve, blood supply and lymph drainage as well as significant clinical points. (1 hour) • Face: muscles of facial expression, motor and sensory nerve supply of face, blood supply and lymph drainage. Description of dangerous area of face. (2 hours) • Facial nerve: Course, branches and results of extracranial injury. (1 hour) • Parotid gland: site, extension, parts, capsule, relations, blood supply, nerve supply effect of its inflammation on embedded structures. (1 hour) • Temporal, inratempral and pterygoplatine fossae: Boundaries and contents. Muscles of mastication, mandibular nerve, maxillary nerve, maxillary artery, pterygoid venous plexus and sphenopalatine ganglion. (3 hours) • Temporomandibular joint: Type, variety, articular bones, capsule, ligaments, intra-capsular disc, analysis of the joint movements. Dislocation: causes, site of dislocated head of mandible and how to fix it. (1 hour) • Cranial cavity: Dural folds, dural venous sinuses, pituitary gland and intracranial course of internal carotid artery. Effects of enlargement of pituitary gland. (2 hours) • Nasal cavity: Boundaries, parts, nasal septum, features of lateral wall and related orifices, blood and nerve supply. (2 hours) • Paranasal sinuses: site, number, boundaries and effects of its inflammation). Relation between ***maxillary*** sinusitis and abcesses related to roots of premolar and molar teeth of upper jaw. (1 hour) • Oral cavity: parts, Boundaries***, contents, nerve and blood supply. (1 hour)*** • ***Tongue: site, shape, parts, muscles, nerve supply and blood supply. Effect of injury of its motor nerve***

5- Teaching and Learning Methods	a. Didactic Lectures: for acquisition of course knowledge, one two-hour lecture per week. b. Practical classes: including practical demonstration on dissected specimen and radiological films in the dissecting room, one two-hour session per week. c. Tutorial classes: 2 hours weekly before dissecting a major region and a brief discussion by the end of each practical lesson. d. Self-Assessment: As appropriate, self-assessment questions in the form of short essay and/or MCQs.
6- Teaching and Learning Methods for special needs students	***----***
7- Student Assessment	
a) Assessment Methods	a. Written examination: (2) hours Assessment of Knowledge and understanding in the form of assay, MCQ and fill in the blanks questions. b. Oral examination: (10-15) minutes Assessment of understanding of pre-identified knowledge. c. Practical examinations: Three minutes per station for a total of 10 stations, testing Identification Knowledge of different anatomical structures on bones and human cadaver. d. Logbook Assessment of practical activities.
b) Assessment Schedule	***Assessment 1: MCQ Quiz exam*** ***Assessment 2: Mid Term Exam (Essay, fill in the blanks, and MCQ)*** ***Assessment 3: MCQ Quiz exam*** ***Assessment 4: Practical exam*** ***Assessment 5: Oral exam*** ***Assessment 6: Final written exam***
c) Weighting of Assessment	***Assessment 1: 2.0 %*** ***Assessment 2: 6.0 %*** ***Assessment 3: 2.0 %*** ***Assessment 4: 10.0 %*** ***Assessment 5: 20.0 %*** ***Assessment 6: 60.0 %***

8- List of References	
a) Course Notes	*Available in hard copy*
b) Essential Books (Text Books)	*Netter's Head and Neck Anatomy for Dentistry.*
c) Recommended Books	*1-Gray's Anatomy for student* *2-Cunningham's Text Book of Anatomy*
d) Scientific periodicals, bulletins, etc…..	

Course Coordinator: Dr. Sherif Fahmy Arsanyos
Head of Department: Dr. Nagwa Roshdy
Date: /3 /2016

University: Future University in Egypt.
Faculty: Faculty of Oral and Dental Medicine
Department*: Oral medicine, periodontology, diagnosis and radiology*

Course Specification

1- Basic Information		
Course Title: oral radiology	**Course Code:** ٦١١	**Level: 1st year master degree**
Master degree in:	Credit Hours: 3/ Theoretical: 2/Practical: 2	
2- Aim of the course:	1. To provide the students with information related to **radiological sciences** including radiation physics, image production, and possible errors 2. To enable the students to understand and use the **dental radiography equipment** such as machine, different types of image receptors and processing methods 3. To train students to **clinical imaging sciences** including conventional intra oral, digital radiography, head and neck imaging, panoramic imaging	

3- Intended Learning Outcomes of Course (ILO) : **By the end of the course, post graduate student should be able to:**	
a. Knowledge and understanding :	1- explain radiation physics, including X-rays production, different components of X-ray machine and the various properties of X-rays 2- Discuss how images are produced and identify different image characteristics as density, contrast, sharpness and resolution. Illustrate all factors affecting these characteristics. 3- Identify types of radiographic films by size, number and speed (intra-oral and extra-oral). Explain the underlying principles of the use of screens and discuss its different types and structure. 4- Explain the principles of all the intra oral radiographic techniques 5- Describe how images are produced by processing and describe different processing techniques and chemicals. 6- Identify the digital radiography systems and their advantages and uses. 7- Explain the principles of extra-oral radiographic techniques and understand their indications. 8- Identify different radiographic pitfalls, their causes and method of overcome.
b. Intellectual Skills:	1- Make decisions regarding proper radiographic prescription. 2- Formulate complete radiographic report for intraoral CMS, panoramic and extra oral radiographs.
c. Professional and Practical Skills:	1- Apply their knowledge and skills in radiographic techniques and processing to acquire excellent diagnostic quality radiographs 2- Complete full mouth periapical, bitewing, and occlusal survey images (CMS) for adults and children.

d. General and transferable skills	1- Demonstrate appropriate professional attitudes and behavior in different situations toward patients, colleagues and supervisors. 2- Provide empathic care for all patients without discrimination. 3- Assess Regularly one's knowledge and skills, and seek additional information to correct deficiencies and enhance performance. 4- Implement and monitor infection control and environmental safety programs according to current standard
4- Course Contents:	• X ray machine and production of x ray • Dental film • Digital radiography • IO techniques periapical, bitewing and occlusal EO views • Panoramic radiography (principle, technique) • Processing techniques • Common technique and processing errors • Processing • IO landmarks(maxilla) • IO landmarks(mandible) • Object localization and exercises • Infection control • EO landmarks • Panoramic anatomy • Panoramic errors
5- Teaching and Learning Methods	• Lectures by PPS presentations • Clinical training: • Demonstrations and videos • Work sheets and surveys • Report back sessions • rotations in radiology department • literature review seminars • Group work, team work, and self-presentation
6- Teaching and Learning Methods for special needs students	-----

7- Student Assessment	
d) Assessment Methods	• formative quizzes • clinical requirements, and reports • Final Written exam • Final Oral exam • Final clinical exam
e) Assessment Schedule	• First midterm exam(week5) • Second midterm exam(week10) • Practical exam(week 12) • Oral exam (end of semester) • Final written exam(end of semester)
f) Weighting of Assessment	• Midterm written exam (20%) • Practical exam (20%) • Oral exam (20%) • Final written exam (40%)
8- List of References	
e) Course Notes	Course notes available PPS available for the students from the department
f) Essential Books (Text Books)	Stuart C. White, DDS, PhD and Michael J. Pharoah, DDS, Oral Radiology, 7th Edition 2014 , Principles and Interpretation
g) Recommended Books	Eric Waites , Essentials of dental radiography and radiology, 5th ed 2013
h) Scientific periodicals, bulletins, etc…..	Journal of maxillofacial radiology http://www.joomr.org/

Course Coordinator: Prof Gihan Omar
Head of Department: Prof Shahira Elashery

University: Future University in Egypt.
Faculty: Faculty of Oral and Dental Medicine
Department: conservative dentistry

Course Specification

9- Basic Information		
Course Name: **Dental Materials**	**Course Code:** **615**	**Level:** **1st part, 1stterm**
Master degree in: **Dental Materials** **Operative dentistry** **Endodontics** **Fixed Prosthodontics** **Removable Prosthodontics** **Pedodontics** **Orthodontics**	**Credit Hours:2** **Contact Hours: 3 Theoretical:1 Practical:2**	
10- Aim of the course:	• To present the basic properties of dental materials as they are related to clinical manipulation by the dentist. • To bridge the gap between the knowledge obtained in the basic course in materials science, chemistry, and physics and the dental operatory. • To analyze the benefits and limitations of dental materials. • To make rational decisions on the selection of dental materials and use in a clinical practice.	

11- Intended Learning Outcomes of Course (ILO) : **By the end of the course, post graduate student should be able to:**	
e) Knowledge and understanding :	a1- Identify the change of state, the interatomic bonds and the crystalline and non crystalline structure. a2- Define the different physical properties. a3- Define the different mechanical properties. a4-Specify the different testing methodology for the different properties. a5- Discuss the biocompatibility of dental materials a6- Define adhesion and cohesion and the factors affecting them. a7- Explain enamel and dentin bonding mechanisms. a8-Classify polymers and their structure. a9- Explain the polymerization mechanisms. a10- Define copolymerization, cross linking and plasticizers. a11- Outline the physical properties of polymers. a12- List the applications of polymers in dentistry. a13- Describe metals and alloys. a14- Explain solidification, and microstructure of metals a15- Distinguish wrought metals. a16- Define coring and homogenization a17- State the different methods of altering mechanical properties of alloys. a18- List the different solid state reactions occurring in alloys. a19- Define tarnish and corrosion, state the different types. a20- Explain the electrochemical corrosion, identify the different types and its application in dentistry. a21- Discuss protection against corrosion.

f) Intellectual Skills:	b 1- Differentiate between different types of bonds. b 2- Relate between microstructure and different properties of dental aterials. b 3- Distinguish between different thermal properties of the materials. b 4- Analyze the effect of proper selection and handling of materials on their optical properties. b 5- Differentiate between different mechanical properties. b 6- Diagram stress – strain curve for different mechanical properties of dental materials. b 7- Analyze the curves for viscoelastic materials. b 8- Predict the properties of materials suitable for construction of long span bridge, removable dentures, anterior or posterior filling materials, orthodontic wires or endodontic files. b 9- Select proper test for tensile strength of brittle materials, fatigue, flexural strength and impact strength of different materials. b 10- Predict the properties of adhesives to achieve proper bonding. b 11- Differentiate between bonding to enamel and to dentin. b 12- Compare between different types of polymers. b 13- Analyze the effect of polymerization reaction, molecular weight, cross linking, copolymerization, plasticizers, fillers, temperature on polymers' properties. b 14- Diagram solidification, and microstructure of metals. b 15- Distinguish wrought metals. b 16- Relate between microstructure of metals and mechanical properties. b 17- Classify different types of alloys. b 18- Compare eutectic to solid solution alloys. b 19- Analyze coring and homogenization. b 20- Select the solid state reaction suitable for adjusting different metallic appliances. b 21- Differentiate between different mechanisms of corrosion. b 22- Setup different instructions for operators and patients to combat corrosion in the oral cavity.

g) Professional and Practical Skills:	c1- Categorize the different materials according to their microstructure. c2- Determine the use of different materials consistent with their physical, mechanical, biological, and chemical properties. c3-Choose the proper testing machine and their use. c4- Find out the behavior of different materials during service in oral cavity.
h) General and transferable skills	d1- Communicate effectively with colleagues, staff members and helping personnel d2- Demonstrate appropriate professional attitude and behavior in different situations
12- Course Contents:	1- Structure of matter. 2- Physical properties 3- Adhesion 4- Mechanical properties 5- Polymers 6- Metallurgy 7- Corrosion

Weeks	Topics	
	Lecture	Lab
1st week	Structure of Matter	Structure of Matter
2nd week	Mechanical properties.	Mechanical Properties
3rd week	Mechanical Properties.	Mechanical Properties.
4th week	Mechanical Properties	Mechanical Properties
5th week	Physical Properties	Physical Properties
6th	Physical Properties	Physical Properties
7th	Adhesion	Adhesion
8th	Polymers	Polymers
9th	Metallurgy	Metallurgy
10th	Metallurgy	Metallurgy
11th	Metallurgy	Metallurgy
12th	Tarnish and Corrosion	Tarnish and Corrosion

13- Teaching and Learning Methods	5-1. Interactive Lectures (including discussions and brain storming. 5-2. Practical and small groups sessions. 5-3. Case study and problem solving 5-4. Demonstrations 5-5. Self study 5-6. Presentations and seminars.
14- Teaching and Learning Methods for special needs students	

15- Student Assessment

d) Assessment Methods	7-a-1. Written examination to assess knowledge and understanding. 7-a-2. Oral examination to assess knowledge and understanding. 7-a-3. Practical examination to assess practical skills
e) Assessment Schedule	Assessment 1: Final written, Practical & oral exams by the end of the course
f) Weighting of Assessment	**All Departments Except Orthodontic Students** Final term Examination 60% Oral Examination 20% Practical Examination 20% Total 100% **Orthodontic Students** Final term Examination 60% Oral Examination 40% Total 100%

16- List of References

e) Course Notes	Hand out : available for students from the department
f) Essential Books (Text Books)	• Sakaguchi, RL and Powers JM: Restorative Dental materials edited by RG Craig. 13th edition. • Anusavice, KJ; Shen, C and Rawls HR: Phillips' Science of Dental materials. 12th edition
g) Recommended Books	
h) Scientific periodicals, bulletins, etc…..	Periodicals, Web Sites, ….etc

Course Coordinator: Prof. Taheya Moussa

Head of Department: prof. Essam Abdelhafez

Date: / 3 /2016

University: Future University in Egypt.
Faculty: Faculty of Oral and Dental Medicine
Department*: oral biology and oral pathology*

Course Specification

1- Basic Information		
Course Title: oral pathology	**Course Code:602**	**Level: 1st part master`s degree**
Master degree in: All specialties	***Credit Hours: 3 Theoretical:2Practical:2***	

2- Aim of the course:	1. To demonstrate common pathological diseases affecting the periapical area. 2. To highlight the differences between different types of cysts of oral and paraoral region. 3. To underline different types of odotogenic tumors.
3- Intended Learning Outcomes of Course (ILO): **By the end of the course, post graduate student should be able to:**	
a) Knowledge and understanding :	a1- Describe the process of pulp necrosis and calcification a2-. Discuss different diseases affecting the periapical area a3- describe dental granuloma, dental abscess and alveolar osteitis a4- Identify the clinical signs & symptoms of acute and chronic osteomyelitis a5- Categorize odontogenic cysts a6- Summarize soft tissue cysts a7- Classify odontogenic tumors into epithelial, mesenchymal and mixed.
b) Intellectual Skills:	b1- Differentiate between pulp necrosis and calcifications. b2- Evaluate diseases of the periapical areas. b3- Distinguish between periapical granuloma, cyst and alveolar osteitis b4- Analyze types of osteomyelitis b5- Differentiate between different types of odontogenic cysts according to clinical, histological and radiographic pictures and compare them with soft tissue cysts. b6-Subdivide epithelial, mesenchymal and mixed odontogenic tumors according to their clinical behavior, histological and radiographic pictures.

c) Professional and Practical Skills:	c1- Hypothesize treatment plan to different diseases affecting periapical area (dental granuloma, abscess and alveolar osteitis) c2-Estimate the clinical signs and symptoms of acute and chronic osteomyelitis . c3- Predict the recurrence rate of odontogenic cysts and tumors based on their clinical behavior and histological pictures.
d) General and transferable skills	d1- Demonstrate appropriate professional attitudes and behavior in dealing with staff members & helping personnel . d2- Communicate effectively both verbally and in writing with other health care professionals to maximize patient benefits and minimize the risk of errors and to teach surgeons to convey the disease grade according to the commonly used grading systems worldwide. d3- Apply the information technology as a means of communication for data collection and analysis and for life – long learning . d4- Identify the socioeconormic , cultural , geographical & accupational factors that may influence etiology of oral pathological conditions and the impact of disease on the community

4- Course Contents:	• Pulp necrosis and calcification • Diseases of periapical area • Dental granuloma, abscess and alveolar osteitis • Osteomyelitis (acute and chronic) • Odontogenic cysts • Classification of inflammatory odontogenic cysts • Soft tissue cysts • Odontogenic tumors • Classification of epithelial odontogenic tumors • Mesenchymal and mixed odontogenic tumors
5- Teaching and Learning Methods	• Lectures with discussions (interactive lectures), Data show presentation, brain storming, and case study. • Practical sessions. • Microscopic slides: Demonstration of slides using computer projection, Discussion and practice of the skill of identification of microscopic slides.
6- Teaching and Learning Methods for special needs students	Individual (one on one classes with one of the TA`s or lecturers during hours agreed upon by the student and the staff members
7- Student Assessment	
a) Assessment Methods	• written examination to assess knowledge and understanding and assessment of general intellectual skills • Multiple choice questions to assess knowledge and understanding and assessment of general intellectual skills • Oral examination to assess knowledge and understanding (and assessment of practical skills & assessment of general intellectual skills) • Practical examination to assess knowledge and understanding and assessment of practical skills and assessment of general intellectual skills

b) Assessment Schedule	Final written exam (at the end of the semester) Final practical exam (at the end of the semester) Final oral exam(at the end of the semester)
c) Weighting of Assessment	Final written exam (90 marks of 150) Final practical exam (30 marks of 150) Final oral exam (30 marks of 150)
8- List of References	
a) Course Notes	The lecture notes are available (based on the latest edition of `oral and maxillofacial pathology / Neville)
b) Essential Books (Text Books)	Brad Neville, Doglas d. dam, Carl allen, et al 2015, Oral and Maxillofacial pathology 4th ed., Sanders.
c) Recommended Books	Colored Atlas of oral pathology
d) Scientific periodicals, bulletins, etc…..	

Course Coordinator: Dr. Adham Hussein Fahmy
Head of Department: prof. Rehab Abdulmoneim
Date: / 3 /2016

University: Future University in Egypt.
Faculty: Faculty of Oral and Dental Medicine
Department*: oral biology and oral pathology department*

Course Specification

1- Basic Information		
Course Title: Oral histology 2	**Course Code: 604**	**Level:1st part – 2nd semester**
Master degree in: **Orthodontics** **Fixed prosthetic dentistry** **Operative dentistry** **Prosthetic dentistry** **Oral and maxillofacial surgery**	***Credit Hours: 3*** ***Theoretical:2*** ***Practical:2***	
2- Aim of the course:	• To keep pace with recent advances and to provide an expanded knowledge about histology, embryology and physiology of cementum, pulp and shedding and eruption. • To serve as a basis for understanding the clinical courses such as oral pathology, oral surgery and oral medicine	

3- Intended Learning Outcomes of Course (ILO) : **By the end of the course, post graduate student should be able to:**	
a) Knowledge and understanding:	▪ Identify cementum & pulpal dental tissues. ▪ Describe the structure and function of cementum & pulp. ▪ Discuss important para-oral structures closely related to the oral cavity. ▪ Explain the clinical significance associated with these para-oral structures. ▪ Describe the histological age changes of cementum, pulp & some para-oral structures. ▪ Describe histology & physiology of teeth eruption & shedding.
b) Intellectual Skills:	1- Differentiate between the different oral and para-oral tissues. 2- Illustrate the importance of the para-oral tissues and their clinical implications on the dental & other oral tissues. 3- Distinguish any age changes or abnormalities that might affect some dental cementum, pulp & some para-oral tissues.
c) Professional and Practical Skills:	1. Interpret the normal histology of dental cementum & pulp & para-oral tissues through power point data show. 2. Draw the histological structure of dental cementum, pulp & para-oral tissues.
d) General and transferable skills	1. Communicate effectively with colleagues and interact in a team work. 2. Demonstrate appropriate professional attitude and behavior in different situations. 3. Manage time effectively.
4- Course Contents:	• Cementum • Pulp • Shedding • Eruption • Embryology (Cranio- facial embryology) • Maxillary Sinus • Tempro-mandibular joint

5- Teaching and Learning Methods	a) Interactive lectures: including power point data show, videos and brain storming. b) Practical and small group sessions: Each practical session is preceded by slide demonstration, description and drawing of oral tissues. c) Class discussions. d) Drawing in the practical books under supervision of the responsible staff members.
6- Teaching and Learning Methods for special needs students	Direct observation Individual teaching
7- Student Assessment	
a) Assessment Methods	a) Written examination to assess knowledge and understanding and intellectual skills. b) Oral examination to assess knowledge and understanding and intellectual skills and attitude. c) Practical examination to assess practical skills & intellectual skills & general skills. d) Practical book to assess practical skills. e) Research assignments. f) Presentations and seminars.
b) Assessment Schedule	Final term
c) Weighting of Assessment	Final term Examination 90 Oral Examination 30 Practical Examination 30 Total 150
8- List of References	
a) Course Notes	*Department handouts

b) Essential Books (Text Books)	• Mary Bath-Balogh,Margaret J. Fehrenbach, Dental Embryology Histology and anatomy. • TenCate's Oral Histology Development, Strucure and Function.
c) Recommended Books	----
d) Scientific periodicals, bulletins, etc…..	Websites related to the study subject: Science direct- Pub Med

Course Coordinator: Rehab Abdul Moneim
Head of Department: Rehab Abdul Moneim
Date: / 3 /2016

University: Future University in Egypt.
Faculty: Faculty of Oral and Dental Medicine
Department*: general supplementary sciences*

Course Specification

1- Basic Information		
Course Title: Anatomy (of Neck)	**Course Code: 606**	**Level: Part I, second semester**
Master degree in: **-Orthododontics.** **-Removable Prosthodontics.** **-Oral and maxillofacial Surgery.** **-Conservative Dentistry.**	***Credit Hours: Theoretical: 2 - Practical: 1***	
2- Aim of the course:	• To apply anatomical facts while examining the living subject to reach the proper diagnosis. • To identify the different surface markings of neck with determining the position of muscles and their actions and the course of nerves and vessels. • To interpret the normal anatomical structures of neck on radiographs of different regions of neck. • To provide appropriate ethical and professional education necessary for dealing with cadavers. • To correlate anatomical facts with its clinical application.	
3- Intended Learning Outcomes of Course (ILO) : **By the end of the course, post graduate student should be able to:**		
a. Knowledge and understanding :	**1-** Discuss the basic principles of the structure of different muscles, nerves, vessels, and glands of neck. **2**. Describe the basic features of muscles, nerves, vessels and glands of the neck. **3-** Outline major clinical applications in the core syllabus of anatomical facts.	

b. Intellectual Skills:	**1-** Correlate anatomy of different surface markings in determining the position or course of internal structure of the neck. **2-** Explain the clinical significance of muscle actions.
c. Professional and Practical Skills:	**1-** Apply the learned anatomical facts while examining living subject to reach the proper diagnosis. **2-** Identify the different muscles, glands, major vessels and nerves in human cadavers. **3-** Interpret radiograph, C.T, and magnetic resonance images.
d. General and transferable skills	**1-** Maintain honesty and integrity in all interactions with teachers, colleagues, patients and others with whom dentists/oral surgeons must interact with in their professional lives. **2-** Appreciate their role as well as the necessity of seeking the collaboration of other workers on as needed basis. **3-** Take responsibility towards all work rules and regulations. **4-** Motional stability in all unusual stressful situations**.**

4- Course Contents:	• **Skull**: General and particular features: - Bones forming the skull (name, position and parts of each)- Major foramina and fissures with structures passing, clinical points as commonly fractured areas: (1 hour) • **Mandible**: Parts, features, muscles and ligaments attached to it, nerves, vessels and glands related. Foramina in the mandible with passing structures. Common sites of fracture. (1 hour). • **Skin, fascia of the neck:** superficial fascia with structures embedded inside, parts of deep fascia (site and extension of each part). (1 hour) • **Deep fascia:** parts, site, extensions and related tissue spaces. Spread of neck infection from abcess around roots of teeth of lower jaw. (1 hour) • **Sternomastoid muscle:** Site, attachments, nerve supply, relations and results of spasmodic contraction. (1 hour) • **Posterior triangle of the neck**: Boundaries, site, parts, contents andSubmandibular region: results of injury at its roof. (1 hour). • **Anterior triangle of the neck**: Site, boundaries and divisions. (1 hour) • **Carotid triangle**: Site, boundaires, contents and significance of carotid body and sinus. • **Submandibular region:** (5 hours) -Submandibular muscles. -Submandibular and sublingual salivary glands. -Lingual nerve and submandibular ganglion. -Digastric triangle (boundaries and contents). -Submental triangle (boundaries and contents). • **Infrahyoid muscles:** Site, attachments, nerve supply and action. Muscular triangle (Site, boundaries and contents). (1 hour) • **Thyroid gland:** Site, parts, relations, blood supply and nerves related to the main arteries. Parathyroid glands (number and site). Clinical points related to enlargement of the gland and thyroidectomy. (1 hour) • **Trachea & esophagus:** Site, extensions, relations, blood supply and nerve supply. (1 hour) • **Carotid arteries (common, external & internal):** Course and branches. Carotid body and sinus (site, function and nerve supply). (1 hour) • **Jugular veins (anterior, external and internal):** Site, course and tributaries. Effects of cut injury of external

5- Teaching and Learning Methods	**1. Didactic Lectures:** for acquisition of course knowledge, one two-hour lecture per week. **2. Practical classes:** including practical demonstration on dissected specimen and radiological films in the dissecting room, one two-hour session per week. **3. Tutorial classes:** 2 hours weekly before dissecting a major region and a brief discussion by the end of each practical lesson. **4. Self-Assessment:** As appropriate, self-assessment questions in the form of short essay and/or MCQs.
6- Teaching and Learning Methods for special needs students	-----
7- Student Assessment	
a) Assessment Methods	**1. Written examination:** (2) hours Assessment of Knowledge and understanding in the form of assay, MCQ and fill in the blanks questions. **2. Oral examination:** (10-15) minutes Assessment of understanding of pre-identified knowledge. **3. Practical examinations:** Three minutes per station for a total of 10 stations, testing Identification Knowledge of different anatomical structures on bones and human cadaver. **4. Logbook Assessment** of practical activities.
b) Assessment Schedule	**Assessment 1:** MCQ Quiz exam **Assessment 2:** Mid Term Exam (Essay, fill in the blanks, and MCQ) **Assessment 3:** MCQ Quiz exam **Assessment 4:** Practical exam **Assessment 5:** Oral exam **Assessment 6:** Final written exam

c) Weighting of Assessment	**Assessment 1:** 2.0 % **Assessment 2:** 6.0 % **Assessment 3:** 2.0 % **Assessment 4:** 10.0 % **Assessment 5:** 20.0 % **Assessment 6:** 60.0 %
8- List of References	
a) Course Notes	Available in hard copy
b) Essential Books (Text Books)	Netter's Head and Neck Anatomy for Dentistry.
c) Recommended Books	1-Gray's Anatomy for student 2-Cunningham's Text Book of Anatomy
d) Scientific periodicals, bulletins, etc…..	

Course Coordinator: Dr. Sherif Fahmy Arsanyos
Head of Department: Dr. Nagwa Roshdy
Date: 3/3 /2016

University: Future University in Egypt.
Faculty: Faculty of Oral and Dental Medicine
Department*: Oral medicine periodontology diagnosis and radiology*

Course Specification

1- Basic Information		
Course Title: oral radiology	**Course Code: 612**	**Level: 1st year master degree**
Master degree in:	***Credit Hours: 3/ Theoretical: 2/Practical: 2***	
2- Aim of the course:	1. To train students to clinical imaging sciences including CT, CBCT, MRI, US, contrast and enhanced imaging 2. To enable the students to interpret normal radiographic anatomy in intra oral and extra oral radiographs, CT and CBCT 3. To identify radiographic manifestation of local and systemic diseases in head and neck region.	
3- Intended Learning Outcomes of Course (ILO) : **By the end of the course, post graduate student should be able to:**		
a.Knowledge and understanding :	1. Identify and list anatomical landmarks related to various intra-oral and extra-oral radiographs. 2. Explain the principles of extra-oral radiographic techniques and understand their indications 3. Discuss the methodological approach and principles of radiographic interpretation and description of lesions. 4. Describe different carious lesions and radiographic methods of their evaluation. 5. describe different periodontal lesions and radiographic methods of their evaluation	

b. Intellectual Skills:	1. Discuss principles of radiation biology, doses, and methods of protection with special emphasis on th ALARA concept 2. Formulate complete radiographic report for intraoral CMS, panoramic and extra oral radiographs. 3. Formulate a differential diagnosis list of a lesion
c. Professional and Practical Skills:	1- Appreciate normal radiographic anatomy and variations as well as common dental pathology seen on intraoral radiographs. 2- Learn the radiographic interpretation basics to enhance diagnostic skills and also on extra-oral radiography, panoramic radiography and digital radiography. 3- Identify different radiographic carious lesions. 4- Perform radiographic assessment means of different periodontal lesions. 5- Interpret radiographs of some teeth-related syndromes, as well as traumatic injuries of teeth and jaws.
d. General and transferable skills	1- Demonstrate appropriate professional attitudes and behavior in different situations toward patients, colleagues and supervisors. 2- Provide empathic care for all patients without discrimination. 3- Regularly assess one's knowledge and skills, and seek additional information to correct deficiencies and enhance performance. 4- Implement and monitor infection control and environmental safety programs according to current standard

4- Course Contents:	• radiation protection of the patient, operator, personal, and environment • Introduction to DD and description of the lesion • Periapical RL • Pericoronal RL • Solitary well defined RL • Solitary ill-defined RL • Interradicular RL • Multilocular RL • Multi-focal RL • Generalized RL • Mixed RL-RO (contacting teeth) • Mixed RL-RO(not contacting teeth) • RO lesions • Interpretation and misinterpretation of carious lesions • Interpretation of periodontal diseases • Alternative and specialized imaging modalities (CT. CBCT, MRI and US, scintigraphy and sialography)
5- Teaching and Learning Methods	• Lectures by PPS presentations • Clinical training: • Demonstrations and videos • Work sheets and surveys • Report back sessions • rotations in radiology department • literature review seminars • Group work, team work, and self-presentation
6- Teaching and Learning Methods for special needs students	-----

7- Student Assessment	
a) Assessment Methods	• formative quizzes • clinical requirements, and reports • Final Written exam • Final Oral exam • Final clinical exam
b) Assessment Schedule	• First midterm exam(week5) • Second midterm exam(week10) • Practical exam(week 12) • Oral exam (end of semester) • Final written exam(end of semester)
c) Weighting of Assessment	• Midterm written exam (20%) • Practical exam (20%) • Oral exam (20%) • Final written exam (40%)

8- List of References	
a) Course Notes	Course notes available PPS available for the students from the department
b) Essential Books (Text Books)	Oral Radiology, 7th Edition 2014 , Principles and Interpretation By Stuart C. White, DDS, PhD and Michael J. Pharoah, DDS
c) Recommended Books	Essentials of dental radiography and radiology, Eric Waites, 5th ed 2013
d) Scientific periodicals, bulletins, etc…..	Journal of maxillofacial radiology http://www.joomr.org/

Course Coordinator: prof. Gihan Omar
Head of Department: prof. Shahira Elasheiry
3/2016

University: Future University in Egypt.
Faculty: Faculty of Oral and Dental Medicine
Department*: conservative dentistry Department*

Course Specification

1- Basic Information		
Course name :Dental materials	**Course Code:616**	**Level: Master degree 1st part 2nd term**
Master degree in: • **Dental materials** • **Operative** • **Fixed Prosthodontics** • **Removable Prosthodontics** • **Orthodontics** • **Pedodontics** • **Endodontics**	**Credit Hours: 2 credit hours (3 contact hours)Theoretical: 1 Practical: 2**	
2- Aim of the course:	• To present the basic properties of dental materials as they are related to clinical manipulation by the dentist. • To analyze the benefits and limitations of dental materials. • To make rational decisions on the selection of dental materials and use in a clinical practice. • To discover recent advances in different dental materials and analyze their benefits and limitations.	

3- Intended Learning Outcomes of Course (ILO) : By the end of the course, post graduate student should be able to:	
a) Knowledge and understanding :	a 1- Identify the chemistry of setting, basic principles and technical considerations of gypsum products and list the different die materials used in dentistry. a 2- List the requirements, components and types of investment materials. a 3- Identify the purpose, requirements, classifications, and general characteristics of impression materials in regards to indications and limitations. a 4- Identify casting procedures and the possible defects and how to overcome these defects. a 5- Identify the different types of dental casting alloys, their properties, methods of casting and uses. a 6- Identify the different types of wrought base metal alloys, their properties and their uses in dentistry. a 7- Describe soldering and welding procedures. a 8- Describe the structure, properties and technical considerations of dental amalgam. a 9- Identify the types, properties, processing techniques of denture base resins. a 10- List the different resilient liners and tissue conditioners for dentures. a 11- Identify the different types of direct esthetic restorative materials, their requirements, compositions, properties and clinical applications. a 12- Identify the different classes of ceramics, their compositions and method of strengthening with focusing on recent advances in all ceramic materials and their processing techniques. a 13- List different types of dental cements and identify their classification, uses and properties. a 14- Discover the newly introduced materials and describe a criterion for their selection.
b) Intellectual Skills:	b 1- Predict the ideal requirements of different materials used in dentistry that are related at most to their specific use. b 2- Categorize different materials used in dentistry. b 3- Relate the effect of materials' composition to their properties. b 4- Predict the best use of materials according to their properties. b 5- Analyze the need of materials to modifications.

c) Professional and Practical Skills:	c1- differentiate different dental materials and their mode of supply. c2- manipulate the different dental materials Properly. c3- Select the appropriate material suitable for each clinical situation.
d) General and transferable skills	d1- Improve Communication skills effectively through presentation of the seminars. d2- Demonstrate appropriate professional attitude and behavior in different Situations

4- Course Contents:	1- Model and Die Materials 2- Investment Materials 3- Casting technology 4- Dental Casting Alloys 5- Impression Materials 6- Dental Cements 7- Direct Esthetic Restorative Materials 8- None Metallic Denture Base 9- Dental Ceramics: All ceramic materials and processing techniques 10- Dental Amalgam 11- Wrought Wire Alloys 12- Joining of metals and alloys
5- Teaching and Learning Methods	1. Interactive lectures including discussion and brain storming 2. Small groups sessions 3. Case study and problem solving 4. Demonstration 5. Self study 6. seminars and presentation

6- Teaching and Learning Methods for special needs students	1. Written examination to assess knowledge and understanding. 2. Individual oral examination to assess knowledge and understanding. 3. Practical examination
7- Student Assessment	
a) Assessment Methods	• **All departments except orthodontics:** 1. Written examination to assess knowledge and understanding. 2. Oral examination to assess knowledge and understanding. 3. Practical examination • **Orthodontic department:** 1. Written examination to assess knowledge and understanding. 2. Oral examination to assess knowledge and understanding.
b) Assessment Schedule	1: Practical exam 2: Final written & oral exam
c) Weighting of Assessment	• All departments except orthodontics: Practical Examination 20 % Oral Examination 20 % Written Examination 60 % Total 100% • Orthodontic department: Oral Examination 40 % Written Examination 60 % Total 100%

8- List of References	
e) Course Notes	• Handout of presented seminars
f) Essential Books (Text Books)	• Anusavice KJ, shen C, Rawls HR; Phillips' Science of Dental materials. 12th edition, 2013, Elsevier.
g) Recommended Books	• Sakguchi RL, power JM; Craig's Restorative Dental materials. 13th edition, 2012, Elsevier.

Course Coordinator: prof. Taheya Mousa

Head of Department: Prof. Essam Abdelhafez

Date: / 3 /2016

Elective courses

University: Future University in Egypt.
Faculty: Faculty of Oral and Dental Medicine
Department*: oral medicine periodontology diagnosis and radiology*

Course Specification

1- Basic Information		
Course Title: Laser applications in dentistry	**Course Code:** 632	**Level:** 1st year master degree Elective course
Master degree in: all specialties	***Credit Hours: 2 / Theoretical:2 / Practical:0***	
2- Aim of the course:	**1.** To demonstrate general understanding of laser use in dentistry **2.** To improve the health and wellbeing of patients through the proper use of laser technology. **3.** To overview the research and clinical aspects of the safe and effective uses of lasers in dentistry.	
3- Intended Learning Outcomes of Course (ILO) : **By the end of the course, post graduate student should be able to:**		
a. Knowledge and understanding :	**1.** Identify the scientific and clinical principles of lasers in dentistry. **2.** Discuss basic concepts of laser physics and segmentation of wavelengths. **3.** Explain the nature of light, the light spectrum and laser wavelengths. **4.** Explain the basic elements of laser - tissue interaction. **5.** Become familiar with different types of laser used in dentistry **6.** Identify laser set up, delivery system and power settings, laser applications used in dental soft and hard tissue management.	

b. Intellectual Skills:	1- Make decisions regarding proper laser type, mode, watt, and frequency. 2- Predict the wide advantages of using laser in the dental office.
c. Professional and Practical Skills:	1- Use of lasers through hands-on clinical simulation. 2- Apply Laser in dental soft and hard tissue management. 3- integrate laser use in treatment successfully 4- Use laser safety and infection control in the dental practice.
d. General and transferable skills	1- Assess regularly one's knowledge and skills, and seek additional information to correct deficiencies and enhance performance. 2- Implement and monitor infection control and environmental safety programs according to current standards.

4- **Course Contents:**	• Introduction to the course • Differences between laser and visible light • Differences between laser and x ray
	• Laser physics and beam generation • General characters of laser beam
	• Lasers in dentistry: uses, advantages, and limitations
	• Different types and modes of laser
	• CO2 laser, Properties and advantages
	• Diode laser, Properties and advantages
	• Nd-YAG laser, Properties and advantages • Low level laser applications • Soft tissue laser procedures • Hard tissue laser procedures
	• Laser interaction with biological tissues
	• Photo-chemical interaction and its applications • biostimulation
	• Photo-thermal interaction and its applications
	• Photo-electrical interaction and its applications
	• Photo-mechanical interaction and its applications
	• Laser safety
5- Teaching and Learning Methods	Lectures by PPS presentations Open – discussion lectures Clinical training: • Demonstrations and videos • Case studies • Work sheets and surveys • Report back sessions

6- Teaching and Learning Methods for special needs students	
7- Student Assessment	
a) Assessment Methods	• continuous formative quizzes to assess knowledge and understanding • Group work to assess practical skills, team work, and presentation • Assignment to assess understanding skills • Final Written examination to assess knowledge and understanding.
b) Assessment Schedule	▪ Assessment 1: first midterm (written/week 5) ▪ Assessment 2: group presentation (pps /week 12) ▪ Assessment 3: second midterm (written/ week 10) ▪ Assessment 4: Final written (week 15)
c) Weighting of Assessment	Written Examination 100 %
8- List of References	
a) Course Notes	• Course notes available
b) Essential Books (Text Books)	• Dental Applications of Advanced Lasers 2004 Edition Jeffrey G. Manni
c) Recommended Books	• Atlas of Laser Applications in Dentistry Coluzzi DJ, Convissar RA. 2007
d) Scientific periodicals, bulletins, etc…..	• ALD academy of laser dentistry periodicals http://www.laserdentistry.org

Course Coordinator: prof. Gihan Omar
Head of Department: prof. Shahira Elashiry
Date: / 3 /2016

University: Future University in Egypt.
Faculty: Faculty of Oral and Dental Medicine
Department: general supplementary sciences

Course Specification

1- Basic Information		
Course Title: biochemistry	**Course Code: ٦٢٣**	**Level: first or second part**
Master degree in: Elective course for all specialities	**Credit Hours: Theoretical:...2** **Practical:...0**	

2- Aim of the course:	1) Explains the Chemistry and the metabolism of Biological Molecules. 2) understand the chemical function of Biomolecules and highlights the importance of individual molecules inside the cell. 3) understand the metabolic changes of different molecules inside the body. 4) understand the basic principles of errors of metabolism and their reflection on the health of the individual.
3- Intended Learning Outcomes of Course (ILO) : **By the end of the course, post graduate student should be able to:**	
a) Knowledge and understanding :	A1- Describe the structure and importance of carbohydrates, lipids, and proteins of medical importance. A2- Describe the metabolic pathways A3- Discuss the principles of metabolic pathways. A4- Point out the importance of vitamins. A5- Demonstrate the basic structure and functions of Immunoglobulins A6- Describe the basic principles of some metabolic errors A7- Discuss the basic principles of molecular Biology

b) Intellectual Skills:	b1- Differentiate between structures of carbohydrates, lipids and proteins. b2-Explain the importance of some molecular biology techniques b3-Explain the role of enzymes in regulation of chemical reactions in the body b4- Differentiate between metabolism in health and in disease b5- Explain the role of vitamin deficiency in development of some diseases
c) Professional and Practical Skills:	C1-Perform basic laboratory tests c2-Identify unknown carbohydrate solution c3- Identify unknown protein solution c4- Detect abnormal constituents of urine
d) General and transferable skills	d1-Work effectively in groups. d2- Exercise leadership when appropriate. d3-Act responsibly in personal and professional relationships. d4-Take responsibility for their own learning and continuing personal and professional development. d5-Act ethically and consistently with high moral standards in personal and public forums.

4- Course Contents:

1	Chemistry and Metabolism of Carbohydrates
2	Chemistry and Metabolism of Lipids
3	Chemistry and Metabolism of Proteins and Amino acids
4	Chemistry of Immunoglobulins
5	Chemistry of Nucleotides and Nucleic acids
6	Chemistry of Enzymes
7	Vitamins
8	Regulation of blood glucose level and Diabetes Mellitus

5- Teaching and Learning Methods	• Lectures • Practical training • Small group discussion
6- Teaching and Learning Methods for special needs students	• Demonstration & instructive Lessons with regular checkup according to their special needs.
7- Student Assessment	
a) Assessment Methods	Written examination (short questions, multiple choice
b) Assessment Schedule	Final written at the end of the course
c) Weighting of Assessment	١٠٠ written exam

8- List of References	
a) Course Notes	
b) Essential Books (Text Books)	Lippincott's illustrated Reviews: Biochemistry, 7th edition, 2014
c) Recommended Books	Harper's Illustrated Biochemistry 30th edition, 2015
d) Scientific periodicals, bulletins, etc…..	

Course Coordinator: Dr. Nagwa Roshdy

Date: 3 /2016

University: Future University in Egypt.

Faculty: Faculty of Oral and Dental Medicine

Department: oral and maxillofacial surgery

Course Specification

1- Basic Information		
Course Title: medical emergency in dentistry	**Course Code: ٦٣٣**	**Level: first or second part**
Master degree in: Elective course for all specialities	**Credit Hours: Theoretical:...2** **Practical:...0**	

2- Aim of the course:	**To make the candidates familiar with prevention and management of medical emergencies in dental clinic**
3- Intended Learning Outcomes of Course (ILO) : **By the end of the course, post graduate student should be able to:**	
a) Knowledge and understanding :	1- Summarize local anesthetic drugs. 2- Memorize Safe precautions for Dental Chair Anesthesia. 3- Define types of common medical emergencies in dentistry. 4- Identify Resuscitation Council's Guidelines 5- Recognize special demands for Pediatric medical emergencies. 6- Identify emergency drug kit and equipment, and the knowledge to properly use all items.

b) Intellectual Skills:	1- calculate Appropriate dosage of drug related emergencies 2- select patients susceptible to medical emergency
c) Professional and Practical Skills:	1- Manage Airway obstruction. 2- manage medical emergencies in dentistry. 3- Apply medical emergency drugs 4- Perform Basic life support maneuvers 5- Examine patients prior to treatment 6- Evaluate Laboratory investigations
d) General and transferable skills	1- Lead a team and work in a team 2- Manage time effectively

4- Course Contents:	• Pharmacology , dosages of emergency & local anesthetic drugs. • Differential diagnosis of Common medical emergencies in dental practice. • Simplified approach for preventing & treatment of medical emergencies • Ambulatory Dental Chair anesthesia. • Pediatric medical emergencies • Medicolegal aspect of medical emergencies in dental practice • Medical equipments needed in dental office • Basic life support maneuvers • Dental sedation and safety issues regarding sedation

5- Teaching and Learning Methods	Interactive lectures Discussion. Demonstrations. Brain storming. Role plays
6- Teaching and Learning Methods for special needs students	• Demonstration & instructive Lessons with regular checkup according to their special needs.
7- Student Assessment	
a) Assessment Methods	• Reflective Student Essays • Comprehensive quizzes • written Exam
b) Assessment Schedule	2nd week — **Presentation 1** 4 th week — **Assignment 1** 10 th week — **Presentation 2** 11 th week — **Assignment 2** Final exam — **Written exams**
c) Weighting of Assessment	١٠٠ written exam

8- List of References	
a) Course Notes	
b) Essential Books (Text Books)	**Elsevier** :Medical Emergencies in the Dental Office 7th Edition

c) Recommended Books	Wiley: Basic Guide to Medical Emergencies in the Dental Practice
d) Scientific periodicals, bulletins, etc…..	The American journal of emergency medicine The Journal of Emergency Medicine

Course Coordinator: Dr. Aktham Adel

Date: 3 /2016

University: Future University in Egypt.
Faculty: Faculty of Oral and Dental Medicine
Department: oral and maxillofacial surgery

Course Specification

1- Basic Information		
Course Title: implantology	**Course Code: ٦٢٩**	**Level: first or second part**
Master degree in: Elective course for all specialties	**Credit Hours: Theoretical: 2 Practical: 0**	

2- Aim of the course:	1) To educate the students about the basics of surgical, biological, prosthetic and periodontal considerations that should be followed during implantation. 2) To familiarize the student with different recent treatment modalities of varying difficulties. 3) To enable students to detect the causes of implant failure and their management. 4) To educate students about the care and maintenance aspect of the implant
3- Intended Learning Outcomes of Course (ILO) : **By the end of the course, post graduate student should be able to:**	
a) Knowledge and understanding :	A1- identify the basics of diagnosis with the treatment planning of the badly broken and/or missing teeth for implantation. A2- Recognize the biological and periodontal aspects of the implant. A3- Identify the principles and types of luting cements A4- discuss treatment options for un-restorable and/or missing teeth.

b) Intellectual Skills:	B1- order the steps of implant preparation in order to fulfill biological and periodontal considerations B2- classify properly the parameters of implant success and failure.
c) Professional and Practical Skills:	C1-Practice the steps of diagnosis, treatment planning, surgical procedures, and follow up of implant cases. c2- Perform properly the steps of implantation taking into consideration the biological and periodontal aspects C3- Perform properly the different steps of prosthetic procedures .
d) General and transferable skills	D1- respect to all patients irrespective to their socioeconomic levels, cultures or religious beliefs D2- Implement infection control policies. D3- Life-long learning

4- Course Contents:	**Theory of Osseointegration** **Armamentarium and Types of implants** **Surgical Techniques** **Diagnosis of Peri-implant mucositis & Peri-implant implantitis** **Treatment of Peri-implant mucositis & Peri-implant implantitis** **Principles of implant location; prosthetic & anatomical considerations** **Prosthetic template; construction & uses** **Types of impression techniques in prosthetic implant dentistry** **Types of implant supported prosthesis** **Planning and follow up** **Radiographic assessment and 3D evaluation**
5- Teaching and Learning Methods	• Lectures • Small group discussion
6- Teaching and Learning Methods for special needs students	----------
7- Student Assessment	
d) Assessment Methods	Written examination (short questions, multiple choice)
e) Assessment Schedule	Final written at the end of the course
f) Weighting of Assessment	١٠٠ written exam

8- List of References	
a) Course Notes	
b) Essential Books (Text Books)	Contemporary implant dentistry, 3rd. ed., Carl Misch, 2007
c) Recommended Books	EUREKA R2: concept, principle, and clinical cases, 1st ed., 2015
d) Scientific periodicals, bulletins, etc…..	

Course Coordinator: Dr. Nelly Hamouda

Date: 3 /2016

Second part courses

University: Future University in Egypt.

Faculty: Faculty of Oral and Dental Medicine

Department: prosthodontics

Course Specification

1- Basic Information		
Course Title: Complete Denture Prosthodontics	**Course Code:769**	**Level: 1st semester 2nd part**
Master degree in: Prosthetic Dentistry.	**Credit Hours:5 Theoretical: 3 Practical: 4**	
2- Aim of the course:	• This course is designed to familiarize the students with instruments, materials and laboratory procedures and techniques used for removable prosthodontics. • The laboratory and clinical procedures will be taught and their interdependence stressed. • The student will study the complete denture components and techniques of complete denture construction.	
3- Intended Learning Outcomes of Course (ILO) : **By the end of the course, post graduate student should be able to:**		

a) Knowledge and understanding :	a1- Describe the anatomy and physiology of the oral cavity a2- Define different steps for complete denture construction a3- Identify various types of impression trays and techniques. a4- Define relief and posterior palatal seal. a5- Identify occlusion blocks. a6-.Explain TMJ and various mandibular movements a7- Define jaw relations. a8- List types of face bows and articulators. a9- List various of artificial teeth and arrangement of artificial teeth. a10-List steps of waxing up and denture processing a11-Describe remounting, repair, relining, and rebasing of dentures. a12-Discuss new denture processing techniques a13-Describe new denture base materials.
b) Intellectual Skills:	b1- Interpret normal and abnormal edentulous anatomy and its relationship to Complete denture fabrication b2- Assess the different problems that can occur during laboratory complete denture Construction. b3- Make decisions regarding common technical discrepancies and faults using appropriate problem solving skills

c) Professional and Practical Skills:	c1- Manipulate the dental materials necessary to fabricate a complete denture. c2- Use various instrument used in fabrication of complete dentures. c3- Perform the laboratory steps required to fabricate a complete denture. c4- Perform repair, relining and rebasing for complete dentures.
d) General and transferable skills	d1- Demonstrate appropriate professional attitudes and behavior in dealing with staff members & helping personnel. d2-Communicate effectively both verbally and written with other laboratory professionals to maximize patient benefits and minimize the risk of errors.

4- Course Contents:	1. Steps of complete denture construction, anatomy and physiology 2. Impression trays and techniques 3. Relief and posterior palatal seal 4. Occlusion blocks 5. Jaw relation record 6. TMJ and mandibular movements 7. Face bow and Articulators 8. Selection of artificial teeth arrangement 9. Retention and stability 10. Waxing up and processing remounting of dentures, repair, relining and rebasing. 11. New denture processing techniques 12. New denture base materials
5- Teaching and Learning Methods	1. Interactive lectures. (including discussions and brain storming) 2. Practical demonstration 3. Clinical training. 4. Requirements. 5.Problem solving -Case solving -brain storming 6.Self-study (small projects or report /reading materials/online materials/Presentation/seminars
6- Teaching and Learning Methods for special needs students	• Direct observation. • Individual teaching. • Hands on training

7- Student Assessment	
a) Assessment Methods	• Written examination to assess knowledge and understanding. • Oral examination to assess knowledge, understanding and intellectual skills • Practical examination to assess practical, professional skills & intellectual skills • Requirement. (classwork)
b) Assessment Schedule	• Assessment 1: practical Assessment (requirement) • Assessment 2: practical exam • Assessment 3: Final written & oral exam
c) Weighting of Assessment	• Quiz 20% • Requirement practical 8% • Final exam 40% • Practical exam 12% • Oral exam 20%

8- List of References	
a) Course Notes	Power point presentations. Hands out.
b) Essential Books (Text Books)	Boucher's prosthodontic treatment for edentulous patients George A. Zarb, Charles L. Bolender, Carl O. Boucher, Gunnar E. Carlson. Mosby, 1997
c) Recommended Books	

d) Scientific periodicals, bulletins, etc…..	www.pubmed.com www.Science direct.com www.blackwell.com

Course Coordinator:A. prof. Hossam Nassar

Head of Department: prof. Hussein Elcharkawy

Date: / 3 /2016

University: Future University in Egypt.

Faculty: Faculty of Oral and Dental Medicine

Department: Prosthodontics

Course Specification

1- Basic Information		
Course Name: **Occlusion-1**	**Course Code: 761**	**Level:1st semester 2nd part**
Master degree in: • **Fixed Prosthodontics.** • **Operative Dentistry.**	**Credit Hours: 1** **Theoretical: 1 / Practical: 0**	

2- Aim of the course:	This course is designed to introduce the student to natural teeth occlusion and different concepts of occlusion.
3- Intended Learning Outcomes of Course (ILO) : **By the end of the course, post graduate student should be able to:**	
a) Knowledge and understanding :	a.1 Discuss the basic principles of dental occlusion. a.2 Identify the functional and static interaction of teeth in occlusion. a.3 Describe the relation between dental occlusion, TMJ and masticatory muscles.
b) Intellectual Skills:	b.1 Analyze clinical dental occlusion problems particularly in relation with fixed prosthodontics. b.2 Review critically the outcomes of changing the type of occlusion, and make appropriate changes to the original treatment plan. b.3 Interpret the relation between dental occlusion and fixed prosthodontics clinical practice.

c) Professional and Practical Skills:	c.1 Examine joints, muscles and occlusion to properly diagnose problems and identify cases. c.2 Take an accurate centric record. c.3 Analyze a set of mounted study models. c.4 Prescribe the correct treatment approach for the patient. c.5 Perform the occlusal adjustment procedure.
d) General and transferable skills	d.1 Develop information technology and numerical skills. d.2 Communicate inter personally with dental team colleagues and laboratory personnel. d.3 Manage time effectively.

4- Course Contents:	1. TMJ anatomy. 2. Definitions. 3. Condylar movements. 4. Mandibular movements. 5. Determinants of occlusion. 6. Posselt's envelop of motion. 7. Occlusal contacts. 8. Units of occlusion. 9. Static occlusion. 10. Dynamic occlusion. 11. Organic occlusion. 12. Occlusal adjustments.
5- Teaching and Learning Methods	5.1 **Interactive Lectures; including discussion and brain storming.** 5.2 **Problem solving**.
6- Teaching and Learning Methods for special needs students	• Direct observation • Hands-on training • Individual teaching.

7- Student Assessment	
a) Assessment Methods	6.1 **Written examination** to assess knowledge and understanding, and intellectual skills. 6.2 **Oral examination** to assess knowledge and understanding, intellectual and general skills
b) Assessment Schedule	By the end of the 1st part of the 2nd semester: • Written final exam • Oral final exam.
c) Weighting of Assessment	Written exam: 30 Oral exam: 20 Total 50

8- List of References	
a) Course Notes	PPT presentations of course coordinator. Course notes.
b) Essential Books (Text Books)	• Dawson PF (2006): Functional occlusion from TMJ to smile design, 1st edition, Edinburgh: Elsevier Mosby.
c) Recommended Books	
d) Scientific periodicals, bulletins, etc…..	• www.pubmed.com. • www.sciencedirect.com. • www.blackwell.com

Course Coordinator: Dr Reham Elbastey
Head of Department: Prof Ashraf Hussien
Date: 2/3/2016

University: Future University in Egypt.

Faculty: Faculty of Oral and Dental Medicine

Department: **prosthodontics**

Course Specification

1- Basic Information		
Course Title: Maxillofacial prosthodontics	**Course Code:771**	**Level:1st semester 2nd part**
Master Degree In: Prosthetic Dentistry	**Credit Hours: 2 (Theoretical: 1, Practical: 2)**	

2- Aim of the course:	• This course is designed to introduce the student to techniques in management of intraoral congenital and acquired defects. • The student will be able to manage and treat irradiated and fractured patients, and carry on the construction of stents and splints. • The student will also recognize different surgical guides used in implant dentistry.

3- Intended Learning Outcomes of Course (ILO) : **By the end of the course, post graduate student should be able to:**	
a) Knowledge and understanding :	A1. List congenital and acquired maxillary and mandible defects. A2. Discuss and diagnose simple congenital defect, speech alterations, acquired defects and their surgical and prosthetic management. A3. Describe the sequence of treatment procedures of different maxillofacial prostheses A4. Define splints, stents and radiotherapy prosthesis. A5. Identify the need for radiation stents, oral stents and splints. A6. Identify and manage patients under chemotherapy. A7. List types and techniques of construction of implant surgical stents.

b) Intellectual Skills:	B1. Interpret and manage congenital and acquired defect of oral structures. B2. Formulate appropriate treatment plan for maxillofacial patients. B3. Take decisions regarding suitability of different treatment modalities for congenital and acquired defect in different situation. B4. Assess the typical problems of radiotherapy and chemotherapy. B5. Take decisions regarding suitability of different surgical guides for implant placement.
c) Professional and Practical Skills:	C1. Manage congenital and acquired maxillofacial defects. C2. Perform mouth preparation, tooth preparation, construction of intraoral maxillofacial prosthesis and periodic recall procedures. C3. Diagnose Effectively and plan the appropriate treatment sequences for a Patient who lost part of the intraoral structures. C4. Demonstrate understanding of stents, splints and radiotherapy prosthesis C5. Demonstrate understanding of different implant surgical guides,

d) General and transferable skills	D1. Demonstrate appropriate professional attitudes and behavior in dealing with patient of maxillofacial defects. D2. Communicate effectively both verbally and in writing with other members of the maxillofacial team to maximize patient benefits and minimize the risk of errors.

4- Course Contents:	1. Congenital defects 2. Speech and speech appliances 3. Acquired maxillary defects 4. Acquired Mandibular defects 5. Stents 6. Splints 7. Trismus appliances 8. Radio therapy and Radio therapy prosthesis 9. Chemotherapy 10. Implant surgical stents

5- Teaching and Learning Methods	1. Interactive lectures. (including discussions and brain storming) 2. Practical demonstration 3. Clinical training. 4. Requirements. 5.Problem solving -Case solving -brain storming 6.Self-study (small projects or report /reading materials/online materials/Presentation/seminars)
6- Teaching and Learning Methods for special needs students	Direct observation. Individual teaching. Hands on training
7- Student Assessment	
a) Assessment Methods	1. Written examination to assess knowledge and understanding. 2. Oral examination to assess knowledge understanding and intellectual skills. 3. Clinical examination to assess clinical skills, professional& intellectual skills. 4. Requirement. (classwork)
b) Assessment Schedule	Assessment 1: Clinical Assessment.(Requirement) Assessment 2: Clinical exam. Assessment 3: Final written & oral exam

c) Weighting of Assessment	Written exam: Quiz 10% , Final exam 50% Clinical Requirement 10% Clinical exam 10% Oral exam 20%

8- List of References	
a) Course Notes	Power point presentations. Hands out.
b) Essential Books (Text Books)	"Maxillofacial Rehabilitation" John Beumer, Mark T. Marunick, Salvatone J. , E spasito, Quintessence, 2015
c) Recommended Books	
d) Scientific periodicals, bulletins, etc…..	www.pubmed.com www.Science direct.com www.blackwell.com

Course Coordinator: A.prof. Hisham alamaldin

Head of Department: prof. Hussein Elcharkawy

Date: / 3 /2016

University: Future University in Egypt.

Faculty: Faculty of Oral and Dental Medicine

Department: **Prosthodontics**

Course Specification

1- Basic Information		
Course Title:Partial Denture	**Course Code:773**	**Level:1st semester 2nd part**
Master Degree In: Prosthetic Dentistry	**Credit Hours: 4 Theoretical: 2. Practical: 4**	

2- Aim of the course:	1. The student will study the partial denture components and the principle of partial denture design. 2. The student will be able to carry out the steps for fabrication of cobalt chromium metallic framework as well as acrylic partial dentures

3-Intended Learning Outcomes of Course (ILO) : **By the end of the course, post graduate student should be able to:**	
a) Knowledge and understanding :	a1- define objective of partial denture a2-Discuss all partial denture components. a3- Identify forces acting on partial dentures. a4- List uses of dental surveyor. a5- Define various components of partial dentures , and their importance. a6- Identify different partial denture designs and problems. a7-. Describe various laboratory procedure for partial dentures a8-. Discuss different repair techniques of partial dentures component.
b) Intellectual Skills:	b1-Distinguish partial denture classes b2. Formulate appropriate partial denture designs. b3- Compare various partial denture components b4- Make decisions regarding common faults using appropriate problem solving skills. b5- Make decision regarding repairs of partial denture
c) Professional and Practical Skills:	c1- Demonstrate forces acting on partial dentures . c2- design the partial denture cases. c3-Demonstrate dental cast surveying. c4- Perform all laboratory steps required to fabricate partial dentures.

d) General and transferable skills	d1- Demonstrate appropriate professional attitudes and behavior in dealing with staff members & helping personnel. d2- Communicate effectively both verbally and in writing with other health care professionals to maximize patient benefits and minimize the risk of errors.

3- Course Contents:	1. Introduction and objectives of partial denture. 2. Classification 3. Forces acting on partial denture. 4. Denture base materials and types. 5. Occlusal rests. 6. Direct retainers. 7. Indirect retainers 8. Mandibular and maxillary major connectors 9. Dental surveyor. 10. Laboratory procedures 11. Repair and relining.
4- Teaching and Learning Methods	1.Interactive lectures. (including discussions and brain storming) 2. Practical demonstration 3. Clinical training. 4. Requirements. 5.Problem solving -Case solving -brain storming 6.Self-study (small projects or report /reading materials/online materials/Presentation/seminars

5- Teaching and Learning Methods for special needs students	• Direct observation. • Individual teaching. • Hands on training
6- Student Assessment	
a) Assessment Methods	• Written examination to assess knowledge and understanding. • Oral examination to assess knowledge understanding and intellectual skills • Practical examination to assess practical , professional skills & intellectual skills • Requirement. (classwork)
b) Assessment Schedule	• Assessment 1: Class Assessment • Assessment 2: practical exam • Assessment 3: Final written & oral exam
c) Weighting of Assessment	• Written exam: Quiz 20%, • Final exam 40%. • Requirement practical 8% • Practical exam 12% • Oral exam 20%

7- List of References	
a) Course Notes	Power point presentations. Hands out

b) Essential Books (Text Books)	McCracken's "Removable Partial Prosthodonyivd" 12th edition Alan Carr, David Brown, Elsevier, 2010
c) Recommended Books	Stewarts Clinical " Removable Partial Prosthodontics" fourth edition, Phenix, Rodney D., Cagna, David R., Defreest, Charles F. 2008
d) Scientific periodicals, bulletins, etc…..	www.pubmed.com www.Science direct.com www.blackwell.com

Course Coordinator: A.prof. Mohamed Faroul

Head of Department: prof. Hussein Elcharkawy

Date: / 3 /2016

University: Future University in Egypt.

Faculty: Faculty of Oral and Dental Medicine

Department: **Prosthodontics**

Course Specification

1- Basic Information		
Course Title: Complete Denture	**Course Code:770**	**Level: 2nd part (2nd semester)**
Master degree in: Prosthetic Dentistry.	**Credit Hours: 5 (Theoretical: 3, Practical: 4)**	

2- Aim of the course:	• This course is designed to familiarize the students with instruments, materials and laboratory procedures and clinical techniques, used in the restoration of a completely edentulous patient. • The student will be able to manage complicated edentulous cases, such as flat and flabby ridges, single dentures and overdentures.

3-Intended Learning Outcomes of Course (ILO) : **By the end of the course, post graduate student should be able to:**	
a) Knowledge and understanding :	a1-Describe various steps of history taking and clinical examination including intra and extra oral examination. a2- Discuss recent impression techniques for compromised ridges. a3- Identify different clinical jaw relation steps. a4-. Describe clinical steps of try in stage. a5- Explain denture insertion and maintenance of complete denture. a6- Identify patients complain after denture insertion a7-Describe suitable management of some problematic completely edentulous cases.(flat and flabby) a8-Explain problems and management of single denture. a9- Explain problems and management of tooth and implant supported overdenture. a10-Describe different challenges in construction of immediate denture

b) Intellectual Skills:	b1- Interpret normal and abnormal edentulous anatomy and its relationship to complete denture fabrication. b2- Illustrate different factors related to retention and stability of complete denture. b3- Assess the typical problems that can occur during complete denture construction. b4- Take decisions regarding common technical discrepancies and faults using appropriate problem solving skills. b5- Distinguish patient complain and develop the effective measures for their treatments.
c) Professional and Practical Skills:	c1-Perform intra and extra oral examinations c2 Apply procedures of basic impression techniques, jaw relation record, trial and final denture insertion c3-Manipulate the dental material necessary for fabrication a complete denture Manage occlusal disharmonies and post insertion follow up c4- Construct casts and models and take required radiographs to formulate the best treatment plan according to patient's needs. c5 Manipulate the dental materials necessary to fabricate a complete denture. c6- Use various instrument used in fabrication of complete dentures. c7- Perform the laboratory steps required to fabricate a complete denture. c8- Perform Repair for complete dentures.

d) General and transferable skills	d1 – Demonstrate sensitivity and attitude in patient care particularly toward elderly patients d2- Adopt a creative attitude in an ethical and scientific approach . d3- Deal with patients with different mental attitude and realizing the personal limitations. D4-Display appropriate professional communication skills with patients, colleagues and the rest of dental team and other relevant team or group. d5- Self-evaluation for the professional abilities, performance and progress. d6- Use the information technology to improve the education through self – directed learning and research work activities. d7- Develop skills of problem solving as well as working in a prescribed time limit.

4-Course Contents:	1. Diagnosis & treatment planning for completely edentulous patients 2. Recent impression techniques for compromised ridges. 3. Jaw relation record. 4. Try in clinical stages. 5. Denture insertion steps. 6. Remounting steps 7. Patient complaint 8. Flat and flabby ridges. 9. Single denture 10. Tooth and implant supported overdenture. 11. Immediate dentures.
5-Teaching and Learning Methods	1.Interactive lectures. (including discussions and brain storming) 2. Practical demonstration 3.Clinical training. 4. Requirements. 5.Problem solving -Case solving -brain storming 6.Self-study (small projects or report /reading materials/online materials/Presentation/seminars)
6-Teaching and Learning Methods for special needs students	Direct observation. Individual teaching. Hands on training

7-Student Assessment	
a) Assessment Methods	1. Written examination to assess knowledge and understanding. 2. Oral examination to assess knowledge understanding and intellectual skills. 3. Clinical examination to assess clinical skills, professional& intellectual skills. 4. Requirement. (classwork)
b) Assessment Schedule	Assessment 1: Clinical Assessment.(Requirement) Assessment 2: Clinical exam. Assessment 3: Final written & oral exam.
c) Weighting of Assessment	• Written exam: Quiz 20% , Final exam 40% • Clinical Requirement 8% • Practical exam 12% • Oral exam 20%

8-List of References	
a) Course Notes	Power point presentations. Hands out.
b) Essential Books (Text Books)	Boucher's prosthodontic treatment for edentulous patients George A. Zarb, Charles L. Bolender, Carl O. Boucher, Gunnar E. Carlson. Mosby, 1997
c) Recommended Books	"Dental Implant Prosthetics" 2nd edition, Carl Misch. Mobsy 2014

d) Scientific periodicals, bulletins, etc…..	www.pubmed.com www.Science direct.com www.blackwell.com

Course Coordinator: A.prof. Mohamed Faroul

Head of Department: prof. Hussein Elcharkawy

Date: / 3 /2016

University: Future University in Egypt.

Faculty: Faculty of Oral and Dental Medicine

Department: **Prosthodontics**

Course Specification

1- Basic Information		
Course Title:Maxillofacial Prosthodontics	**Course Code:772**	**Level:2nd part 2nd semester**
Master Degree In: Prosthetic Dentistry	**Credit Hours: 4 (Theoretical: 1 , Practical:4)**	

2- Aim of the course:	This course is designed to introduce the student to techniques used in management of extaoral congenital and acquired defects. The student will be able to manage and treat facial defects whether congenital or acquired and to carry on construction of suitable prosthesis.

3- Intended Learning Outcomes of Course (ILO) : **By the end of the course, post graduate student should be able to:**	
a) Knowledge and understanding :	A1. Discuss extra oral maxillofacial implants A2. List materials used for facial defects A3. Describe ocular and orbital prosthesis A4. Identify auricular prosthesis A5. Define nasal prosthesis A6. Name and describe mid facial defects and prosthesis
b) Intellectual Skills:	B1. Interpret and manage congenital and acquired defect of extraoral structures. B2. Assess the typical problems of maxillofacial defects. B3. Formulate appropriate treatment plan for extra oral maxillofacial patients. B4. Take decisions regarding suitability of different treatment modalities for congenital and acquired defect in different situation.
c) Professional and Practical Skills:	C1.Assess congenital and acquired extraoralmaxillofacial defects. C2. Perform clinical and laboratory steps for construction of extraoral maxillofacial prosthesis and periodic recall procedures. C3. Diagnose and plan the appropriate treatment sequences for a Patient who lost part of the extraoral structures.

d) General and transferable skills	D1. Demonstrate appropriate professional attitudes and behavior in dealing with patient of maxillofacial defects. D2. Communicate effectively both verbally and in writing with other members of the maxillofacial team to maximize patient benefits and minimize the risk of errors.

4- Course Contents:	1. Extraoral maxillofacial implants 2. Materials used for facial defects 3. Ocular and orbital prosthesis 4. Auricular prosthesis 5. Nasal prosthesis 6. Mid facial defects and prosthesis
5- Teaching and Learning Methods	1. Interactive lectures. (including discussions and brain storming) 2. Practical demonstration 3. Clinical training. 4. Requirements. 5.Problem solving -Case solving -brain storming 6.Self-study (small projects or report /reading materials/online materials/Presentation/seminars)
6- Teaching and Learning Methods for special needs students	Direct observation. Individual teaching. Hands on training

7- Student Assessment	
a) Assessment Methods	1. Written examination to assess knowledge and understanding. 2. Oral examination to assess knowledge understanding and intellectual skills. 3. Clinical examination to assess clinical skills, professional & intellectual skills. 4. Requirement. (classwork)
b) Assessment Schedule	Assessment 1: Clinical Assessment.(Requirement) Assessment 2: Clinical exam. Assessment 3: Final written & oral exam
c) Weighting of Assessment	Written exam: Quiz 10% , Final exam 50% Clinical Requirement 10% Clinical exam 10% Oral exam 20%

8- List of References	
a) Course Notes	Power point presentations. Hands out.
b) Essential Books (Text Books)	"Maxillofacial Rehabilitation" John Beumer, Mark T. Marunick, Salvatone J. , E spasito, Quintessence, 2015
c) Recommended Books	

d) Scientific periodicals, bulletins, etc…..	www.pubmed.com www.Science direct.com www.blackwell.com

Course Coordinator: A.prof. Hossam Nassar

Head of Department: prof. Hussein Elcharkawy

Date: / 3 /2016

University: Future University in Egypt.

Faculty: Faculty of Oral and Dental Medicine

Department: **Prosthodontics**

Course Specification

1- Basic Information		
Course Title: Partial Denture	**Course Code:٧٧٤**	**Level:2nd semester 2nd part**
Master Degree In: Prosthetic Dentistry	**Credit Hours: Theoretical: 2 Practical: 4**	

2- Aim of the course:	The student will be able to recognize the objectives of partial denture, develop the treatment plan and acquiring skill of management of partially edentulous patient following standardized techniques.

3- Intended Learning Outcomes of Course (ILO) : **By the end of the course, post graduate student should be able to:**	
a) Knowledge and understanding :	a1- Describe the different clinical steps for partial dentures Construction. a2- Diagnose partially edentulous cases and proper treatment plan a3- Identify principles of design for class I & II a4- Identify principles of design for class III & IV a5- Demonstrate different mouth preparation steps a6- Describe different impression techniques for partially edentulous patient a7-Recognize try in stage. a8-Recognize jaw relation, basic occlusion in partial dentures. a9 -Identify patient's complaints after denture insertion. a10- State remounting procedure. a11- List the damaging effects of partial denture. a12-Discuss implants in partially edentulous cases.
b) Intellectual Skills:	b1- Interpret normal and abnormal partially edentulous anatomy and its relationship to partial denture construction b2- Assess the typical problems that occur during partial denture construction. b3- Design partial denture framework. b4- Distinguish patient complain and develop effective measures for their treatment. b5- Develop a sound treatment plan involving implant dentistry.

c) Professional and Practical Skills:	c1- Perform thorough clinical examination both extra and intra oral as well as general assessment of the patient conditions. c2- Use various clinical instruments used in fabrication of partial dentures. c3- Perform all clinical steps required to fabricate a partial dentures. c4- Perform repairs for partial dentures. C5- Apply clinical skills in impression making. C6-Perform mouth preparation procedures. C7- Solve patient complaints.
d) General and transferable skills	d1- Display an appropriate professional attitudes and behavior in dealing with staff members, patient , colleagues and rest of the team . d2- Communicate effectively both verbally and in writing with other health care professionals to maximize patient benefits and minimize the risk of errors.

4- Course Contents:	1. Diagnosis and clinical examination. 2. Principles of partial denture design class I and class II 3. Principles of partial denture design class III and class IV 4. Mouth preparation procedures. 5. Final impression techniques. 6. Metal try in stage. 7. Occlusal relationships. 8. Initial placement and patient complaints. 9. Damaging effects-stresses, of partial denture. 10. Remounting procedures. 11. Implants in the partially edentulous state.
5- Teaching and Learning Methods	1. Interactive lectures. (including discussions and brain storming) 2. Practical demonstration 3. Clinical training. 4. Requirements. 5.Problem solving -Case solving -brain storming 6.Self-study (small projects or report /reading materials/online materials/Presentation/seminars)
6- Teaching and Learning Methods for special needs students	• Direct observation. • Individual teaching. • Hands on training

7- Student Assessment	
a) Assessment Methods	1. Written examination to assess knowledge and understanding. 2. Oral examination to assess knowledge understanding and intellectual skills. 3. Clinical examination to assess clinical skills, professional & intellectual skills. 4. Requirement. (classwork)
b) Assessment Schedule	Assessment 1: Clinical Assessment.(Requirement) Assessment 2: Clinical exam. Assessment 3: Final written & oral exam.
c) Weighting of Assessment	• Written exam: Quiz 20%, Final exam 40% • Clinical Requirement 8% • Clinical exam 12%. • Oral exam 20%.

8- List of References	
a) Course Notes	Power point presentations. Hands out.
b) Essential Books (Text Books)	McCracken's "Removable Partial Prosthodonyivd" 12th edition Alan Carr, David Brown, Elsevier, 2010
c) Recommended Books	Stewarts Clinical " Removable Partial Prosthodontics" fourth edition, Phenix, Rodney D., Cagna, David R., Defreest, Charles F. 2008 "Dental Implant Prosthetics" 2nd edition, Carl Misch. Mobsy 2014
d) Scientific periodicals, bulletins, etc…..	www.pubmed.com www.Science direct.com www.blackwell.com

Course Coordinator: prof. Hussein Elcharkawy

Head of Department: : prof. Hussein Elcharkawy

Date: / 3 /2016

University: Future University in Egypt.

Faculty: Faculty of Oral and Dental Medicine

Department: Prosthodontics

Course Specification

1- Basic Information		
Course Name: **Occlusion-2**	**Course Code: 762**	**Level:2nd semester 2nd part**
Master degree in: • **Fixed Prosthodontics.** • **Operative Dentistry.**	**Credit Hours: 1** **Theoretical: 1 / Practical: 0**	

2- Aim of the course:	This course is designed to introduce the student to design a treatment plan to patients with compromised occlusion.
3- Intended Learning Outcomes of Course (ILO) : **By the end of the course, post graduate student should be able to:**	
a) Knowledge and understanding :	a.1 Describe different types of articulators. a.2 Classify different types of TMJ disorders.
b) Intellectual Skills:	b.1 Select the suitable type of articulator for the clinical situation.
c) Professional and Practical Skills:	c.1 Transfer different records to semi-adjustable articulators. c.2 Diagnose different types of TMJ disorders.

d) General and transferable skills	d.1 Develop information technology and numerical skills. d.2 Communicate inter personally with dental team colleagues and laboratory personnel. d.3 Manage time effectively. d.4 Follow ethical and legal rules during dental practice.

4- Course Contents:	1. Articulators: a. Non-adjustable articulators. b. Semi-adjustable articulators. c. Fully adjustable articulators. 2. Records needed for mounting on a semi-adjustable articulator: a. Face Bow record. b. Centric relation record. c. Eccentric relation record. 3. TMJ disorders.
5- Teaching and Learning Methods	5.1 **Interactive Lectures; including discussion and brain storming.** 5.2 **Problem solving**.
6- Teaching and Learning Methods for special needs students	• Direct observation • Hands-on training • Individual teaching.

7- Student Assessment	
a) Assessment Methods	**Written examination** to assess knowledge and understanding, and intellectual skills. **Oral examination** to assess knowledge and understanding, intellectual and general skills
b) Assessment Schedule	After thesis presentation, defense and acceptance: • Written final exam • Oral final exam.
c) Weighting of Assessment	Written exam: 30 Oral exam: 20 Total 50

8- List of References	
a) **Course Notes**	PPT presentations of the course coordinator. Course notes.
b) **Essential Books (Text Books)**	• Dawson PF (2006): Functional occlusion from TMJ to smile design, 1st edition, Edinburgh: Elsevier Mosby.
c) **Recommended Books**	
d) **Scientific periodicals, bulletins, etc…..**	• www.pubmed.com. • www.sciencedirect.com. • www.blackwell.com

Course Coordinator: Dr Reham Elbastey
Head of Department: Prof Ashraf Hussien
Date: 2/3/2016