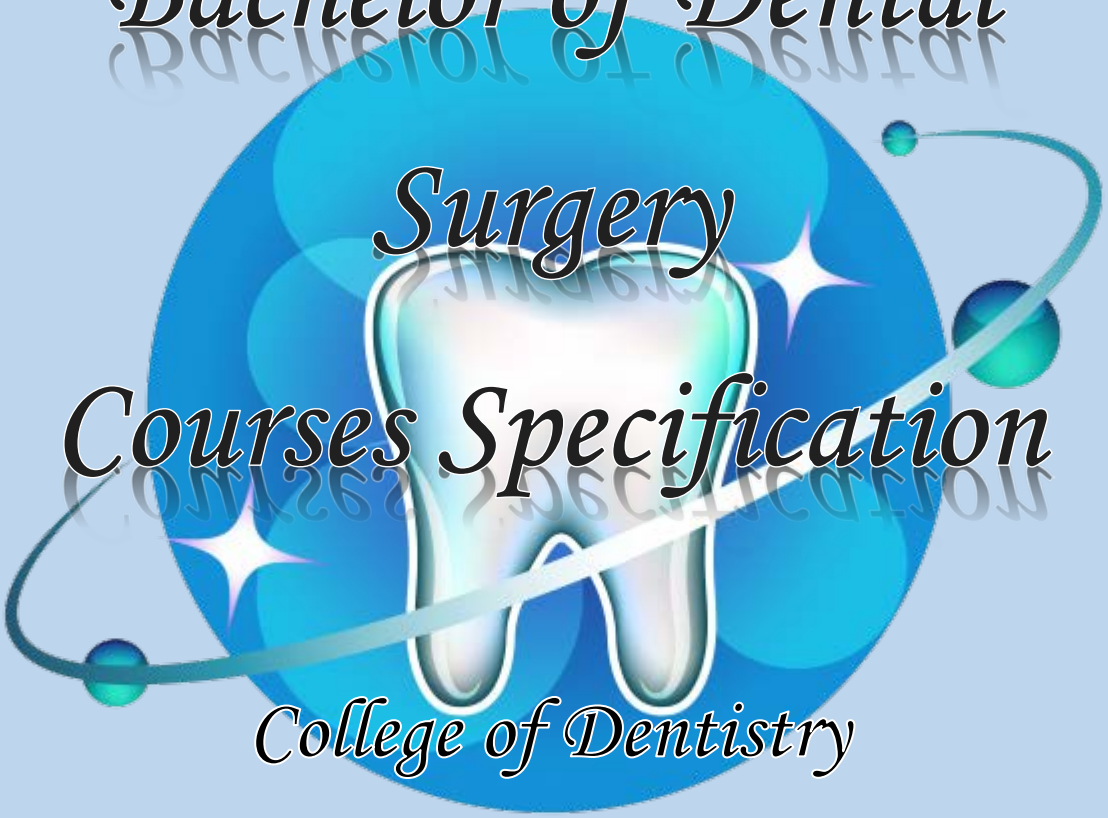
VISION رؤية 2030
المملكة العربية السعودية
KINGDOM OF SAUDI ARABIA

Qassim University جامعة القصيم
College of Dentistry كلية طب الأسنان

Bachelor of Dental Surgery Courses Specification



College of Dentistry

Qassim University

2022/1443


بسم الله الرحمن الرحيم

Table of Contents

College of Dentistry 18

About the College 18

Bachelor of Dental Surgery (BDS) Program 18

Program Mission 18

Courses Specification: 19

Course Specification: DENT 111 – Dental Education 19

Course Outline: 19

Course Learning Outcomes: 19

Educational Methods: 20

Assessment of Students: 20

References: 20

Course Specification: DENT 112 – Cell Structure & Function 21

Course Outline: 21

Course Learning Outcomes: 21

Educational Methods: 21

Assessment of Students 21

References: 22

Course Specification: DENT 113 – Head & Neck: Structure & Function 23

Course Outline: 23

Course Learning Outcomes: 23

Educational Methods: 23

Assessment of Students: 24

References: 24

Course Specification: DENT 114 – Genetics, Growth, and Development 25

Course Outline: 25

Course Learning Outcomes: 25

Educational Methods: 25

Assessment of Students: 25

References: 26
Course Specification: DENT 115 – Principles of Diseases 27
Course Outline: 27
Course Learning Outcomes: 27
Educational Methods: 27
Assessment of Students: 28
References: 28
Course Specification: DENT 121 – Scientific Presentation Skills (1) 29
Course Outline: 29
Course Learning Outcomes: 29
Educational Methods: 29
Assessment of Students: 29
References: 30
Course Specification: DENT 122 – Community Dentistry (1) 31
Course Outline: 31
Course Learning Outcomes: 31
Educational Methods: 31
Assessment of Students: 31
References: 32
Course Specification: DENT 123 – The Art of Sculpture in Dentistry 33
Course Outline: 33
Course Learning Outcomes: 33
Educational Methods: 33
Assessment of students: 33
References: 34
Course Specification: DENT 124 – Development of Dental Students 35
Course Outline: 35
Course Learning Outcomes: 35
Educational Methods: 35

Assessment of students 36
References: 36
Course Specification: DENT 125 –Technology and Acquired Knowledge for Dental Students 37
Course Outline: 37
Course Learning Outcomes: 37
Educational Methods: 37
Assessment of Students: 37
References: 38
Course Specification: DENT 126 – Dentist – Community Communication 39
Course Outline: 39
Course Learning Outcomes: 39
Educational Methods: 39
Assessment of students 39
References: 40
Course Specification: DENT 131 – Dental Skills (1) 41
Course Outline: 41
Course Learning Outcomes: 41
Educational Methods: 41
Assessment of Students: 42
References: 42
Course Specification: DENT 132 – Digital Editing of Dental Record 43
Course Outline: 43
Course Learning Outcomes: 43
Educational Materials 43
Assessment of students 43
References: 43
Course Specification: DENT 133 – Management of Scientific Meeting 44
Course Outline: 44
Course Learning Outcomes: 44

Educational Methods: 44
Assessment of Students: 44
References: 45
Course Specification: DENT 211 – Body Systems in Health & Disease 46
Course Outline: 46
Course Learning Outcomes: 46
Educational Materials: 46
Assessment of students: 47
References: 47
Course Specification: DENT 212 – General Surgery 48
Course Outline: 48
Course Learning Outcomes: 48
Educational Materials: 48
Assessment of students: 48
References: 49
Course Specification: DENT 213 – Neuroscience 50
Course Outline: 50
Course Learning Outcomes: 50
Educational Methods: 50
Assessment of Students: 50
References: 51
Course Specification: DENT 214 – Principles of Dental Sciences 52
Course Outline: 52
Course Learning Outcomes: 52
Educational Methods: 52
Assessment of Students: 53
References: 53
Course Specification: DENT 221 – Scientific Presentation Skills (2) 54
Course Outline: 54

Course Learning Outcomes: 54
Educational Methods: 54
Assessment of Students: 54
References: 55
Course Specification: DENT 222 – Community Dentistry (2) 56
Course Outline: 56
Course Learning Outcomes: 56
Educational Methods: 56
Assessment of Students: 56
Reference Books: 56
Course Specification: DENT 223 – Community Dentistry (3) 57
Course Outline: 57
Course Learning Outcomes: 57
Educational Methods: 57
Assessment of Students: 58
Reference Books: 58
Course Specification: DENT 224–Emergency Medicine for Dental Students 59
Course Outline: 59
Course Learning Outcomes: 59
Educational Methods: 59
Evaluation of students 59
References: 60
Course Specification: DENT 225 – Scientific Editing for Dental Periodicals 61
Course Outline: 61
Course Learning Outcomes: 61
Educational Materials: 61
Assessment of students: 61
References: 62
Course Specification: DENT 226 – Alternative Dentistry 63

Course Outline: 63
Course Learning Outcomes: 63
Educational Materials: 63
Assessment of students: 63
References: 63
Course Specification: DENT 227 – Laboratory Techniques in Oral and Maxillofacial Pathology 64
Course Outline: 64
Course Learning Outcomes: 64
Educational Methods: 65
Assessment of Students: 65
References: 65
Course Specification: DENT 231 – Dental Skills (2) 66
Course outline 66
Course Learning Outcomes: 66
Educational Materials: 66
Assessment of Students: 66
References: 67
Course Specification: DENT 232 – Photography in Dentistry 68
Course Outline: 68
Course Outcomes: 68
Educational Materials: 68
Evaluation of students 68
References: 69
Course Specification: DENT 311 – Introduction to Dental Practice 70
Course outline: 70
Course Learning Outcomes: 70
Educational Methods: 71
Assessment: 71
References: 71

Course Specification: DENT 312 – Restorative 1 73
Course outline: 73
Course Learning Outcomes: 73
Educational Methods: 73
Assessment of Students: 73
References: 74
Course Specification: DENT 313 – Restorative 2 75
Course outline: 75
Course Learning Outcomes: 75
Educational Methods: 75
Assessment of Students: 75
References: 75
Course Specification: DENT 321 – Scientific Presentation Skills (3) 77
Course Outline: 77
Course Learning Outcomes: 77
Educational Methods: 77
Assessment of Students: 77
References: 78
Course Specification: DENT 322 – Community Dentistry (4) 79
Course Outline: 79
Course Learning Outcomes: 79
Educational Methods: 79
Assessment of Students: 79
References: 80
Course Specification: DENT 323 –Ethics in Dentistry 81
Course Outline: 81
Course Learning Outcomes (LO): 81
Educational Methods: 81
Assessment of students: 82

References: 82
Course Specification: DENT 324 – Management of Occupational Hazards 83
Course Outline: 83
Course Learning Outcomes: 83
Educational Methods: 83
Assessment of Students: 83
References: 83
Course Specification: DENT 325 – Nanodentistry 84
Course Outline: 84
Course Learning Outcomes: 84
Educational Materials: 84
Assessment of students 84
References: 85
Course Specification: DENT 326 – Comparative Dentistry 86
Course Outline: 86
Course Learning Outcomes: 86
Educational Methods: 86
Assessment of students: 86
References: 86
Course Specification: DENT 327 – The Art of Dental Therapeutics 87
Course Outline: 87
Course Learning Outcomes: 87
Educational Methods: 88
Assessment of Students: 88
References: 88
Course Specification: DENT 328 – Dental Technology 89
Course Outline: 89
Course Learning Outcomes: 89
Educational Methods: 89

Assessment of Students: 89
References: 90
Course Specification: DENT 329 – Dental Informatics 91
Course Outline: 91
Course Learning Outcomes: 91
Educational Methods: 92
Assessment of Students: 92
References: 92
Course Specification: DENT 331 – Dental Skills (3) 93
Course outline: 93
Course learning Outcomes: 93
Educational Methods: 94
Assessment of Students: 94
References: 94
Course Specification: DENT 332 – Principles of Dental Equipment Maintenance 96
Course Outline: 96
Course Outcomes: 96
Educational Methods: 96
Evaluation of students 96
References: 96
Course Specification: DENT 333 – Recent Trends in Oral and Maxillofacial Pathology 97
Course Outline: 97
Course Learning Outcomes: 97
Educational Materials: 98
Assessment of students: 98
References: 98
Course Specification: DENT 341 – Dental Clinical Practice (1) 99
Course Outline: 99

Course Learning Outcomes: 99
Educational Methods: 99
Assessment of Students: 100
References: 100
Course Specification: DENT 411 – Surgical Management 101
Course Outline: 101
Course Learning Outcomes: 101
Educational Method: 101
Evaluation of students: 101
References: 102
Course Specification: DENT 412 – Child & Adolescent Care 103
Course Outline: 103
Course Learning Outcomes: 103
Educational Methods: 104
Assessment of Students: 104
References: 104
Course Specification: DENT 413 – Management of Oral & Maxillofacial Diseases (1) 105
Course Outline: 105
Course Outcomes: 105
Educational Methods: 106
Evaluation of students: 106
References: 106
Course Specification: DENT 414 – Management of Oral & Maxillofacial Diseases (2) 107
Course Outline: 107
Course Learning Outcomes: 107
Educational Methods: 108
Evaluation of students: 108
References: 108

Course Specification: DENT 415 – Dental Implantology 109
Course Outline: 109
Course Learning Outcomes: 109
Educational Methods: 109
Assessment of Students: 109
References: 109
Course Specification: DENT 416 – Maxillofacial Surgery & Rehabilitation 111
Course Outline: 111
Course Learning Outcomes: 111
Educational Methods: 111
Assessment of Students: 112
References: 112
Course Specification: DENT 421 – Scientific Presentation Skills (4) 113
Course Outline: 113
Course Learning Outcomes: 113
Educational Methods: 113
Assessment of Students: 113
References: 114
Course Specification: DENT 422 – Community Dentistry (5) 115
Course Outline: 115
Course Learning Outcomes: 115
Educational Methods: 115
Assessment of Students: 116
References: 116
Course Specification: DENT 423 – Restorative 3 117
Course Outline: 117
Course Learning Outcomes: 117
Educational Methods: 117
Assessment of Students: 117

References: 117

Course Specification: DENT 424 – Biotechnology in Dentistry 119

Course Outline: 119

Course Learning Outcomes: 119

Educational Methods: 119

Assessment of Students: 119

References: 119

Course Specification: DENT 425 – Scientific Presentation Skills (5) 121

Course Outline: 121

Course Learning Outcomes : 121

Educational Methods: 121

Assessment of Students: 121

References: 122

Course Specification: DENT 426 – Problem Solving in Dentistry 123

Course Outline: 123

Course Learning Outcomes: 123

Educational Methods: 123

Assessment of students: 124

References: 124

Course Specification: DENT 427 – Orthodontic Treatment for Adults 125

Course Outline: 125

Course Learning Outcomes: 125

Educational Methods: 125

Assessment of Students: 125

References: 125

Course Specification: DENT 428 – Practice Management 127

Course Outline: 127

Course Learning Outcomes: 127

Educational Methods: 127

Assessment of Students: 127
References: 128
Course Specification: DENT 431 – Dental Skills (4) 129
Course Outline: 129
Course Learning Outcomes: 129
Educational Methods: 129
Assessment of Students: 129
References: 130
Course Specification: DENT 432 – Recent Modalities in Dental Radiology 131
Course Outline: 131
Course Learning Outcomes: 131
Educational Methods: 131
Assessment of students 131
References: 132
Course Specification: DENT 441 – Dental Clinical Practice (2) 133
Course Outline: 133
Course Learning Outcomes: 133
Educational Methods: 134
Assessment of Students: 134
References: 134
Course Specification: DENT 442 – Advanced Periodontics Clinics 136
Course Outline: 136
Course Learning Outcomes: 136
Educational Materials: 136
Evaluation of students: 136
References: 136
Course Specification: DENT 443 – Advanced Endodontics Clinics 137
Course Outline: 137
Course Learning Outcomes: 137

Educational Methods: 137
Assessment of Students: 137
References: 137
Course Specification: DENT 444 – Advanced Cosmetics Clinics 138
Course Outline: 138
Course Learning Outcomes: 138
Educational Methods: 138
Assessment of Students: 138
References: 138
Course Specification: DENT 445 – Total Patient Care 139
Course Outline 139
Course Learning Outcomes: 139
Educational Methods: 140
Assessment of Students: 140
References: 140
Course Specification: DENT 446 – Advanced Orthodontics Clinics 142
Course Outline: 142
Course Learning Outcomes: 142
Educational Materials: 142
Assessments of students 142
References: 143
Course Specification: DENT 447 – Advanced Implant Dentistry Clinics 144
Course Outline: 144
Course Learning Outcomes: 144
Educational Materials: 144
Assessments of students: 144
References: 144
Course Specification: DENT 448 – Advanced Oral & Maxillofacial Surgery Clinics 144
Course Outline: 145

Course Learning Outcomes: 145
Educational Methods: 145
Assessments of students: 145
References: 145
Course Specification: DENT 449 – Advanced Pedodontics Clinics 147
Course Outline: 147
Course Outcomes: 147
Educational Materials: 147
Assessments of students 147
References: 147

College of Dentistry

About the College

College of Dentistry, Qassim University is one of the modern colleges among Saudi Arabia. The Royal Decree to establish the college was issued on 18 / 1 / 1426 Hijri. The college had received its first batch of students starting from the academic year 1428-1429 Hijri.

Bachelor of Dental Surgery (BDS) Program

Program Mission

Teaching dental students to become qualified in the general practice of dentistry by providing a distinguished educational program that meets the needs of the labor market, in accordance with the highest clinical standards to meet the professional needs, committed to continuous education, providing research and local community service programs.

Courses Specification:

Course Specification: DENT 111 – Dental Education			
Course Symbol	DENT 111	Year	1
Course Title	Dental Education	Units	2 Didactic
Prerequisite			

Course Outline:

The idea of the problem based learning [PBL] will be discussed in the beginning of this course to clarify the modality of its application in the medico-dental practice.

This course is designed to review the dental history & provide students with the basic rules andelements of a dental word, including word roots, prefixes, suffixes and combining forms. The student will be able to analyze, spell, pronounce and build dental terms according to word partsand descriptions.

In order to enhance the student's knowledge of dental science, various terminologies including dental & medical terms are introduced & also using of computerized & internet exercises.

Principles of Medical & Dental ethics are involved in this course; the dentist can evolve his duties & rights towards his profession & be able for decision making.

During this course a practical model for verbal & non- verbal communication will be introducedand induces advice for managing communication in everyday clinical situations, together with interactive workshops.

The ability to communicate information clearly & concisely to different audiences is an essential attribute of any good doctor. Poor communication can lead to patient dissatisfaction, a breakdown of the doctor-patient relationship and complaints.

Course Learning Outcomes:

By the end of this course, student should be able to:

1. Memorize the role, assembly, assessment process of PBL.
2. Recognize the history of dental equipment, diseases, materials and schools.
3. Identify dental and medical terminology, anatomical landmarks of the oral cavity and body systems, organs and Axis
4. Describe the ethics of dentistry and its pivots

5. Memorize and identify advantages, methods and characteristics of effective communication
6. Recognize the use of the internet as a search engine.
7. Outline concepts of leadership responsibilities and ability to work independently and in groups and using available database on library website.

Educational Methods:

1. Lectures.
2. PBL sessions.
3. Video, animations.

Assessment of Students:

1. Summative Exams
    - MCQs
    - Short essays
2. Discussion forums and tutor evaluation

References:

1. Wheeler, RussellC. Wheeler's Dental anatomy, physiology and occlusion. W.B. Saunders company.6th edition
2. Charline M. Dofka. Dental Terminology. Third Edition. Delmar, Cengage Learning2013.
3. Code of Ethics for Health Care Practitioners, 3rd Edition, the Saudi Commission for Health Specialties, 1435 H.
4. Peter Washer. Clinical Communication Skills. Oxford Core Texts, 2009.
5. Student's guide, College of Dentistry, Qassim University.

Course Specification: DENT 112 – Cell Structure & Function			
Course Symbol	DENT 112	Year	1
Course Title	Cell Structure & Function	Units	4 Didactic1 Practical
Prerequisite			

Course Outline:

This course is designed to ensure that dental student acquire sound knowledge in various integrated areas of cell biology, biochemistry, physiology and general histology.

Some areas of the mentioned disciplines have been covered less extensively than others to suit the needs of a dental student.

Course Learning Outcomes:

By the end of this course, student should be able to:

1. Describe the structures of the cell and functions of its components
2. Outline the chemistry of carbohydrates, lipids and proteins
3. Recognize effectively with other peer students as a member or leader of professional group team in assessment of problem in cell structure and function by using electronic technical tools.
4. Recognize the biochemistry and physiology of the cells and environment in which cells are living.
5. Describe the function of the epithelium, connective tissue, muscles and nerve
6. Describe the metabolism of carbohydrates, lipids and proteins.
7. Describe the physiology of autonomic nervous system.

Educational Methods:

1. Lectures.
2. Problem Based Learning (PBL) sessions.
3. Laboratory work.

Assessment of Students

1. Summative Exams
    - MCQs
    - Short essays

2. Discussion forums and tutor evaluation

References:

1. Wheater's Functional Histology, By Young, O'Dowd & Woodford. 6thed. 2014, Elsevier Churchill Livingstone.
2. Ganong's Review of Medical Physiology, By Kim E. Barrett, Susan M. Barman, Scott Boitano, ed.25th, 2016, Heddwen Lang. Brooks
3. Harper's Biochemistry, By Robert K. et al; Appleton and Lange, Latest ed.
4. Basic Histology, By Junqureira, Carneiro and Kelly; McGraw-Hill Publishing Co. Latest ed.

Course Specification: DENT 113 – Head & Neck: Structure & Function			
Course Symbol	DENT 113	Year	1
Course Title	Head & Neck: Structure & Function	Units	4 Didactic1 Practical
Prerequisite			

Course Outline:

This course is an entrance requirement for preclinical and clinical dental programs. Students study the anatomy, physiology of the head and neck, and occlusion of the teeth. The course includes introductions to basic terminology and tooth structure, and extends to a survey of all of the oral systems. All material discussed with direct relationship to a well-characterized dental clinical case.

Oral secretions and salivary glands function, TMJ and static occlusion will be included in this course.

Course Learning Outcomes:

By the end of this course, student should be able to:

1. Describe in details the anatomical structure of the head and neck.
2. Recognize the histological criteria of the head and neck structure.
3. Memorize the physiological criteria as related to the head and neck.
4. Record the development, anatomical, histological, age changes of tempromandibular joint.
5. Outline macro-anatomy and the microanatomy, and functions of salivary glands.
6. State the composition and functions of saliva.
7. Tell the hormonal functions of the glands in head and neck.
8. Recognize as a member or leader of professional group team, the assessment of the major structures and functions of the head and neck problems using proper electronic tools.

Educational Methods:

1. Lectures
2. PBL sessions.
3. Lab demonstration.

Assessment of Students:

1. Summative Exams
    - MCQs
    - Short essays
2. Formative assessment.
    - OSPE
3. Discussion forums and tutor evaluation

References:

1. Snell Clinical Anatomy, Lippincott Williams and Wilkins; 7th edition, 2003.
2. Jonquiere's Basic Histology, Mac Grow Hill; 9th edition, 1998.
3. Harper's Illustrated Biochemistry, Mac Grow Hill; 27th edition, 2005.
4. Guyton Text Book of Medical Physiology, W.B. Saunders; 10th edition, 2000.
5. Lippincott's Illustrated Reviews: Microbiology (Lippincott's Illustrated Reviews Series) by Richard A Harvey, Pamela C Champe, and Bruce D Fisher: Lippincott Williams & Wilkins, 2nd ed.; 2006.Scott & Dixon: Anatomy for Dental students. OUP Oxford; 3rd edition, 1996.

Course Specification: DENT 114 – Genetics, Growth, and Development			
Course Symbol	DENT 114	Year	1
Course Title	Genetics, Growth, and Development	Units	5 Didactic1 Practical
Prerequisite			

Course Outline:

The purpose of this course is to introduce the student to basic concepts of growth and development, maturational, aging processes of the tissues, systems within the craniofacial complex, and deviation and variation from the normal growth and development in order to prepare the student for the following Preclinical and Clinical stages.

Course Learning Outcomes:

By the end of this course, student should be able to:

1. Distinguish the molecular biology and genetics essential for oral biology.
2. Recognize the human embryology with a focus on embryonic development of the head, neck, face & oral cavity to recognize the abnormal development.
3. Outline the process of teeth development until their eruption and shedding to recognize their dental anomalies and their abnormal eruptive behavior.
4. Define the structure of the dental, oral and paraoral tissue and relate the normal structures with the clinical application to be base line for the future studies.
5. Recognize the development and the growth theories as well as the age changes of the craniofacial growth with comparisons of the different theories of growth to measure the normal growth pattern.
6. Recognize the essential nutrition actions and the effect of growth factors and hormones on the human growth and development to enhance optimal growth and development.

Educational Methods:

1. PBL sessions.
2. Lectures.
3. laboratory sessions.

Assessment of Students:

1. Summative Exams

- MCQ

2. Formative assessment
   - OSPE
3. Discussion forums and tutor evaluation

References:

1. Tom Strachan and Andrew P.: Human Molecular Genetics, 4thEd, Press 2009
2. Robert Schleif,: Genetics and Molecular Biology, 2nd ed. Johns Hopkins University Press 1993
3. Antonio Nanci: Ten cat`s Oral Histology: Development, Structure, and Function, 8th ed. Elsevier Health Sciences, Mosby, 2014
4. Bhasker, S.N.: Orban's Oral Histology and Embryology, Edition By G.S. Kumar, Mosby 13th ed. 2011
5. Avery, J.K. : Oral development and Histology, 3rd ed New York Thieme 2001
6. Avery, J.K., Daniel, J &Chiego, Jr: Essential of Oral Histology and Embryology. A clinical Approach 4th ed 2013
7. S. Bishara: Text book of Orthodontics, Saunders, 2004
8. Proffit: Contemporary of Orthodontics, 4th ed Mosby, 2007.
9. Major, M. Ash, Stanley Nelson: Wheeler`s Dental Anatomy, Physiology and Occlusion, Saunders, Saint Louis, Missouri, USA, 9th ed 2008.
10. Berkovitz, B.K.B., Holland, G.R. &Moxham, B.J.: Oral Anatomy, histology and Embryology, 5th ed Mosby 2017.
11. Nevelle, Daam: Oral and Maxillofacial Pathology, 3rd edition, Saunders, 2009.
12. Ormrod, J.E: Essentials of Educational Psychology: Big Ideas to Guide Effective Teaching. Boston, MA: Pearson Education Inc. 2012
13. James K. Avery: Oral Development and Histology 3rd edition, 2002. Thieme Medical Publishers, Inc. or latest Edition if present
14. Berkovitz BKB, Holland GR and Moxham BJ: A colour Atlas and Textbook of Oral Anatomy, Histology and Embryology 5th edition, 2017, Wolfe Medical Publications Ltd.

Course Specification: DENT 115 – Principles of Diseases			
Course Symbol	DENT 115	Year	1
Course Title	Principles of Diseases	Units	5 Didactic1 Practical
Prerequisite			

Course Outline:

This course includes the basic principles of disease and relevant histopathology. Considerable emphasis is given to understanding mechanisms underlying alterations at the cell and subcellular levels. The parameter of cell injury, inflammation, immunopathology, repair and regeneration, carcinogenesis, hemodynamic disturbances, and nutritional diseases are studied. Correlations of systemic diseases of importance in dentistry are emphasized. This course will provide the student with a working understanding of pharmacology and pharmacotherapeutics as applied to dental practice.

Course Learning Outcomes:

By the end of this course, student should be able to:

1. Recognize the cell injury, inflammation, healing and repair and the circulatory disturbances
2. Describe the carcinogenesis, the mode of neoplastic mechanisms and growth and nutritional disorders.
3. State the basic microbiology regarding the mechanisms of bacterial and viral pathogenesis and body defense as an anatomical barrier.
4. State the relationship between the basic physiology and hematology with laboratory investigations.
5. Recognize components of immune system, various types of immunities and immune reactions.
6. Describe the biochemical basis of DNA damage and repair, regulation of cell cycle, genetic diseases and cancer.
7. Outline the basic pharmacology in particular drug-drug interactions.
8. Outline effectively as an individual and a part of a team to communicate information and ideas in the principles of disease by using electronic technical tools.

Educational Methods:

1. PBL sessions

2. Lectures
3. Lab demonstration.

Assessment of Students:

1. Summative Exams
    - MCQs
    - Short essays
2. Formative assessment.
    - OSPE
3. Discussion forums and tutor evaluation

References:

1. Robbin's Basic Pathology, by Kumar, Cotran and Robbins, 10th ed. 2017,W.B. Saunders Company, Philadelphia.
2. Medical Microbiology and Immunology, by Jawetz , 28th ed. 2019, Appleton & Lange Company.
3. Essential hematology, by Victor Hoffbrand, Paul Moss, John Pettit 15 th edition. 2015, Wiley-Blackwell
4. Harper's Biochemistry, By Robert K. et al; 31st ed , 2018 Appleton and Lange.
5. Basic & Clinical Phamacology, by Bertram G. Katzung 15th ed. 2018, McGraw-Hill Companies
6. Review of Medical Physiology, By Williams Ganong; 26th ed. 2019, Lange Medical Books, Latest.

Course Specification: DENT 121 – Scientific Presentation Skills (1)			
Course Symbol	DENT 121	Year	1
Course Title	Scientific presentation skills (1)	Units	1 Practical
Prerequisite			

Course Outline:

In the field of dentistry, knowledge and technical skills are not the only prerequisites for good practice. An ability to communicate effectively, to use active listening, to gather and impart information effectively, and to demonstrate empathy, rapport, ethical awareness is crucial.

The aim of this course is improve skill and behavior that help the students to communicate more effectively, present with confidence and enhance personnel impact.

In this course, the students gain a comprehensive and proven set of skill that helps them to work effectively with colleagues and develop expertise.

Course Learning Outcomes:

By the end of this course, student should be able to:

1. Recognize the essential elements for writing and presenting the selected topic.
2. Use software programs for designing and construction of scientific presentations.
3. Demonstrate various techniques of effective interpersonal skills during the presentation.
4. Present the topics orally with confidence using PowerPoint technology and other audio-visual aids.

Educational Methods:

1. Lectures.
2. Self-directed learning
3. Small group discussion.

Assessment of Students:

1. Rubrics
2. Direct observation of performance/behavior.
3. Oral presentations.

References:

1. Carter M. Designing Science Presentations, 1st ed. St. Louis, MO: Mosby/Elsevier; 2012.
2. Dentistry, Dental Practice and the Community by Burt AB, Eklund SA. 6th Ed 2005, W. B.Saunders Company.

Course Specification: DENT 122 – Community Dentistry (1)			
Course Symbol	DENT 122	Year	1
Course Title	Community Dentistry (1)	Units	1 Didactic
Prerequisite			

Course Outline:

The course has been designed to introduce to the dental undergraduates the basic concepts about community dentistry, oral health promotion and education. The implications of the system of Primary Health Care to the provision of oral health care to communities are discussed.

Course Learning Outcomes:

By the end of this course, student should be able to:

1. Discuss the concept of health and various factors affecting it.
2. Discuss the concept of health and various factors affecting it.
3. Define community dentistry and its domains.
4. Define primary health care and its implications to oral health care.
5. State the principles of health promotion and various oral health promotive strategies.
6. Discuss the basic methods of health education, different priority groups and the barriers to effective health education.
7. Distinguish between health education and health promotion.
8. Recognize the existing behavioral and health problems.

Educational Methods:

1. Lectures
2. Debate

Assessment of Students:

1. Summative Exams
   - MCQs
   - Short essays
2. Rubrics

3. Debates
4. Individual and group presentations

References:

1. Dentistry, Dental Practice and the Community by Burt AB, Eklund SA. 7th Ed 2020, W. B. Saunders Company.
2. Community dentistry and oral epidemiology journal by Wiley.

Course Specification: DENT 123 – The Art of Sculpture in Dentistry			
Course Symbol	DENT 123	Year	1-5
Course Title	The Art of Sculpture in Dentistry	Units	1 Didactic
Prerequisite			

Course Outline:

The purpose of this course is to introduce the student to basic concepts of Perceptual Skills and Visual Arts Vocabulary and developed their ability and taste of the artistic skills in order to develop competencies and creative skills in problem solving, communication, and management of time and resources that contribute to lifelong learning and career skills. They also learn about careers in and related to the visual arts.

Course Learning Outcomes:

By the end of this course, student should be able to:

1. Apply the terms and expressions used in Drawing, painting and sculpting skills with proficiency.
2. Expanding knowledge of art and creativity.
3. Improving hand-eye coordination and imagination to create beauty in two and three dimensions.
4. Understanding the cause and effect of surface contour on light reflection, deflection, and Absorption.
5. Improving color taste and sensitivity so that fabricated teeth become more life-like and undetectable as dentistry.
6. Drawing visual perception of outline form details, special proportions, and value differences in color.
7. Understanding sculpting skills of volume, weight, and texture in three dimensions and in all views and angles

Educational Methods:

1. Didactic lectures
2. Artistic Projects

Assessment of students:

1. Continuous assessment.

2. Assignments and projects.

References:

1. Arnason H: History of Modern Art: Painting, Sculpture, Architecture, Photography (5th Edition), 2003

Course Specification: DENT 124 – Development of Dental Students			
Course Symbol	DENT 124	Year	1-5
Course Title	Development of Dental Students	Units	1 Didactic
Prerequisite			

Course Outline:

Student Development is dedicated to ensuring students' college success and motivating their journey toward lifelong learning. It will enable students to develop their own plan for personal, academic and career success through self-evaluation, application of specific techniques, and classroom activities. These activities will help students acquire effective study strategies, increase critical and creative thinking skills, establish short-term and long-term goals, and learn to manage time more efficiently. This is a course about making choices, especially those about setting and meeting personal, academic and career goals.

The Mind Map is a dynamic and exciting tool to help all thinking and planning becomes a smarter and faster activity. The creation of a Mind Map is a revolutionary way to tap into the infinite resources in student's brain, to make appropriate decisions, and to understand their feelings.

Course Learning Outcomes:

By the end of this course, student should be able to:

1. Acquire knowledge in retaining memory power.
2. Acquire speed reading skills.
3. Acquire mind mapping techniques.
4. Integrate memory training, speed reading and mind mapping.
5. Learn techniques to develop effective Mind Maps.
6. Practice ways to overcome blocks.
7. Experience ways to expand his creative ability.
8. Design a mind map to reach a goal.

Educational Methods:

1. Lectures.
2. Assignments

Assessment of students

1. Continuous assessment (MCQ).
2. Final exams (MCQ & SEQ).

References:

1. Tony Buzan. Harper Thorsons: The Ultimate Book of Mind Maps. 2006

Course Specification: DENT 125 –Technology and Acquired Knowledge for Dental Students			
Course Symbol	DENT 125	Year	1-5
Course Title	Technology and Acquired Knowledge for Dental Students	Units	1 Didactic1 Practical
Prerequisite			

Course Outline:

This course is an elective course, designed to equip the student with the integrated knowledge of dental advancements. Main aim is to educate the students with the basic and advanced theories and skills to improvise updated learning design in dentistry.

Course Learning Outcomes:

By the end of this course, student should be able to:

1. Identify key milestones in the use of Technology in Dental Education
2. Critically evaluate digital learning resources with reference to effective application of learning theory
3. Choose an appropriate learning solution within a given learning context and analyze its level of effectiveness
4. Describe the potential and limitations of e-learning in the overall context of learning
5. Identify the key components for the development of an effective e-learning solution
6. Use and critically select appropriate methods of working with learning technologies.
7. Research and evaluate the possibilities and constraints of past, present and emerging learning technologies.
8. Critically evaluate digital learning resources in the context of design principles

Educational Methods:

1. Lectures
2. Workshops
3. Assignments

Assessment of Students:

1. Continuous assessment.
2. Assignments and projects

References:

1. Littlejohn, Alison. Reusing Online Resources - a sustainable approach to e-learning. 2003. Kogan Page (London).
2. Watkins, Ryan. 75 e-Learning Activities: Making Online Learning Interactive. 2005. Pfeiffer Wiley.
3. Salmon, Gilly. E-activities - the key to active online learning. 2002.
4. Salmon, Gilly. E-moderating - the key to teaching and learning on-line. 2000. Kogan Page (London), Taylor Francis Paperback.

Course Specification: DENT 126 – Dentist – Community Communication			
Course Symbol	DENT 126	Year	1-5
Course Title	Dentist – Community Communication	Units	1 Didactic
Prerequisite			

Course Outline:

It have been observed that; the tasks assigned to the dentists had a remarkable development during the past decades, Their roles is no longer confined only to the provision of treatment services, but the communication with the community through various media became one of the basic roles of the dentist, either print , audio or visible. And therefore there was an urgent need for the training of dental students on the basics of communication with the community through such means and trained skills.

Course Learning Outcomes:

By the end of this course, student should be able to:

1. Know the foundations of radio interviews and television, as well as successful awareness programs.
2. Understand the controls that should be observed by the dentist when conducting an interview with him.
3. Prepare the intended messages and letters in the administrative health institutions with an indication of its importance in the organization or institution that will work with the dentist.
4. Demonstrate the importance of writing for awareness as a mean of communicating with the media and the community.
5. Know how to edit press releases issued by medical institutions.

Educational Methods:

1. Lectures.
2. Assignments.

Assessment of students:

1. Continuous assessment (MCQ).
2. Final Exam (MCQ & SEQ).

References:

1. Jaber Mohammed Tmaoy, Public Relations and its Practical Applications, Cairo, World Library Press, 2005.
2. Essam El-Din Faraj, The Art Editor of Advertising and Public Relations, Cairo Arab Renaissance Publishing House, 2007.
3. Ali Ajwa, The Scientific Basis for Public Relations, Cairo, Alam Elketab, 2000.
4. Farouk Abu Zeid, Press Release, Alam Elketab, Cairo, 2004.

Course Specification: DENT 131 – Dental Skills (1)			
Course Symbol	DENT 131	Year	1
Course Title	Dental Skills (1)		
Prerequisite		Units	2 Didactic2 Practical

Course Outline:

The course layout the foundation for developing technical artistic skills by the dental student and related these skills to his clinical performance

Course Learning Outcomes:

By the end of this course, student should be able to:

1. Identify the anatomical landmarks, nomenclature and notation of the oral cavity and all primary and permanent teeth concentrating on molars.
2. Identify morphology of all teeth concentrating on anterior and premolars with reference of notation systems.
3. Describe the anatomy of pulp cavities of primary and permanent teeth, chronology, morphology of teeth with the importance of tooth form and arrangement.
4. Recognize the importance of tooth form in protection of the periodontium, fundamentals of the dental anatomy with the chronological and physiological concepts.
5. Recognize occlusion, articulation of primary and permanent teeth, the main anatomical aspects of human dentition along with eruption dates and dental outlines and forms.
6. Outline the different types of primary and permanent teeth, the important morphological concepts and the physiological background and important dates in the teeth lifespan.
7. Diagram all permanent teeth on graph papers according to tables of measurements and apply manual waxing up of dental casts following the professional manner following the rules organizing the labs.
8. Restore missing parts of some anterior and posterior teeth using waxing-up PKT technique and differentiate between teeth.

Educational Methods:

1. Lectures
2. Lab demonstrations.
3. Small group work Simulation.

Assessment of Students:

1. Summative Exams
   - MCQs
   - Short essays.
2. Laboratory and clinical requirements.
3. Practical exam
   - OSPE

References:

1. ASH and NELSON. Wheeler's Dental Anatomy, Physiology and Occlusion, Elsevier Health Science 10th ed,2015.
2. Fuller, JL and Denehy GE. Concise Dental Anatomy and Morphology. Year book Medical Publishers, Inc. Chicago. London,4th ed,2001
3. BW and Rickne CS. Dental Anatomy: It's Relevance to Dentistry. Baltimore, 5th ed,1997

Course Specification: DENT 132 – Digital Editing of Dental Record			
Course Symbol	DENT 132	Year	1-5
Course Title	Digital Editing of Dental Record	Units	2 Practical
Prerequisite			

Course Outline:

In this course, the student gains knowledge and familiarize with the necessary tools in Adobe Photoshop software to transform average dental records photographs into professional quality photographs comparable to pictures used in publications and continuing education.

Student will be able to present their cases using Power Point presentations and scientific posters.

Course Learning Outcomes:

By the end of this course, student should be able to:

1. Distinguish between different formats of saving digital photograph.
2. Manipulate, edit and create professional images with Photoshop for the primary purpose
3. Understand the main features available within PowerPoint, and to be able to create professional case presentations.

Educational Materials:

1. Workshops

Assessment of students:

1. Continuous assessment.
2. Assignments and projects.

References:

1. Humphreys, Joshua / Turner, E.: Adobe in Design Cs2 Basics, Course Technology, Inc. edition 7. 2006
2. Niess, Maggie / Lee, John: 2007 Microsoft Office System, John Wiley & Sons, Inc. edition 9.

Course Specification: DENT 133 – Management of Scientific Meeting			
Course Symbol	DENT 133	Year	1-5
Course Title	Management of Scientific Meeting		
Prerequisite		Units	1 Practical

Course Outline:

After graduating the dentist is subjected to the management of meetings and preparation, whether the meetings of the Board of Management department or hospital, even in private clinics he may need to hold scientific meetings to develop treatment plans for patients as well as the value of the scientific meeting as a mechanism for a unique form of personal interchange we aim from this course to explain how we can organize and gain experienced in the business of running a conference, symposium, workshop and tutorial sessions and eager for information, guidelines, and tips on running a scientific meeting smoothly and successfully.

Course Learning Outcomes:

By the end of this course, student should be able to:

1. Share in preparing scientific meeting.
2. Marketing for the scientific meeting.
3. Know the duties of each committee.
4. How to contract with sponsors.
5. Register for the conference.
6. Know the financial of conference.

Educational Methods:

1. Lectures.
2. Workshop.
3. Project (e.g. conference organization)

Assessment of Students:

1. Continuous assessment.
2. Project.

References:

1. IEEE, Introduction to conference organization manual, IEEE webmaster, 2009.
2. IAPSS, How to organize a conference step by step manual, 2003

Course Specification: DENT 211 – Body Systems in Health & Disease			
Course Symbol	DENT 211	Year	2
Course Title	Body Systems in Health & Disease	Units	8 Didactic3 Practical
Prerequisite	DENT 112, DENT 115		
Co-requisite	DENT 224		

Course Outline:

This course is designed to ensure that dental student acquire sound knowledge in various integrated areas of Anatomy, Histology, Pathology, Microbiology, Biochemistry, Pharmacology and Physiological basis of the human body systems, and the most common health problems that has a direct or indirect relation to his practice as a dentist. These will include the common Internal medicine, and the Dermatology.

Course Learning Outcomes:

By the end of this course, student should be able to:

1. Recognize the normal anatomical, histological, biochemical and physiological basis of the different systems of the body.
2. Define the pathogenesis, pathological, clinical presentation, and managements of the common health problems in the different body systems.
3. Justify the different diagnostic procedures and plans of the health problems.
4. Criticize the common basic health problems facts and concepts to their practical counterpart.
5. Operate effectively with others as a member or leader of professional group team in assessments of the major body systems problem by using proper medical and electronic technical tools.
6. Demonstrate the basic clinical skills in eliciting general examination and vital signs.
7. Perform the different techniques for clinical approaches in examination of different body systems for electing abnormal signs.

Educational Materials:

1. Lectures teaching
2. Lab demonstration

3. Self-direct learning ”SDL”
4. PBL+TBL

Assessment of students:

1. Summative Exams
   - MCQs
   - Short essays
2. Formative assessment.
   - OSPE
3. Discussion forums and tutor evaluation.

References:

1. Review of Medical Physiology, WGanong; Lange Medical Books, 26th ed. 2019
2. Keith Moore,Arthur F Dalley - Clinically Oriented Anatomy, 8th Edition, 2017
3. Robins’s pathology 14th ed.2015
4. Principles of Clinical Pharmacology, Second Edition Arthur J. Atkinson, 2016
5. Functional Histology, Young and Heath; Churchil Livingstone. 9th ed., 2015
6. Harper’s Biochemistry, By Robert K. et al; Appleton and Lange, 31th ed, 2018
7. Davidson's principles and practice of medicine,23rd edition, 2018
8. Oxford handbook of clinical medicine, Oxford, 10th edition, 2017
9. Essentials of Medical Microbiology: Apurba S. Sastry & Sandhya Bhat 2nd ed, 2018
10. Atlas of Human Anatomy: Student Consult Access, Frank H.,2015.

Course Specification: DENT 212 – General Surgery			
Course Symbol	DENT 212	Year	2
Course Title	General Surgery		
Prerequisite	DENT 112, DENT 115	Units	2 Didactic

Course Outline:

This course is designed to ensure that dental student acquire sound knowledge in various integrated areas of Anatomy, Histology, Pathology, Microbiology, Biochemistry, Pharmacology and Physiological basis of the human body systems, and the most common health problems that has a direct or indirect relation to his practice as a dentist. These will include the General surgery, Ear Nose and throat, and Ophthalmology.

Course Learning Outcomes:

By the end of this course, student should be able to:

1. Recognize the normal anatomical, histological, biochemical and physiological basis of the skin, eye, ear, nose and throat.
2. Describe the pathogenesis, pathological and clinical presentation of the common surgical and dermatological problems, which have dental aspects in the different body systems
3. Memorize the relationship and the effects of various systemic diseases on the oral cavity.
4. Outline the common clinical and pathological presentations and management of oral mucosa health problems
5. Justify the different diagnostic procedures and plans of the health problems.
6. Recognize the common basic dermatological and surgical problems and concepts to their practical counterpart.
7. Outline effectively surgical problems by using proper medical and electronic technical tools.

Educational Materials:

1. PBL and TBL sessions.
2. Lectures

Assessment of students:

1. Summative Exams
   - MCQs

- Short essays

2. Discussion forums and tutor evaluation.

References:

1. Review of Medical Physiology, By Williams Ganong; 29th ed. 2015
2. Functional Histology, By Young and Heath; Churchil Livingstone. 7th ed.2015
3. Davidson's Principles and Practice of Medicine: Churchill Livingstone, 2015
4. Oxford manual of general surgery, 2015.
5. Current, diagnosis and treatment in E.N.T, 2015.
6. Oxford manual of dermatology, 2015.
7. Principles of ophthalmology, 2015.
8. Robins's pathology 11th ed.2015.
9. Basic microbiology. 7th edition, 2014.
10. Medscape General Surgery (internet search).

Course Specification: DENT 213 – Neuroscience			
Course Symbol	DENT 213	Year	2
Course Title	Neuroscience	Units	3 Didactic1 Practical
Prerequisite	DENT 113		

Course Outline:

This comprehensive, multidisciplinary course is dedicated to the understanding of the main functions of the nervous system, the principles of sensory and motor functions and to understand pain and its management. Instruction includes training in local anesthesia and nitrous oxide administration. Lecture topics include pain transmission, neurotransmitters, theories of pain perception, and treatment procedures for patients suffering from acute or chronic pain. Consideration is given to the use of drugs, biofeedback, hypnosis, and surgery for treatment of pain.

Course Learning Outcomes:

By the end of this course, student should be able to:

1. Recognize the normal anatomical, histological, biochemical and physiological basis of the nervous system.
2. Define the pathogenesis, pathological, clinical presentation, and managements of the common neurological problems and the impacts on dental science.
3. Memorize leadership responsibilities and ability to work independently and in groups.
4. Analyze the different diagnostic procedures and plans of the neurological problems.
5. Criticize the common basic local dental anesthetic approaches and problems and concepts to their practical counterpart.
6. Operate effectively in order to assess the major neurological problems by using proper medical and electronic technical tools.
7. Perform the basic clinical skills in eliciting neurological examination.
8. Demonstrate the different techniques for local dental/oral anesthesia.

Educational Methods:

1. PBL sessions.
2. Lectures.
3. Lab demonstrations.

Assessment of Students:

1. Summative Exams

- MCQs
- Short essays

2. Formative assessment.
   - OSPE
   - OSCE.
3. Discussion forums and tutor evaluation.

References:

1. Text Book of Medical Physiology, By Guyton & Hill; W B Saunders Co 2013
2. Functional Histology, Churchill Livingstone. 5th ed.,2014
3. Davidson's Principles and Practice of Medicine: Churchill Livingstone, 2014
4. Clinical Anatomy, Lippincott Williams and Wilkins; 12th edition, 2013.
5. Basic Histology, MacGrow Hill;13th edition, 2014.
6. Harper's Illustrated Biochemistry, MacGrowHil; 29th edition, 2014.
7. Brain's clinical neurology, Oxford Medical Publication, 11th edition, 2014.
8. Neuroscience. Purves et al; 7thedition 2013.
9. Handbook of local anesthesia, Stanley, F.; 9th edition, 2014.
10. Robins's pathology 9th ed.2014
11. Principles of Clinical Pharmacology, Second Edition Arthur J. Atkinson Jr., 2014
12. Oxford manual of basic medicine.

Course Specification: DENT 214 – Principles of Dental Sciences			
Course Symbol	DENT 214	Year	2
Course Title	Principles of Dental Sciences		
Prerequisite	DENT 114 , DENT 115	Units	5 Didactic1 Practical

Course Outline:

This course is designed to assist in the transition from the didactic and preclinical portion of the curriculum to the clinical phase, with the ultimate goal of developing competent dentists. Competent dentists demonstrate appropriate patient management skills, professionalism and integrity in the delivery of dental care, and critical thinking necessary for life-long learning.

The students are introduced to basic concepts of clinical patient care and are provided opportunities to observe and model future behaviors as they observe faculty and student dentists deliver appropriate care in a compassionate manner.

Epidemiology of dental caries and periodontal disease and their indices will be discussed in the block.

Course Learning Outcomes:

By the end of this course, student should be able to:

1. Identify Principles of pharmaceutical therapy in dentistry and topical drug application.
2. Describe the etiology and pathogenesis of dental caries, pulp diseases, gingival and periodontal diseases.
3. Recognize the epidemiology and measures of dental caries and periodontal diseases
4. Recognize the differential diagnosis of oral lesions to reach the final diagnosis
5. Differentiate between different materials used in dentistry.
6. Recognize dental radiographic, equipment, techniques and radiographic interpretation basics
7. Identify the general principles of intra and extra oral clinical examination and different intraoral radiographic techniques.

Educational Methods:

1. PBL sessions.
2. Lectures.
3. Lab demonstrations.

Assessment of Students:

1. Summative Exams
   - MCQs
   - Short essays
2. Discussion forums and tutor evaluation

References:

1. Pharmacology and Therapeutics for Dentistry. By Yagielia et al, 4th ed., 1998, by Mosby
2. Phillips' Science of Dental Materials. By Kenneth J. Anusavice, 11th ed., 2003, by Saunders.
3. Dental Radiography: Principles AND Techniques. By: Joen M. lannucci & Laura Jansen Howerton. 3rd ed., 2006, by Saunders.
4. Burket's Oral Medicine. By Martin Greenberg, Michael Glick, and Jonathan A. Ship. 11th ed., 2008, by pmph usa.
5. Oral Pathology: Clinical Pathologic Correlations. By Joseph A. Regezi, James J. Sciubba, and Richard C. K. Jordan, 5th ed., 2007, by Saunders.
6. Carranza's Clinical Periodontology. By Michael G. Newman, Henry Takei, Perry R. Klokkevold, Fermin A. Carranza. 10th ed., 2006, by Saunders.
7. Sturdevant's Art and Science of Operative Dentistry. By Theodore Roberson, Harold O. Heymann, Edward J. Swift. 5th ed., 2006, by Mosby.
8. Pathways of the Pulp. By Sephen C., 8th ed., 2002, by Mosby.

Course Specification: DENT 221 – Scientific Presentation Skills (2)			
Course Symbol	DENT 221	Year	2
Course Title	Scientific Presentation Skills (2)		
Prerequisite		Units	1 Practical

Course Outline:

In the field of dentistry, knowledge and technical skills are not the only prerequisites for good practice. An ability to communicate effectively, to use active listening, to gather and impart information effectively, and to demonstrate empathy, rapport, ethical awareness is crucial.

The aim of this course is improve skill and behavior that help the students to communicate more effectively, present with confidence and enhance personnel impact.

In this course, the students gain a comprehensive and proven set of skill that helps them to work effectively with colleagues and develop expertise.

Course Learning Outcomes:

By the end of this course, student should be able to:

1. Recognize the essential elements for writing and presenting the selected article.
2. Use software programs for designing and construction of scientific presentations.
3. Demonstrate various techniques of effective interpersonal skills during the presentation.
4. Present the articles orally with confidence using PowerPoint technology and other audio-visual aids.

Educational Methods:

1. Lectures
2. Self-directed learning.
3. Small group discussion.

Assessment of Students:

1. Rubrics
2. Direct observation of performance/behavior.
3. Oral presentations.

References:

1. Dennis C Tanner. An advanced Course in Communication Sciences. 2006
2. Gillam Ronald B, Marquardt Thomas P and Martin Fredrick. Communication Sciences and Disorders. Singular Publishing Group.USA. 2000

Course Specification: DENT 222 – Community Dentistry (2)			
Course Symbol	DENT 222	Year	2
Course Title	Community Dentistry (2)	Units	1 Didactic
Prerequisite			

Course Outline:

This course has been designed to introduce to undergraduates the basic concepts and methods of conducting research. The lectures will be supplemented by some practical exercises to enhance the ability of students to actually apply these concepts and methods.

Course Learning Outcomes:

By the end of this course, student should be able to:

1. Define Epidemiology and its uses for risk factors assessment
2. State sampling frame and sampling methods
3. Compare between experimental and non-experimental studies for study design.
4. Operate electronic database to search articles in scientific journals and websites.
5. Appraise a scientific paper to improve scientific report writing.

Educational Methods:

1. Lectures.
2. Group discussion.
3. Self-direct learning.

Assessment of Students:

1. Summative Exams
   - MCQs
   - Short essays
2. Individual and group presentations

Reference Books:

1. Dentistry, Dental Practice and the Community by Burt AB, Eklund SA. 6th Ed 2005, W. B. Saunders Company.
2. Community dentistry and oral epidemiology journal by Wiley
3. Epidemiology by Leon Gordis. 5th Ed 2014, W. B. Saunders Company.

Course Specification: DENT 223 – Community Dentistry (3)			
Course Symbol	DENT 223	Year	2
Course Title	Community Dentistry (3)		
Prerequisite		Units	1 Didactic

Course Outline:

The course has been designed to highlight the relevance of the basic concepts of biostatistics to oral epidemiology and dental research. It will include data coding, entry and analysis using SPSS (Statistical Package for Social Sciences).The course will facilitate students in acquiring skills of drawing inferences from data and of evaluating the statistics presented in scientific papers.

Course Learning Outcomes:

By the end of this course, student should be able to:

1. Describe biostatistics and summary statistics highlighting their importance in oral health care.
2. List indications and assumptions for the tests of significance.
3. Recognize the concepts and practical application of probability, normal distribution, confidence interval, relative risk and odds ratio and diagnostic accuracy of an index test.
4. Interpret the values of relative risk and odds ratio, specificity, positive predictive value, negative predictive value, false positive rate, false negative rate and diagnostic accuracy.
5. Interpret the test statistics, Kappa statistics, p-value and confidence intervals for different types of data.
6. Calculate the relative risk, odds ratio specificity, positive predictive value, negative predictive value, false positive rate, false negative rate and diagnostic accuracy.
7. Compute the summary statistics, test statistics, Kappa statistics, p-value and confidence intervals for different types of data using SPSS program.

Educational Methods:

1. Lectures.
2. Self-direct learning "SDL"
3. Class work and in class discussions.
4. Computer demonstration and practical exercises using dummy data and scenarios.

Assessment of Students:

1. Summative Exams
   - MCQs
   - Short essays.
2. Computer based simulation

Reference Books:

1. Biostatistics for Oral healthcare by Kim JS, Dailey RJ. 2008. Blackwell Munksgaard.
2. Bulman JS, Osborn JF. Statistics in dentistry 1989. British Dental Journal.
3. Kuzma JW: Basic statistics for the health sciences by. 5th Rev Ed Mayfield Publishing Company. 2005.

Course Specification: DENT 224–Emergency Medicine for Dental Students			
Course Symbol	DENT 224	Year	2
Course Title	Emergency Medicine for Dental Students		
Co-requisite	DENT 211	Units	1 Didactic1 Practical

Course Outline:

Life-threatening emergencies can occur anytime, anywhere and to anyone. Such situations are somewhat more likely to occur within the confines of the dental office due to the increased level of stress which is so often present.

In this course the areas which are considered vital to a proper understanding of Emergency Medicine will be discussed. This will include a discussion of a thorough review of the office emergency kit (medications and equipment), basic life support including CPR and air way management. Additionally, it will include the recognition and management of specific emergency situations that may be faced in the dental clinic like altered consciousness, acute chest pain, seizures, shock, hypertensive crisis, acute severe asthma, hypo and hyperglycemia and local anesthetic toxicity.

Course Learning Outcomes:

By the end of this course, student should be able to:

1. Identify medical problems that can faces the dentist in the dental clinics, causes and how to deal with these problems.
2. Explain situations which need rapid response and how to be ready to manage these cases as fast as he can.
3. Perform CPR, managing the airway and use the automated external Defibrillator AED.

Educational Methods:

1. Lectures
2. Assignments.
3. Simulation.

Evaluation of students:

1. Summative Exams
    - MCQs
    - Short essays

2. Formative Exams
    - OSPE.

References:

1. JP Wayatt, R.N. Illingrworth, C.E. Robertson, M.J. Clancy, P.T. Muunro. Oxford Handbook of Accident and Emergency Medicine. 2nd ed. 1998.
2. Emergency Medicine Recall. By: William A Woods, J. Scott Just and Jeffrey S. Young. 1st edition. 2000.
3. Lectures notes in Emergency Medicine. By Chris Moulton, David Yates.4th Edition

Course Specification: DENT 225 – Scientific Editing for Dental Periodicals			
Course Symbol	DENT 225	Year	2-5
Course Title	Scientific Editing for Dental Periodicals	Units	1 Didactic
Prerequisite			

Course Outline:

A critical aspect of the scientific process is the reporting of new research results in scientific journals in order to disseminate that information to the larger community of dentists. Communication of results contributes to the pool of knowledge within the discipline of dentistry and very often provides information that helps others interpret their own experimental results. Most journals accept papers for publication only after peer review by a group of scientists who work in the same field and who recommend the paper be published.

Scientific editing of dental periodicals course will provide students early with the basic principles needed to perform writing, editing, and reviewing of scientific publications. The students will also be expected and encouraged to demonstrate the maturity and judgment for research articles, as well as critical data evaluations that will increase the chances of publication.

Course Learning Outcomes:

By the end of this course, student should be able to:

1. Differentiate between the variable types of scientific publications including primary, secondary, tertiary, and grey literature.
2. Understand the components of each type of scientific publication, (e.g. title, abstract, introduction, review of literature).
3. Criticize dental periodicals.
4. Perform peer reviewing of scientific publications.
5. Write bibliography in a proper scientific way.
6. Using endnote for searching of references.

Educational Materials:

1. Didactic lectures.

Assessment of students:

1. Continuous assessment(MCQ).
2. Assignments.

References:

1. Thomas F. Babor, Kerstin Stenius, Susan Savva, Jean O'Reilly. Publishing Addiction Science: A Guide for the Perplexed. Multi-Science Publishing Co. Ltd.; 2nd Ed, 2009.
2. Mahmoud F. Fathalla. A Practical Guide for Health Researchers. WHO Regional Publications Eastern Mediterranean Series 30. 2004

Course Specification: DENT 226 – Alternative Dentistry			
Course Symbol	DENT 226	Year	2-5
Course Title	Alternative Dentistry	Units	1 Didactic
Prerequisite			

Course Outline:

This Alternative Dentistry course is an approach to Dentistry that promotes health and wellness instead of the treatment of disease. This approach to Dentistry encompasses both modern science and knowledge drawn from the world's great traditions on natural healing. It is sometimes called **"Biological"** dentistry or **"Biocompatible"** dentistry. Alternative Dentistry acknowledges and deals with the mind, body, and spirit of the patient, not just his or her "Teeth".

Course Learning Outcomes:

By the end of this course, student should be able to:

1. Know the Proper nutrition for the prevention and reversal of degenerative dental disease
2. Avoid and eliminate toxins from dental materials
3. Prevent and treat of dental malocclusion (bite problems=physical imbalance)
4. Prevent and treat gum disease at its biological basis
5. Understand the differences between the two primary medical philosophies being practiced today: allopathic (conventional) medicine, and natural medicine (also known as Alternative medicine, or complementary and alternative medicine (CAM)). The conventional allopathic system focuses on disease management, whereas the older, more established natural system focuses on treating the root cause(s) of disease in order to reestablish health.
6. Provide scientific bases for Alternative medicine such as: Allopathic and Homeopathic medicine, Acupuncture, Chelation and Oriental Medicine.

Educational Materials:

1. Didactic lectures

Assessment of students:

1. Continuous assessment(MCQ).
2. Assignments.

References:

1. Sandra Senzon: Reversing Gum Disease Naturally: A Holistic Home Care Program. Publisher: Wiley 2003

Course Specification: DENT 227 – Laboratory Techniques in Oral and Maxillofacial Pathology			
Course Symbol	DENT 227	Year	2-5
Course Title	Laboratory Techniques in Oral and Maxillofacial Pathology	Units	1 Didactic1 Practical
Prerequisite	DENT 115		

Course Outline:

This elective course will focus on the basic as well as the advanced laboratory techniques in the field of oral & maxillofacial pathology. Some techniques (Laser, Implants & Anutoradiography) will encourage students, dentists and oral surgeons to conduct research on human as well as on experimental animal models, and to use computer programs to analyze the microscopic findings in diagnosis and research. In addition, this course will shed a light on the methods of protection against infection, physical, chemical, biological and irradiation hazards in the dental clinics and the laboratory.

Course Learning Outcomes:

By the end of this course, student should be able to:

1. Understand the biological alterations at the cellular and tissue level from the starting of obtaining the surgical biopsy / smear from the patient.
2. Preserve the biopsy / oral cytological smears in special chemicals
3. Conventional preparation of soft tissue, teeth ,bone and smears for light microscopic examination
4. Histochemical preparation of soft tissue, bone and smears for cryostat and paraffin sections.
5. Immunohistochemical preparation of sections by using specific markers (tumor markers) for both electron microscope (Transmission & Scanning) and light microscope.
6. Autoradiographic technique for studying and monitoring the isotopes in soft/ hard tissues for the purpose of diagnosis & research
7. Correlate the clinical and the microscopic data in order to establish an accurate diagnosis.
8. Careful handling of the oral lesions for fear of infection and contamination from hazard materials at the clinics.

Educational Methods:

1. Lectures
2. Practical sessions

Assessment of Students:

1. Continuous assessment (MCQ).
2. Final exam (MCQ & SEQ).

References:

1. Oral Pathology: Clinical/pathologic Correlation by Regezi and Sciubba, 2007
2. Bancroft J, Gamble M.: Theoryand practice of histological techniques (Immunocytochemistry). 2002.

Course Specification: DENT 231 – Dental Skills (2)			
Course Symbol	DENT 231	Year	2
Course Title	Dental skills (2)		
Prerequisite	DENT 131	Units	2 Didactic3 Practical

Course outline:

This course will introduce the students to the field of operative dentistry and periodontology. The course will stress on maintaining the required hand skills regarding grasping techniques of the hand-piece, cavity preparation, filling materials and techniques.

The simulation of the human head will allow the student to apply these procedures clinically on the patients.

Course Learning Outcomes:

By the end of this course, student should be able to:

1. Recognize the basic knowledge and concepts of operative dentistry techniques, equipment and instrumentation.
2. Recognize the basic knowledge and concepts of periodontology techniques, and instrumentation.
3. Outline the materials used in operative dentistry, and their techniques.
4. Perform scaling and root planning on artificial teeth.
5. Perform different Classes of cavity preparation on artificial teeth inside the phantom head.
6. Use of various restorative materials to restore cavities.

Educational Materials:

1. Lectures
2. Lab demonstrations.
3. Simulations.

Assessment of Students:

1. Summative Exams
   - MCQs
   - Short essays
2. Formative assessment.

- OSPE

3. Self-evaluations.
4. Laboratory and clinical requirements
5. Practical Exams

References:

1. Sturtevant's Art and Science of Operative Dentistry, Theodore M. Roberson, Harold O. Heymann and Edward J. Swift 6th edition
2. Carranza's Clinical Periodontology By Michael G. Newman, Henry H. Takei, Fermín A. Carranza, Perry R. Klokkevold. 11th Edition
3. Atlas of Operative Dentistry, preclinical and clinical procedures Joseph R. Evans, John H. Wetz and Roy A. Wilko Quintessence publishing Co, Inc. USA.
4. Fundamentals of Operative dentistry, by Jammes B Summit, Richard s Shwartz
5. Preclinical manual of conservative dentistry.

Course Specification: DENT 232 – Photography in Dentistry			
Course Symbol	DENT 232	Year	2-5
Course Title	Photography In Dentistry		
Prerequisite		Units	1 Practical

Course Outline:

The purpose of this course is to introduce the dental students to basic concepts of dental photography. Clinical photography has its greatest applications as a record-keeping system and as an aid in conveying information. The slide projection of clinical materials is an indispensable tool for use in self-evaluation, patient education, and effective communication with colleagues. The documentation of patient management is a permanent record used not only by the resident during his training but also by the faculty on all levels of education. The use of photography as photo "magic" for calming the fearful child, and as dental newsletters and publications will be discussed.

Course Outcomes:

By the end of this course, student should be able to:

1. Understand Why digital photography? Advantages of digital over 35-mm.
2. know Digital camera systems suitable for intra and extra-oral use
3. Selecting the appropriate macro lens for intra-oral use
4. Describe several methods for the taking of intra and extra-oral images and the use of mirrors, cheek retractors etc.
5. Describe the uses of digital images in tooth shade selection and recording
6. Describe other uses for dental photography such as wall hanging, patient and staff gifts, and as record keeping.
7. Demonstrate digital imaging for face contour and profiles, as well as to aid in full occlusal analysis and communication with patients.
8. Take necessary precautions in taking intraoral photography

Educational Materials:

1. Workshops.

Evaluation of students:

1. Continuous assessment (MCQ)
2. Assignments.

3. Final Exam (MCQ & SEQ)

References:

1. Irfan Ahmad: Digital and Conventional Dental Photography: A Practical Clinical Manual. 2004.
2. Cary Behle: Portrait Photography for the Dentist, Journal of the California Dental Association. 2001-2002

Course Specification: DENT 311 – Introduction to Dental Practice			
Course Symbol	DENT 311	Year	3
Course Title	Introduction to Dental Practice		
Prerequisite	DENT 214 , DENT 231	Units	1 Didactic1 Practical
Co-requisite	DENT 323, DENT 341		

Course outline:

This course is designed to ensure that the student acquired sound knowledge in various integrated areas of diagnosis and filling system, operative dentistry, periodontics, infection control, handling instruments and local anesthesia before real patient clinical work.

Some of these areas had been covered previously and needs to be integrated together.

Course Learning Outcomes:

By the end of this course, student should be able to:

1. Recognize comprehensive dental pharmaceutical treatment, correct prescription writing and drug action and interactions relevant to therapeutic agents that may be encountered in dental practice.
2. Describe the role of dental auxiliaries, utilities, in order to have better basic knowledge of stake holders involved in dentistry.
3. Understand treatment planning in operative dentistry with emphasis on clinical cariology in order to have understanding of sequence of treatment and clinical implications of caries.
4. Recognize the techniques of plaque control and periodontal treatment planning to understand periodontal diseases, its causes, effects and management and treatment planning.
5. Outline infection control principles and methods in order to practice standard of care during working in dental clinics
6. Analyze the uses of Extra-oral, panoramic and the Digital radiography in order to interpret the findings along with normal anatomical landmarks.
7. Employ isolation in operative dentistry in phantom lab with special emphasis on rubber dam technique to have firm grasp about isolation in operating field for cavity preparation and restoration.
8. Apply local anesthesia techniques in simulation lab in order to master the skill for

accurate local anesthesia application by various methods.

Educational Methods:

1. Lectures.
2. Lab demonstrations.
3. Group discussion.
4. Small group work

Assessment:

1. Summative Exams
   - MCQs
   - Short essays
2. Formative assessment.
   - OSPE
3. Practical Exams

References:

1. Michael G. Newman D, Henry Takei, DDS, MS, Perry R. Klokkevold, DDS, MS and Fermin A. Carranza, Dr. ODONT. Carranza's Clinical Periodontology. 12th ed: Expert Consult; 2015. 904 p.
2. Jan Lindhe NPL. Clinical Periodontology and Implant Dentistry. 6th ed: Wiley-Blackwell; June 2015. 1480 p.
3. Wolf HE. Color Atlas of Dental Medicine: Periodontology. 3rd revised and expanded edition (2004) ed: Thieme; 2004.
4. Kohn WG, Collins AS, Cleveland JL, Harte JA, Eklund KJ, Malvitz DM, et al. Guidelines for infection control in dental health-care settings--2003. MMWR Recomm Rep. 2003;52(RR-17):1-61.
5. Frieda A Pickett RDH M, Géza T Terézhalmy DDS, MA. Lippincott Williams & Wilkins' Dental Drug Reference. Second ed: LWW; March 19, 2009.
6. Frieda Pickett RDH M, Frieda A Pickett RDH, MS, Géza T Terézhalmy DDS, MA, GezaTerezhalmy DDS, MA. Basic Principles of Pharmacology with Dental Hygiene Applications: LWW; November 7, 2010.
7. Arthur H. Jeske D, PhD. Dental Drug Reference: Mosby; 2014.
8. Malamed SF. Handbook of Local Anesthesia: Mosby; 21st March 2012. 432 p.
9. Stuart C. White PaMJP, DDS. Oral Radiology Principles and Interpretation: Mosby; 2014. 696 p.
10. Joen M. Iannucci DDS, MS, Laura Jansen Howerton, RDH, MS. Dental Radiography principles and techniques: Saunders; 2017. 480 p.

11. Eric Whaites. Essentials of Dental Radiography and Radiology. 5th ed: Churchill Livingstone; 20 June 2013. 448 p.
12. Harald O. Heymann DDS, MEd, Edward J. Swift, Jr. , DMD, MS and Andre V. Ritter, DDS, MS. Sturdevant's Art and Science of Operative Dentistry. 6th ed: Mosby; 2013.
13. Steven L. Bricker DDS MS, Robert P. Langlais DDS, MS, FACD, Craig S. Miller DDS. Oral Diagnosis, Oral Medicine and Treatment Planning. 2nd ed: pmphusa; 2001. 600 p.
14. Warren Birnbaum BDS FDS RCS, Stephen M. Dunne BDS FDS RCS PhD. Oral Diagnosis: The Clinician's Guide: Butterworth-Heinemann; 2000. 320 p.
15. Prabhu SR. Textbook of Oral Diagnosis: OUP India; 2007. 288 p.

Course Specification: DENT 312 – Restorative 1			
Course Symbol	DENT 312	Year	3
Course Title	Restorative 1		
Co-requisite	DENT 313, DENT 331	Units	5 Didactic

Course outline:

Dental restorative dentistry is among the most important branches of dentistry. The Restorative 1 course is didactic course. This course is intended to provide information to the students about the followed steps for patients asking a prosthetic treatment, starting from diagnosis up to preprosthetic preparation prior receiving final impression.

Epidemiology of dental caries and periodontal disease and their indices will be discussed in the block.

Course Learning Outcomes:

By the end of this course, student should be able to:

1. Recognize the clinical workflow from patient examination and Diagnostic steps to master impression making for patient seeking dental prosthesis
2. Describe the pathology, treatments, and outcomes of periodontal diseases, pulpal-related pathology, and oral pathological lesions.
3. Outline clinical techniques, material selection and failures managements for direct restorations of single tooth.
4. Summarize the proper PDI indices and its criteria for evaluation of dental conditions.
5. Plan a suitable treatment protocol and a suitable prosthesis design for each prosthetic case
6. Demonstrate the differential diagnose different periodontal problems, endodontic problems and oral pathological lesions
7. Demonstrate leadership responsibilities and ability to work independently and in groups.

Educational Methods:

1. PBL & TBL sessions.
2. Lectures

Assessment of Students:

1. Summative Exams

- MCQs

2. Short essays
3. Discussion forums and tutor evaluation.

References:

1. Hassaballa M.A, Talic Y.A. principles of complete denture prosthodontics. KSU, 1st ed, 2004.
2. Zarb G.A, Bolender C.L, Carlsson G.E. Boucher's prosthodontic treatment for edentulous patients. CV mosby co., St. Louis, 11th edition, 1997
3. Glen P. McGivney, Alan B. Carr, William L McCracken: McCracken's Removable Partial Prosthodontics, 10th Edition. Mosby Book, 2005.
4. Herbert T. Shillingburg,Sumiya Hobo, Lowell D. Whitsett , Richard Jacobi, Susan E. Brackett: Fundamentals of Fixed Prosthodontics. Quintessence Publishing (IL); 3rd edition, 2006.
5. Rosenstiel et al: Contemporary Fixed Prosthodontic., 3rd ed., Mosby, Inc.
6. Craige, G.R., C.V: Restorative Dental Material. Mosby, 11th ed.
7. Phillips' Science of Dental Materials, Anusavice-11th edition, Saunders, Elsevier Science 2003.
8. Newman M.G., Takei A.H., Carranza F.A.: Carranza's Clinical Periodontology. 10th Edition 2006.
9. Lindhe J, Lang NP, Karring T: Clinical Periodontology and Implant Dentistry. Fifth Edition.2008.
10. Wolf HE edited: Color Atlas of Dental Medicine: Periodontology. Georg Thieme Verlag. 2005. 3rd edition
11. Martin S, Michael G. Burket's Oral Medicine Diagnosis & Treatment.11th edition.2008
12. Theodore Roberson, Harald O. Heymann, Edward J. Swift, Jr. Sturdevant's. Art and Science of Operative Dentistry: Mosby; 5th edition, 2006.
13. Stephen Cohen and Burns, R. C: Pathways of the pulp. 9th edition, Mosby, 2002.
14. Dentistry, Dental Practice, and the Community by Burt AB, Eklund SA. 6th Ed 2005. W. B. Saunders Company.

Course Specification: DENT 313 – Restorative 2			
Course Symbol	DENT 313	Year	3
Course Title	Restorative 2		
Co-requisite	DENT 312, DENT 331	Units	6 Didactic

Course outline:

Restorative 2 is a didactic course which is proposed to expose the students to the modalities of the preparation & construction of the various restorations including operative dentistry, endodontics, fixed & removable prosthodontic restorations.

The presented course will introduce the student to the didactic background of the restorative treatment for dental patients; the management of these patients will be presented to the student. The course will stress on how the way of handling of the patient is very important for the clinical success of dental restorations.

Course Learning Outcomes:

By the end of this course, student should be able to:

1. Describe the fundamentals basic materials and techniques in construction of prosthodontics and restorative dentistry.
2. Recognize chemotherapeutic treatment of endodontic and periodontal diseases.
3. Describe most common complaints occurred after restorations and how to manage them.
4. Describe oral lesions and its effect in prognosis of Prosthetic restorations.

Educational Methods:

1. PBL & TBL sessions.
2. Lectures.

Assessment of Students:

1. Summative Exams
   - MCQs
   - Short essays
2. Discussion forums and tutor evaluation

References:

1. Hassaballa M.A: clinical complete denture prosthodontics. KSU, 1st ed, 2004.

2. Newman M.G, Takei H.H, Klokkevolv P.R : Carranza F.A: Carranza's Clinical Periodontology : Saunders Elsevier, 10th ed, 2006
3. Sturdevant,S & Edil Roberson Art & science of operative dentistry : Mosby 4th ed , 2002
4. Sephen, C: Pathways of the pulp : Mosby 8th ed , 2002.
5. Peterson, L.J. contemporary oral and maxillofacial surgery, 4th ed. Amsterdam;Elsevier Science, 2002.
6. Joseph A. Regezi, James J. Sciubba, and Richard C. K. Jordan: Clinical Pathologic Correlations, Latest ed., Saunders Company
7. Joseph A. Regezi, James J. Sciubba, and M. Anthony Pogrel: Atlas of Oral and Maxillofacial Pathology, Latest ed.
8. H. T. shallingburg, et al: Fundamentals of tooth preparations., 3rd ed. Quintessence Publishing. Co, Inc.
9. Rosensteal SF., Land MF., Fujimoto J. Contemporary Fixed Prosthodontics. 4th eds. Mosby 2006.
10. Craige, G.R., : Restorative Dental material. C.V. Mosby, 11th ed,2006.
11. Daniel stites McGraw-Hill/Appleton & Lange; : Medical immunology. 10th edition March 23, 2001 .
12. Martin Greenberg , Michael Glick , Jonathan A. Ship: Burket's Oral Medicine, 11th ed. February 1, 2008.
13. Carr AB. Mc Givney GP. Brown DT, Mc Cracken`s : Removable Partial Denture, Elsevier Mosby 11th edition 2005.
14. George A. Zarb et al.: Prosthodontic Treatment for Edentulous Patients: Complete Dentures and Implant-Supported Prostheses. Mosby; 12th edition (2003).
15. Davenport J.C. et al: A Clinical Guide to Removable Partial Dentures. B D J; 2nd edition (2000).
16. Phoenix R.D., Cagna D.R. and Defreest C.F. : Stewart's Clinical Removable Partial Prosthodontics. Quintessence Publishing (IL); 4th edition (2008).

Course Specification: DENT 321 – Scientific Presentation Skills (3)			
Course Symbol	DENT 321	Year	3
Course Title	Scientific presentation skills (3)		
Prerequisite		Units	1 Practical

Course Outline:

In the field of dentistry, knowledge and technical skills are not the only prerequisites for good practice. An ability to communicate effectively, to use active listening, to gather and impart information effectively, and to demonstrate empathy, rapport, ethical awareness is crucial.

The aim of this course is improve skill and behavior that help the students to communicate more effectively, present with confidence and enhance personnel impact.

In this course, the students gain a comprehensive and proven set of skill that helps them to work effectively with colleagues and develop expertise.

Course Learning Outcomes:

By the end of this course, student should be able to:

1. Plan the essential elements of formulating scientific research built on problem-solving.
2. Use software programs for designing and construction of research projects and scientific presentations.
3. Demonstrate various techniques of effective interpersonal skills during the presentation.
4. Develop new skill and behavior for more effective communication with self-confidence in oral presentations.
5. Present the research project confidently using PowerPoint technology and other audio-visual aids.

Educational Methods:

1. Lectures.
2. Self-direct learning.
3. Group discussion.

Assessment of Students:

1. Individual presentation.
2. Rubrics.

3. Direct observation of performance/behaviour

References:

1. Carter M. Designing Science Presentations, 1st ed. St. Louis, MO: Mosby/Elsevier; 2012.
2. Medical writing: a guide for clinicians, educators, and researchers /Robert B. Taylor. New York: Springer, c2011.
3. How to write a paper /edited by George M. Hall? Malden, Mass: BMJ Books/Blackwell Pub., c2008. 4th ed. Gerstein Science.
4. Successful scientific writing: a step-by-step guide for the biological and medical sciences / Janice R. Matthews, Robert W. Matthews. Cambridge: Cambridge University Press, 2014. Fourth edition.
5. How to write, publish, & present in the health sciences: a guide for clinicians & laboratory researchers /Thomas A. Lang. Philadelphia: American College of Physicians, c2009

Course Specification: DENT 322 – Community Dentistry (4)			
Course Symbol	DENT 322	Year	3
Course Title	Community Dentistry (4)		
Prerequisite		Units	1 Didactic

Course Outline:

The preventive dentistry course introduces the students to the philosophy and methods of prevention of oral diseases that can be applied on an individual level and on a mass scale. The course emphasizes upon an understanding of the scientific basis of preventive measures and their rational use considering the patient's and community need as well as relative effectiveness and efficacy of these measures. During the course the students learn and practice different techniques involved in the application of preventive agents used in dental practice and community dental care.

Course Learning Outcomes:

By the end of this course, student should be able to:

1. Recognize different levels of prevention
2. Describe the role of fluoride in dental health and recognize various causes, risk factors and indices of fluorosis.
3. Explain the use of fissure sealants and professionally applied topical fluorides in caries prevention.
4. Recognize different methods of progressive caries treatment (PRR & ART).
5. Recognize major strategies of prevention for dental caries and risk assessment.
6. Explain methods of systemic fluoride application and differentiate between methods of application of systemic and topical fluoride.

Educational Methods:

1. Lectures.
2. Videos.
3. Self-direct learning.
4. Debates.

Assessment of Students:

1. Summative Exams
    - MCQs

- Short essays.

2. Individual and group presentations

References:

1. Dentistry, Dental Practice and the Community by Burt AB, Eklund SA. 7th Ed 2020, W. B. Saunders Company.
2. Primary preventive dentistry by Harris NO, Christen AG. 6th ED 2007
3. Community Dentistry & Oral Epidemiology Journal.
4. Journal of Public Health Dentistry.

Course Specification: DENT 323 –Ethics in Dentistry			
Course Symbol	DENT 323	Year	3
Course Title	Ethics in Dentistry		
Co-requisite	DENT 311 , DENT 341	Units	1 Didactic

Course Outline:

The Ethics in Dentistry provides an introduction to the importance of the doctor-patient relationship and to the process of ethical decision-making. The topics of informed consent, assessment of patient competence, truth telling, confidentiality, and end-of-life decisions are examined in several clinical contexts such as acute care, pediatrics, geriatrics, and rehabilitation medicine.

The Ethics in Dentistry provides is central to the practice of dentistry and is essential for the delivery of high-quality health care in the diagnosis and treatment of disease. A patient must have confidence in the competence of their dentist and must feel that they can confide in him or her. For most dentists, the establishment of good rapport with a patient is important. The doctor- patient relationship forms one of the foundations of contemporary medical ethics. Most dental schools and universities teach dental students from the beginning, even before they start clinics, to maintain a professional rapport with patients, uphold patients' dignity, and respect their privacy.

Course Learning Outcomes:

By the end of this course, student should be able to:

1. State the characteristics of the ethics in Dentistry.
2. Outline the duties towards the community, hem/herself and the profession
3. Recognize the patients and colleagues' rights and duties.
4. Describe the Islamic medical and Dental Jurisprudence.
5. Recognize the ethical principles of conducting a biomedical research.
6. Judge the different Ethical Dilemmas in Dentistry.
7. Explain the Medico legal Issues in dental practice.
8. Analyze the Medical Errors and Liability.

Educational Methods:

1. Lectures.

Assessment of students:

1. Summative Exams
   - MCQs
   - Short essays.

References:

1. Code of Ethics of Health Care Practitioners, The Saudi Commission for Health Specialties, 3rd Edition, 1434 H.
2. Ethics Handbook for Dentists, American College of Dentists, 2013.
3. Islamic Medical Jurisprudences Handbook, Imam Mohamed Bin Saud Islamic University , 2010.
4. Jonathan Silvermann and Julie Draper: Skills for Communication with Patients. Radcliffe Medical press. 2nd edition, 2005.
5. Medical Legalization in Saudi Arabia , 1426 H.

Course Specification: DENT 324 – Management of Occupational Hazards			
Course Symbol	DENT 324	Year	3-5
Course Title	Management of Occupational Hazards		
Prerequisite		Units	1 Didactic

Course Outline:

Dentists, as well as dental personnel, are constantly exposed to a number of specific occupational hazards. These cause the appearance of various ailments, specific to the profession, which develop and intensify with years. Musculo–skeletal pain is the frequent complaint of dental personnel and is more frequently in the cervical area (neck and shoulders) with a significant association between the number of working hours per week and musculo–skeletal pain in all locations (back, upper limb, lower limb).

This didactic course is designed to teach the students how to avoid these professional hazards by applying specialized physical exercises.

Course Learning Outcomes:

By the end of this course, student should be able to:

1. Recognize the specific hazards of the profession.
2. Understand the importance of physical exercises to avoid the occupational hazards.
3. Know how to perform the physical exercises to maintain the health of the musculo–skeletal and nervous systems.

Educational Methods:

1. Lectures.

Assessment of Students:

1. Continuous assessment (MCQ).
2. Assignments.
3. Final exam (MCQ & SEQ).

References:

1. Vilberto Stocchi, Pierpaolo De Feo, and David A. Hood: Role of Physical Exercise in Preventing Disease and Improving the Quality of Life. Amazon Co. 2007
2. Susan B. O'Sullivan and Thomas J. Schmitz: Physical Rehabilitation. Amazon Co.5th ed. 2006.

Course Specification: DENT 325 – Nanodentistry			
Course Symbol	DENT 325	Year	3-5
Course Title	Nanodentistry		
Prerequisite		Units	1 Didactic

Course Outline:

Nanotechnology will have future medical applications leading to the emergence of nanomedicine and nanodentistry. Nanodentistry will make it possible to maintain a near perfect oral health through the use of nanomaterials, biotechnology, including tissue engineering and nanorobotics. The nanorobotic functions may be controlled by an onboard nanocomputer that executes preprogrammed instructions in response to local sensor stimuli.

The outline of this course is to familiarize the students with the current and prospective applications of nanotechnology in Dentistry.

Course Learning Outcomes:

By the end of this course, student should be able to:

1. Define Nanotechnology, Nanomedicine and Nanodentistry.
2. Mention the history of Nanodentistry.
3. Recognise the nanostructures for dental applications like nanorods, nanospheres, nanofibers and nanotubes.
4. Recognise the basic knowledge of dental materials at the molecular level.
5. Identify the uses of nanotechnology in Restorative Dentistry including nanocomposites.
6. Recognize the treatment opportunities in Nanodentistry including tooth repair, tooth reneutralization and hypersensitivity cure.
7. Identify the role of nanorobotic dentifrice (dentifrobots) as an oral preventive measure.
8. Understand the clinical applications of Nanotechnology in Cosmetics Dentistry.

Educational Materials:

1. Lectures.

Assessment of students:

1. Continuous assessment (MCQ).
2. Assignments (MCQ & SEQ).

References:

1. Charles P. Poole and Frank J Owens: Introduction to Nanotechnology; A John Willey and Sons Inc. Publication. 2003.
2. Saunders A: Current practicality of nanotechnology in Dentistry. Part I: Focus on nanocomposite restoratives and biomemetics. J Clin Cosm Invest Dent 2009: 1.
3. Freites A :Nanodentistry. J Am Dent Assoc, Vol 131, No 11, 1559-1565.

Course Specification: DENT 326 – Comparative Dentistry			
Course Symbol	DENT 326	Year	3-5
Course Title	Comparative Dentistry		
Prerequisite		Units	1 Didactic

Course Outline:

This course is designed to provide the dental student with knowledge regarding the experimental animals which can be used in dental research, how to choose the animal and how to deal with them during surgery.

Course Learning Outcomes:

By the end of this course, student should be able to:

1. Understand the primate dentition: introduction to the tooth of nonhuman primates.
2. Know the similarity between the anatomy of human and different animals (tooth, TMJ, alveolar bone).
3. Explain how to handle the experimental animals during surgery.
4. Describe how to care with the animal pre- and postoperative.

Educational Methods:

1. Lectures.

Assessment of students:

1. Continuous assessment (MCQ)
2. Assignments (MCQ & SEQ).

References:

1. A Manual of Dental Anatomy, Human and Comparative. By: Tomes Charles. 2010

Course Specification: DENT 327 – The Art of Dental Therapeutics			
Course Symbol	DENT 327	Year	3-5
Course Title	The art of Dental Therapeutics		
Prerequisite		Units	2 Didactic

Course Outline:

The purpose of this course is to review selected pharmacologic areas with potential clinical relevance in the practice of dentistry. The application of important pharmacologic concepts to therapeutic prescribing decisions will be discussed. Students will improve their general knowledge concerning the medications that they may prescribe, and those drugs known taken by their patients. Drug specific topics will include mechanism of action, indication, dosing, drug interactions and prescribing concerns for dental patients. This course will also provide updates on analgesic and antibiotic selection and therapy, Over the Counter (OTC) drugs and their implications in dental practice,, pain and anxiety control and last trends in pharmacologic research.

Course Learning Outcomes:

By the end of this course, student should be able to:

1. Discuss the principles of pharmacokinetics, pharmacodynamics and pharmacogenomics.
2. Learn the range of products and treatments for patients with dry mouth.
3. Learn about the range of “alternative” or “natural” oral health care products available to treat oral disease.
4. Describe the potential for drug-drug interactions and articulate strategies to avoid or manage them.
5. Recognize reputable databases and references and how to utilize these tools to evaluate drug therapies and interactions.
6. Describe the mechanism of action of popular pain medications and understand why some drugs work and some don’t for postoperative dental pain.
7. Understand the principles of appropriate antibiotic prescribing.
8. Describe the medications used for safe and effective minimal and moderate sedation using oral and inhalational techniques.

Educational Methods:

1. Lectures

Assessment of Students:

1. Continuous assessment (MCQ).
2. Assignments (MCQ & SEQ)

References:

1. J. A. YAGIELA, E. A. NEIDLE. Pharmacolgy and Therapeutics for Dentistry. 2004. MOSBY (London). 5th Edition.
2. Gage & Picket, Dental Drug Reference, 2001. MOSBY (Tenessee). 6th Edition.

Course Specification: DENT 328 – Dental Technology			
Course Symbol	DENT 328	Year	3-5
Course Title	Dental Technology	Units	2 Practical
Prerequisite	DENT 214		

Course Outline:

This is an introductory course that is suitable for dental students, dental assisting, and other dental health occupations.

The course emphasizes the knowledge of dental students about how to fabricate dental restorations, prostheses and appliances to a high standard of precision.

The course includes: Introductory techniques, Applied Dental Materials, Dental Anatomy & Physiology, Steps of fabricating Removable Complete & Partial Dentures, Cast Restorations, Removable Orthodontics, Ceramic Restorations, Bonded Restorations, Fixed and Functional Orthodontics, Advanced Dental Assignments, and Maxillofacial Prosthodontic appliances such as obturators.

During the last part of the course, the student will undertake periods of work placements normally at the dental clinics of Qassim University. The placement periods will enable him to gain the necessary experience in producing appliances, restorations and prostheses for patients.

Course Learning Outcomes:

By the end of this course, student should be able to:

1. Recognize different types of equipment of dental labs and understand the new and developing areas of dental technology.
2. Enhance relationships within the Dental Team.
3. Define steps of fabrication of different types of dental restorations, prostheses and appliances to a high standard of precision.
4. Define different technical errors and how to avoid them.
5. Gain the necessary experience in work placements.

Educational Methods:

1. Lab sessions.

Assessment of Students:

1. Continuous assessment (MCQ).
2. Final Examination (MCQ & SEQ)

References:

1. Sillas J, Durate, Phark: Quintessence of Dental Technology. Quintessence. 1st edition. 2010.

Course Specification: DENT 329 – Dental Informatics			
Course Symbol	DENT 329	Year	3-5
Course Title	Dental Informatics	Units	1 Didactic
Prerequisite			

Course Outline:

Dental informatics is the application of computer and information sciences to improve dental practice, research, education, and management; it is a relatively new field with significant potential for supporting dentistry's many facets.

This course has two primary objectives. The first one is will introduce students to basics of computers and the most common computer applications. Basic computer skills will help students use computer-aided instruction software in the basic sciences. The skills acquired through this course will be immediately useful in other parts of the curriculum.

The second course, "Dental Informatics," concentrates on using computers in the dental office and should be offered in the junior or senior year. Topics include components and functions of practice management programs; computer based oral health records, digital imaging, and buying and managing computer systems.

So participants will begin with conceiving an informatics course, continue to the development of a full course proposal, and explore implementation and evaluation issues.

Course Learning Outcomes:

By the end of this course, student should be able to:

1. Understand the basic components of computer systems, and be able to describe how hardware and software combine into functional systems
2. Operate computers using state-of-the-art operating systems, and perform routine tasks associated with computer use, such as data backup and information organization and management
3. Describe functions in practice management that can be supported by computer technology, and select and use appropriate computer applications to perform these functions
4. Evaluate practice management systems comparatively and develop a complete budget for computer systems purchases
5. Use network-based information resources to support clinical practice, continued education, and communication with colleagues and other members of the healthcare team
6. Use information from practice management systems to perform quality assurance, cost

analysis, and resource allocation in dental practice

7. Identify areas suitable for decision support, research available applications, and select and use them
8. Design and evaluate educational assessment methods

Educational Methods:

1. Lectures.

Assessment of Students:

1. Continuous assessment (MCQ).
2. Final Examination (MCQ & SEQ).

References:

1. Dental Informatics: Integrating Technology into the Dental Environment, L. M. Abbey, J. Zimmerman.1992, Springer-Verlag, New York.
2. Dental Informatics: Strategic Issues for the Dental Profession by J. J. Salley , O. Rienhoff, J. L. Zimmerman , D. A. Lindberg , M. J. Ball 1991, Springer-Verlag, New York.

Course Specification: DENT 331 – Dental Skills (3)			
Course Symbol	DENT 331	Year	3
Course Title	Dental skills (3)	Units	4 Didactic7 Practical
Prerequisite	DENT 231		
Co-requisite	DENT 312 , DENT 313		

Course outline:

Dental Skill (3) is a preclinical course designed to familiarize the students with the theoretical and technical laboratory procedure which are required during treatment of patient who will receive removable prosthesis.

Regarding preclinical endodontic, the course will introduce the student, under simulated clinical conditions, to the skills necessary to perform successful root canal treatment of teeth.

Concerning preclinical operative dentistry, the students will gain knowledge and practice, under simulated clinical conditions, necessary for pin and post retained non-cast restorations.

Also, the course will introduce the students to the field of designs of cavity and tooth preparations for cast restorations.

Concerning fixed prosthodontics, the student will learn in the preclinical simulator to perform all types of preparation and the steps for performing crowns and bridges.

Course learning Outcomes:

By the end of this course, student should be able to:

1. Recognize different material types, and techniques used during constructing metallic and non- metallic part of dental prosthesis in order to fabricate accurate prosthesis.
2. Outline the anatomical nomenclature and variations of all teeth in the oral cavity and instruments required for their preparation.
3. Describe several steps of teeth preparation in order to modify abutment teeth
4. Describe different techniques in fabrication of all- ceramic restorations in order to fabricate flawless restorations.
5. Plan appropriate design for RPD framework in order to construct sufficient wax pattern.
6. Plan appropriate bridge design for fixed restorations in order to fulfill requirements for a successful bridge.

7. Perform different techniques used during constructing metallic and non-metallic part of dental prosthesis in order to fabricate accurate prosthesis.
8. Perform the technical aspects of root canal treatment based on biologic principals.

Educational Methods:

1. Lecture.
2. Videos and animations.
3. Assignment.
4. Group discussion.
5. Case studies.
6. Clinical demonstrations Lab sessions
7. Videos and tutorials presentations
8. Hands-on student learning activities

Assessment of Students:

1. Summative Exams
   - MCQs
   - Short essays.
2. Laboratory and clinical requirements.
3. Practical Exams.
   - OSPE

References:

1. Hassaballa M.A, Talic Y.A. principles of complete denture prosthodontics. KSU, 1st ed, 2004.
2. Sephen, C: Pathways of the pulp : Mosby 8th ed , 2002.
3. H. T. shallingburg, et al : Fundamentals of tooth preparations., 3rd ed. Quintessence Publishing. Co, Inc.
4. Carr AB. Mc Givney GP. Brown DT, Mc Cracken`s : Removable Partial Denture, Elsevier Mosby 11th edition 2005.
5. Hassaballa M.A, Talic Y.A. principles of complete denture prosthodontics. KSU, 1st ed, 2004.
6. Sephen, C: Pathways of the pulp : Mosby 8th ed , 2002.
7. H. T. shallingburg, et al : Fundamentals of tooth preparations., 3rd ed. Quintessence Publishing. Co, Inc.
8. Carr AB. Mc Givney GP. Brown DT, Mc Cracken`s : Removable Partial Denture, Elsevier Mosby 11th edition 2005.

9. George A. Zarb et al.: Prosthodontic Treatment for Edentulous Patients: Complete Dentures and Implant-Supported Prostheses. Mosby; 12th edition (2003).
10. Phoenix R.D., Cagna D.R. and Defreest C.F. : Stewart's Clinical Removable Partial Prosthodontics. Quintessence Publishing (IL); 4th edition (2008).

Course Specification: DENT 332 – Principles of Dental Equipment Maintenance			
Course Symbol	DENT 332	Year	3-5
Course Title	Principle of Dental Equipment Maintenance	Units	1 Practical
Prerequisite			

Course Outline:

In this course, the student gains knowledge of the principle of dental equipment maintenance, and learn some fundamental techniques and tricks used to optimize preventive maintenance programs in dental field. This is mainly achieved through recognition the major components of each piece, operate each piece of equipments and perform routine user maintenance on equipment.

Course Outcomes:

By the end of this course, student should be able to:

1. Know the standard of well-arranged dental clinic.
2. Recognize the infrastructure specification of dental equipment
3. Read carefully the manufacturer's instructions
4. Use of dental equipment sheet (preventive maintenance sheet)
5. Know the most common troubles encountering each part of equipment
6. Operate, maintain, and replace the most common part of equipment

Educational Methods:

1. Practical training.

Evaluation of students:

1. Continuous assessment.
2. Assignments.
3. Final exam.

References:

1. The tool kit for dental risk management: Roy C. Lilley, Paul Lambden. 1st edition, 2002

Course Specification: DENT 333 – Recent Trends in Oral and Maxillofacial Pathology			
Course Symbol	DENT 333	Year	3-5
Course Title	Recent Trends in Oral and Maxillofacial Pathology	Units	1 Didactic1 Practical
Prerequisite	DENT 114		

Course Outline:

This course is planned to teach and train the student the various advanced aspects of oral & maxillofacial pathology. It covers the basic and the most recent principles of pathologic processes in the form of lectures, and laboratory sessions on essential of both conventional & experimental pathology. Extensive studies will be based on current theories in the literature: nature & variations, in health and disease. Analysis and interpretation of clinical, radiographic and microscopic data of the studied oral lesions will be extensively discussed. Biopsy service, written report and the role of computers in clinical pathology are strongly emphasized in this elective course.

Course Learning Outcomes:

By the end of this course, student should be able to:

1. Know the histopathologic service provides a diagnostic and consultation service in head & neck pathology.
2. Understand the consultative diagnostic service including radiographic interpretation, oral surgery, and oral medicine consultation are joint by weekly seminar and presentation of oral lesion cases through clinical/pathologic correlation sessions (CPC).
3. Apply the infection control standard by careful handling of the oral lesions during the surgical procedure and the laboratory preparation to avoid the contamination from blood, viral infections and from material hazards.
4. Know the diagnosis of oral & maxillofacial tissue biopsy types including needle and oral cytology smears.
5. Get educational programs that help him to do research for future post-graduate studies; master and doctor theses.
6. Gain knowledge regarding the following pathologic techniques: molecular biology, histochemistry, immunohistochemistry, electron microscopy (transmission & scanning), X-ray microanalysis, tissue culture, autoradiography, laser and implant technology.
7. Practice the pathologic processing of the biopsy tissues; gross & microscopic examination including assessment of surgical margins for presence of disease,

preparation and transmission of written report.

8. Learn the basic microscopic photography and computer programs for analysis of clinical data.

Educational Materials:

1. Lectures
2. Laboratory sessions.

Assessment of students:

1. Continuous Assessments (MCQ).
2. Final exam (MCQ & SEQ)

References:

1. Oral Pathology: Clinical/pathologic Correlation by Regezi and Sciubba, 2007
2. Bancroft J, Gamble M.: Theoryand practice of histological techniques (Immunocytochemistry). 2002.
3. Molecular Biology of the Cell, by Albert et al, 2007.

Course Specification: DENT 341 – Dental Clinical Practice (1)			
Course Symbol	DENT 341	Year	3
Course Title	Dental Clinical Practice (1)		
Prerequisite	DENT 214 , DENT 231	Units	5 Training
Co-requisite	DENT 311 , DENT 323		

Course Outline:

The course involves dental clinics for operative, periodontics, endodontics, and, fixed and removable prosthesis and primary care. In this course, students should restore and treat cases for both first three specialties and in the same time dealing with the patients when they come to the clinic asking for primary care treatment. The student in this course is allowed to treat any carious lesions including anterior and posterior teeth. Regarding periodontics, the student is allowed to do scaling and root planning, and some advanced types of treatments. The course deals with the basic principles of complete denture fabrication as well as the diagnosis and treatment of a completely edentulous patient.

Course Learning Outcomes:

By the end of this course, student should be able to:

1. Outline infection-control guidelines, law, ethics and professionalism policies.
2. Recognize the dental clinical instruments (both hand and powered forms) and become familiar with various clinical techniques.
3. Utilize critical thinking skills.
4. Develop decision making and problem-solving skills in clinical situations.
5. Interpret the clinical finding and the investigations to properly plan treatment for the patient.
6. Perform successful examination of the gingiva and periodontium using the periodontal chart, perform supragingival scaling and restore cavities with proper techniques and clinical steps.
7. Apply principles of professionalism and the principles of instrumentation and diagnosis for good dental practice
8. Establish good communication and empathy with the patients, leadership and teamwork.

Educational Methods:

1. Individual discussions.

2. Critical thinking.
3. Group discussion.
4. Case presentation
5. Clinical demonstration.
6. Clinical training

Assessment of Students:

1. Continuous assessment.
    - Competency reports
    - Professionalism reports
    - Critical thinking reports
    - Treatment plan Reports.
2. OSCE
3. Assignment Assessment
    - Patient Portfolio.

References:

1. Clinical periodontology and implant dentistry: Jan lindhe ,Thorkild karring, Niklaus peter lang. 4th ed. 2003.
2. Cowson's (2004). Essential Of Oral Pathology And Oral Medicine, 8th edition.
3. Crispian Scully (2008). Oral and Maxillofacial Medicine, 2nd edition, Edinburgh London New York Oxford Philadelphia St Louis Sydney Toronto.
4. Hargreaves K. and Cohen S., (2014). Pathways of the pulp. Mosby 10th edition.
5. Torabinijad, M (2009). Endodontics: Principles and Practice. Elsevier Health Sciences, 4th edition
6. Sturtevant's Art and Science of Operative Dentistry, 6th edition. Theodore M. Roberson, Harold O. Heymann and Edward J. Swift
7. Fundamentals of Operative dentistry, 3rd edition. Jammes B Summit, Richard s Shwartz.

Course Specification: DENT 411 – Surgical Management			
Course Symbol	DENT 411	Year	4
Course Title	Surgical Management		
Prerequisite	DENT 113 , DENT 213	Units	1 Didactic1 Practical
Co-requisite	DENT 441		

Course Outline:

This course is designed to serve the specialties of Oral and Maxillofacial Surgery, & Oral Radiology. The student will enhance his knowledge in patient evaluation &diagnosis, and explain how to perform simple & complicated extraction of erupted teeth as well as managing impacted teeth. The foundation knowledge and skills acquired through these experiences contribute to the development of a general dentist competent in basic oral surgery.

Course Learning Outcomes:

By the end of this course, student should be able to:

1. Recognize the main surgical problem and health risks of each patient
2. Describe the techniques used for extraction of impacted teeth.
3. Interpret appropriate radiographic examination for the patient undergoing simple or surgical extraction of teeth.
4. Explain extra-oral and intraoral clinical findings in presence of systemic disease and how the disease affects overall health, treatment planning and delivery of dental care.
5. Demonstrate the proper technique for simple and complicated extraction of an erupted tooth.
6. Explain common intraoperative and postoperative surgical complications related to extraction.

Educational Method:

1. PBL sessions.
2. Lectures.
3. Lab demonstrations.

Evaluation of students:

1. Summative exams
   - MCQ.

- Short essay.

2. Formative assessment
   - OSPE.
3. Discussion forums and tutor evaluation.

References:

1. Contemporary Oral and Maxillofacial Surgery 5th edition by James R. Hupp, Edward Ellis and Myron R. Tucker
2. Eric Whaites. Essentials of Dental Radiography and Radiology Elsevier Ltd, 4th ed.

Course Specification: DENT 412 – Child & Adolescent Care			
Course Symbol	DENT 412	Year	4
Course Title	Child & Adolescent Care	Units	4 Didactic
Prerequisite	DENT 114 , DENT 214		
Co-requisite	DENT 431		

Course Outline:

Introduction to clinical pediatric dentistry, including behavior management, oral diagnosis, preventive dentistry, care of infants and toddlers, dental anomalies, radiography, anesthesia, restorative procedures, pulp therapy, space maintenance, oral surgery for the primary dentition, and traumatic injuries in the primary and permanent dentitions.

The course is structured so the student may gain experience in the skills necessary to integrate orthodontic treatment within the context of general dental practice. These include a comprehensive clinical evaluation, selecting the correct diagnostic records, developing a list of the patient's orthodontic problems, formulating treatment objectives and establishing a treatment plan that will include the integration of orthodontic treatment with other aspects of dental care when appropriate. The student will also gain familiarity with the biomechanical and patient management principles of orthodontic treatment so they may provide their patients with accurate information about the benefits, risks, practices and alternatives available to patients with both simple and complex malocclusions.

Course Learning Outcomes:

By the end of this course, student should be able to:

1. Outline examination, radiography, diagnosis & treatment planning in relation to child dental management.
2. Tell restorative techniques in children & adolescence
3. Describe possible treatment options related to oral surgery(hard & soft tissue) in children
4. Recognize how to deal with dento-alveloar and maxillofacial traumatology in children and adolescents
5. Identify the factors contributing to irregularities in the developing dentition & their management.
6. Illustrate the role of multidisciplinary and multi-agency collaboration in pediatric dentistry.

7. Explain behavioral science & behavior management appropriate to pediatric dentistry.

Educational Methods:

1. PBL & TBL sessions.
2. Lectures:

Assessment of Students:

1. Summative Exams
   - MCQ.
   - Short essay.
2. Discussion forums and tutor evaluation.

References:

1. Jeffry A. Dean . McDonald and Avery's Dentistry for the Child and Adolescent. 10th edition. Mosby; 2016.
2. Nowak AJ, Christensen JR, Mabry TR, Townsend JA, Wells MH. Pediatric Dentistry infancy through adolescence 6th ed. Elsevier Philadelphia; 2018
3. Welbury RR, Duggal M.S, Hosey M.T. Paediatric Dentistry. 5th edition. Oxford University Press; 2018.
4. William R. Proffit, Henry W. Fields Jr. Contemporary Orthodontics. 6th edition, Mosby; 2019

Course Specification: DENT 413 – Management of Oral & Maxillofacial Diseases (1)			
Course Symbol	DENT 413	Year	4
Course Title	Management of Oral & Maxillofacial Diseases (1)	Units	2 Didactic1 Practical
Prerequisite	DENT 113 , DENT 213		
Co-requisite	DENT 441		

Course Outline:

This course is consists of a series of lectures in a more advanced aspects of Oral and Maxillofacial Surgery such as surgical extraction of impacted teeth, preprosthetic surgery, diagnostic biopsy, early treatment of odontogenic infections, and surgical orthodontic treatment etc. The aim of this program is to provide the students with a basic understanding of and the diagnostic capability to approach these more advanced aspects, of surgery which customarily are dealt with by Oral and Maxillofacial Surgeons.

The pathology, clinical aspects, differential diagnosis and management of these conditions are discussed. In the laboratory sessions the histopathological appearances of the most significant lesions are used as an aid in understanding the biological aspects of oral disease. The seminar periods are used to integrate knowledge of the pathology with oral medicine and to impart a system of diagnosis and treatment based on the understanding of disease.

Course Outcomes:

By the end of this course, student should be able to:

1. Identify patient's Chief Complaint, History, and different Diagnostic means.
2. Recognize the etiology & pathogenesis of different Orofacial Infections
3. State the importance of Surgical Applications in Endodontic Treatment
4. Discuss the Diagnosis, Management, & Prognosis of different Orofacial Infections
5. Describe the incidence, etiology, & Pathogenesis of Oral & Maxillofacial Cysts, Tumors, & Premalignant Lesions
6. Plan the Diagnosis, Management, & Prognosis of different Oral & Maxillofacial Cysts, Tumors, & Premalignant Lesions
7. Perform Intra & Extra Oral Clinical Examination in order to achieve proper Diagnosis of Oral & MaxilloFacial Diseases.
8. Operate effectively the assessment of problems in the management of oral and

maxillofacial diseases as an individual and a part of a team.

Educational Methods:

1. PBL sessions.
2. Lectures.
3. Laboratory sessions

Evaluation of students:

1. Summative Exams
   - MCQs.
   - Short essay.
2. Formative assessment.
   - OSPE.
3. Discussion forums and tutor evaluation.
4. Peer evaluation

References:

1. Wheater's Functional Histology, By Young, O'Dowd & Woodford. 6th ed. 2014, Elsevier Churchil Livingstone.
2. Ganong's Review of Medical Physiology, By Kim E. Barrett, Susan M. Barman, Scott Boitano, ed.25th, 2016,Heddwen Lang. Brooks
3. Harper's Biochemistry, By Robert K. et al; Appleton and Lange, Latest ed.
4. Dental Radiographic Diagnosis. By Kavas H. Thunthy, Electronic Copy.

Course Specification: DENT 414 – Management of Oral & Maxillofacial Diseases (2)			
Course Symbol	DENT 414	Year	4
Course Title	Management of Oral & Maxillofacial Diseases (2)	Units	2 Didactic1 Practical
Prerequisite	DENT 113 , DENT 213		
Co-requisite	DENT 441		

Course Outline:

The course has been designed to develop an understanding and introduce the students to more advanced aspects of Oral and Maxillofacial Surgery such as cysts of the oral cavity, maxillary sinus problems, tempromandibular joint disorders, and odontogenic and non-odontogenic tumors of the oral cavity. The foundation knowledge acquired through this course contribute to the development of diagnostic capability to approach these more advanced aspects of surgery which customarily is dealt with by Oral and Maxillofacial Surgeons.

The pathology, clinical aspects, differential diagnosis and management of these conditions are discussed. In the laboratory sessions the histopathological appearances of the most significant lesions are used as an aid in understanding the biological aspects of oral disease. The seminar periods are used to integrate knowledge of the pathology with oral medicine and to impart a system of diagnosis and treatment based on the understanding of disease.

Course Learning Outcomes:

By the end of this course, student should be able to:

1. Discuss the incidence, etiology& pathogenesis of orofacial diseases and neoplasms of salivary glands.
2. Recognize the differential diagnosis, management, prognosis of orofacial diseases and neoplasms of salivary glands.
3. Describe the incidence, etiology, pathogenesis of different oral & maxillofacial diseases of maxillary sinus and bone.
4. Recognize the Diagnosis, Management, and Prognosis of different Oral & Maxillofacial Diseases of Maxillary Sinus & Bone.
5. Explain the etiology, incidence, diagnosis, and Surgical Management of different Preprosthetic Problems.

6. Demonstrate the various flap operation procedures particularly for treatment of pocket wall and cosmetic gingival enlargement.

Educational Methods:

1. PBL sessions.
2. Lectures.
3. Lab demonstrations.
4. Group discussion.

Evaluation of students:

1. Summative Exams.
   - MCQs.
   - Short essay.
2. Formative assessment.
   - OSPE.
3. Discussion forums and tutor evaluation.

References:

1. Dr. Petersom, J. B.: Principles of Oral & Maxillofacial Surgery, Lippincott.
2. Neville, Damm, Allen and Bouquot: Oral and Maxillofacial Pathology, 1st ed., Saunders, 2009.
3. Hupp, J.R., Contemporary Oral and Maxillofacial Surgery, 5th ed. Amsterdam: Elsevier Science, .2008.
4. Carranza's Clinical Periodontology by Newman, Taki, Carranza, tenth edition.2007.
5. Clinical periodontology and implant dentistry:JanLindhe ,Thorkildkarring, Niklaus peter lang. fourth edition . 2003.
6. Oral Pathology: Clinical Pathologic Correlations by Joseph A. Regezi, James J. Sciubba, and Richard C. K. Jordan, 5th ed 2007, Saunders Company.
7. Dental Radiographic Diagnosis. By Kavas H. Thunthy, Electronic Copy.
8. Dental Radiography: Principles and Techniques. By Joen M. Lannucci, and Laura Jansen Howerton, Published by Elsevier Inc., 3rd Ed., 2006

Course Specification: DENT 415 – Dental Implantology			
Course Symbol	DENT 415	Year	5
Course Title	Dental Implantology	Units	1 Didactic
Prerequisite	DENT 312, DENT 313 DENT 411		

Course Outline:

This course is a didactic course, designed to introduce the students to the science of multidisciplinary implant dentistry. Emphasis is on patient evaluation, diagnosis and treatment planning, implant selection, surgical procedures, prosthodontic restorations, patient management, and follow-up care.

Course Learning Outcomes:

By the end of this course, student should be able to:

1. Recognize the implant patient.
2. Outline a multidisciplinary treatment approach to the management of the implant patient.
3. Outline the surgical procedures for implant placement and its different prosthetic options
4. Recognize the follow-up protocols for the implant patient and different managements of dental implant complications

Educational Methods:

1. Lectures
2. Videos and animations.

Assessment of Students:

1. Summative Exams
   - MCQ.

References:

1. Misch C E. Contemporary Implant Dentistry. Mosby (Elsevier) 3rd edition
2. Newman M.G., Takei A.H., Carranza F.A.: Carranza's Clinical Periodontology. 10th Edition 2006
3. Zarb G.A, Bolender C.L, Carlsson G.E. Boucher's prosthodontic treatment for edentulous patients. CV mosby co., St. Louis, 11th edition, 1997

4. Glen P. McGivney, Alan B. Carr, William L McCracken: McCracken's Removable Partial Prosthodontics, 10th Edition. Mosby Book, 2005
5. Herbert T. Shillingburg,Sumiya Hobo, Lowell D. Whitsett , Richard Jacobi, Susan E. Brackett: Fundamentals of Fixed Prosthodontics. Quintessence Publishing (IL); 3rd edition, 2006
6. Phillips' Science of Dental Materials, Anusavice-11th edition, Saunders, Elsevier Science 2003

Course Specification: DENT 416 – Maxillofacial Surgery & Rehabilitation			
Course Symbol	DENT 416	Year	5
Course Title	Maxillofacial Surgery and Rehabilitation		
Prerequisite	DENT 312, DENT 411 DENT 412, DENT 413 DENT 414	Units	2 Didactic1 Practical

Course Outline:

This course is a didactic course, designed to introduce the students to the science of multidisciplinary maxillo-facial dentistry. It provide a basic theory background, to assist the development of skills in diagnosis, treatment planning, active surgical care and postoperative management. It is also dedicated to prosthetic correction and management of maxillofacial defects acquired from the surgical ablation of cancer, traumatic injuries or congenital birth defects and alterations in growth and development.

It focuses on the prosthodontic rehabilitation of patients with loss and compromise of facial anatomy, i.e., ocular, orbital, nasal, auricular, combined intraoral/extraoral and other related facial deformities.

Course Learning Outcomes:

By the end of this course, student should be able to:

1. Describe the etiology, diagnosis, and management of different types of congenital or acquired maxillary and mandibular defects.
2. List the role of maxillofacial radiology in the diagnosis and treatment of both acquired or congenital maxillofacial defects
3. Recognize a variety of complications of oral surgical procedures. And how to avoid them.
4. Plan the proper design of the maxillofacial prostheses of different types of maxillofacial defects.
5. Perform different types of maxillofacial prostheses and intermaxillary fixation for different types of maxillofacial defects.

Educational Methods:

1. Lectures
2. Clinical demonstrations.
3. Laboratory sessions.

Assessment of Students:

1. Summative Exams
   - MCQ.
   - Short essay.
2. Formative assessment.
   - OSPE.
3. Laboratory and clinical requirements.
4. Practical Exams

References:

1. James R. Hupp, Myron R. Tucker, Edward Ellis III, Contemporary Oral and Maxillofacial Surgery, 6th ed. Mosby, 2013.
2. Sweedan, O. A.: Textbook of Oral and Maxillofacial Surgery, 1st ed. Alexandria: Elmayar press, 2009.
3. Thomas D Taylor. : Clinical maxillofacial prosthetic. Quintessence publishing (IL), 2000.
4. Beumer J., Marunick M. T., Esposito S. J.: Maxillofacial Rehabilitation:
5. Prosthodontic and Surgical Management of Cancer-Related, Acquired, and Congenital Defects of the Head and Neck. Quintessence Pub Co; 1st ed, 2011.
6. Whaites, E. &Drage N.: Essentials of Dental Radiography and Radiology Elsevier Ltd, 5th ed., 2013.

Course Specification: DENT 421 – Scientific Presentation Skills (4)			
Course Symbol	DENT 421	Year	4
Course Title	Scientific presentation skills (4)	Units	1 Practical
Prerequisite			

Course Outline:

In the field of dentistry, knowledge and technical skills are not the only prerequisites for good practice. An ability to communicate effectively, to use active listening, to gather and impart information effectively, and to demonstrate empathy, rapport, ethical awareness is crucial.

The aim of this course is improve skill and behavior that help the students to communicate more effectively, present with confidence and enhance personnel impact.

In this course, the students gain a comprehensive and proven set of skill that helps them to work effectively with colleagues and develop expertise.

Course Learning Outcomes:

By the end of this course, student should be able to:

1. Apply the essential elements of formulating scientific research built on problem-solving.
2. Use software programs for designing and construction of research projects and scientific presentations.
3. Demonstrate various techniques of effective interpersonal skills during the presentation.
4. Develop new skill and behavior for more effective communication with self-confidence in oral presentations.
5. Present the research project confidently using PowerPoint technology and other audio-visual aids.

Educational Methods:

1. Lectures.
2. Self-directed learning.
3. Group discussion.

Assessment of Students:

1. Individual presentations.
2. Rubrics.
3. Direct observation of performance/behavior.

4. Oral presentations

References:

1. Dennis C Tanner. An advanced Course in Communication Sciences. Plural publishing. 2006
2. Gillam Ronald B, Marquardt Thomas P and Martin Fredrick . Communication Sciences and Disorders. Singular Publishing Group.USA. 2000.

Course Specification: DENT 422 – Community Dentistry (5)			
Course Symbol	DENT 422	Year	4
Course Title	Community Dentistry (5)	Units	1 Didactic1 Practical
Prerequisite	DENT 122 , DENT 222 DENT 223 , DENT 322		

Course Outline:

The course has been designed to develop an understanding and give an exercise to the students about the practical implications of the basic concepts of research methodology, oral health education and promotion; and preventive care of individual patients. It will discuss the significance and application of evidence-based dentistry, ethics, geriatric and forensic dentistry. The course will improve critical thinking and organizational skills of dental undergraduates. The course will also enhance the ability of students to work as a viable member of a health team.

Course Learning Outcomes:

By the end of this course, student should be able to:

1. Recognize essential elements of protocol and methodology of an oral health survey.
2. Define Forensic Dentistry and various methods of identification and bite marks analysis.
3. Outline major general and oral health problems of special needs groups.
4. Outline major general and oral health problems of geriatric patients.
5. Interpret the findings in a report after data coding, entry, and analysis.
6. Perform training and calibration of examiners for oral health assessment and dental health education and their application in a team work.
7. Design a questionnaire in a teamwork to assess oral health knowledge, attitudes and practices.

Educational Methods:

1. Lectures
2. Class work and in class discussions.
3. Group discussion.
4. Community-based learning.
5. Group assignment

Assessment of Students:

1. Summative Exams
    - MCQs.
    - Short essay.
2. Rubrics.
3. Group reports
4. DOPS (Direct Observation of Procedural Skills)
5. Extended written work.

References:

1. Dentistry, Dental Practice and the Community by Burt AB, Eklund SA. 6th Ed 2005, W. B. Saunders Company.
2. Forensic Dentistry by Stimson BG, MertizCa 1997, CRC Press.
3. Geriatric Dentistry: A Clinical guidebook by Abdel Rahim M 4th edition 2005

Course Specification: DENT 423 – Restorative 3			
Course Symbol	DENT 423	Year	4
Course Title	Restorative (3)	Units	1 Didactic
Prerequisite	DENT 313		

Course Outline:

This didactic course is designed to prepare the students for the management of the patients with various restorations including operative dentistry, endodontics, removable & fixed prosthodontic restorations in addition to periodontal treatment.

The student will gain didactic knowledge for the management of dental patients with each of the previously mentioned discipline. The course will concentrate on the various treatment modalities with the proper handling of the dental patients.

Course Learning Outcomes:

By the end of this course, student should be able to:

1. Identify the new techniques being used for early diagnosis of carious lesions in order to know the latest techniques being used to treat them.
2. Identify the post restorative complications in order to manage them
3. Describe the concept of occlusion in restorative dentistry to correct it.
4. Describe in depth about the phonetics to know its role in prosthodontics
5. Define the role of retention, support and stability and attachments in removable prosthodontics
6. Describe tooth and Implant supported over dentures.
7. Demonstrate the management of special cases requiring denture construction.

Educational Methods:

1. Lectures

Assessment of Students:

1. Summative Exams.
   - MCQs.
   - Short essay.

References:

1. Hassaballa M.A: Clinical complete denture prosthodontics. KSU, 2nd Edition 2010

2. Zarb G.A, Bolender C.L: Prosthetic Treatment for Edentulous Patients. Complete Dentures and Implant-Supported Prostheses. Mosby; 12th edition. 2004.
3. Sturdevant's & Edil Roberson: Art & science of operative dentistry : Mosby 4th Ed , 2002
4. Glen P. McGivney, Alan B. Carr, William L McCracken: McCracken's Removable Partial Prosthodontics, 10th Edition. Mosby Book, 2000.
5. Carr AB. Mc Givney GP. Brown DT, Mc Cracken`s : Removable Partial Denture, Elsevier Mosby 11th edition 2005.

Course Specification: DENT 424 – Biotechnology in Dentistry			
Course Symbol	DENT 424	Year	4-5
Course Title	Biotechnology in Dentistry		
Prerequisite	DENT 313	Units	1 Didactic

Course Outline:

Tissue Biotechnology in Dentistry course is concerned with the application of principles of tissue engineering and regenerative medicine, especially those of bioengineered bone, the designing and characterization of oral and extraoral oseeointegrated devices, characterization of the interface between the bone and such devices using destructive and non-destructive testing methods and biomechanics and methods of stress analysis

This course will provide a general view for future applications of tissue engineering and computer guided surgeries in dentistry

Course Learning Outcomes:

By the end of this course, student should be able to:

1. Discuss general perspective and background on tissue engineering.
2. Recognize basic concepts of designing oral and extraoral osseointegrated devices
3. Identify various characterization techniques of oral and extraoral osseointegrated devices
4. Recognize different imaging techniques
5. Recognize different stress analysis techniques
6. Obtain an idea about the impact of tissue engineering on the practice of dentistry during the next 10 years.

Educational Methods:

1. Lectures.

Assessment of Students:

1. Continuous assessment
2. Final Examination.

References:

1. Regenerative Dentistry (Synthesis Lectures on Tissue Engineering) Morgan and Claypool Publishers, ISBN-10: 1608452131, ISBN-13: 978-1608452132
2. Biomaterials Science: http//www.fishpond.com.au/Books/Biomaterials-Science-BD-

Ratner-Alan-S- Hoffman/9780125824637

3. Mechanical testing of bone and the bone-implant interface © 2000 CRC Press LLC, 2000
4. N.W. Corporate Blvd., Boca Raton, Florida 33431., International Standard Book Number 0-8493-0266-8, Library of Congress Card Number 99-36531
5. An Introduction to Materials in Medicine, Academic Press Inc, ISBN 0125824637, EAN 9780125824637

Course Specification: DENT 425 – Scientific Presentation Skills (5)			
Course Symbol	DENT 425	Year	5
Course Title	Scientific presentation skills (5)	Units	1 Practical
Prerequisite			

Course Outline:

In the field of dentistry, knowledge and technical skills are not the only prerequisites for good practice. An ability to communicate effectively, to use active listening, to gather and impart information effectively, and to demonstrate empathy, rapport, ethical awareness is crucial.

The aim of this course is improve skill and behavior that help the students to communicate more effectively, present with confidence and enhance personnel impact.

In this course, the students gain a comprehensive and proven set of skill that helps them to work effectively with colleagues and develop expertise.

Course Learning Outcomes :

By the end of this course, student should be able to:

1. Apply the essential elements of formulating scientific research built on problem-solving.
2. Use software programs for designing and construction of research projects and scientific presentations.
3. Demonstrate various techniques of effective interpersonal skills during the presentation.
4. Develop new skill and behavior for more effective communication with self-confidence in oral presentations.
5. Present the research project confidently using PowerPoint technology and other audio-visual aids.

Educational Methods:

1. Lectures
2. Self-direct learning "SDL"
3. Group discussion

Assessment of Students:

1. Rubrics
2. Direct observation of performance/behavior.
3. Oral presentations.

4. Individual presentations

References:

1. Carter M. Designing Science Presentations, 1st ed. St. Louis, MO: Mosby/Elsevier; 2012.
2. Medical writing: a guide for clinicians, educators, and researchers /Robert
3. B. Taylor. New York: Springer, c2011.
4. How to write a paper /edited by George M. Hall? Malden, Mass: BMJ Books/Blackwell Pub., c2008. 4th ed. Gerstein Science.
5. Successful scientific writing: a step-by-step guide for the biological and medical sciences / Janice R. Matthews, Robert W. Matthews. Cambridge: Cambridge University Press, 2014. Fourth edition.
6. How to write, publish, & present in the health sciences: a guide for clinicians & laboratory researchers /Thomas A. Lang. Philadelphia: American College of Physicians, c2009.
7. Sharma S. How to Become a Competent Medical Writer? Perspectives in Clinical Research. 2010;1(1):33-37.
8. Rosa Munoz-Luna: Main Ingredients for Success in L2 Academic Writing: Outlining, Drafting and Proofreading. PLoS One. 2015; 10(6): e0128309.

Course Specification: DENT 426 – Problem Solving in Dentistry			
Course Symbol	DENT 426	Year	5
Course Title	Problem Solving in Dentistry	Units	1 Didactic
Co-requisite	DENT 445		

Course Outline:

Our college use the problem based learning (PBL) as a learning method in the curriculum, and now we are going to introduce the problem solving course as a method to increase the student's skill in both diagnosis and dental treatment. A problem based approach also help the students recognize knowledge in their minds and link between different areas and constructing a knowledge matrix which can be more readily recalled and applied.

Course Learning Outcomes:

By the end of this course, student should be able to:

1. Outline information, clinical techniques, procedures and appropriate investigations needed in multidisciplinary clinical dentistry scenario
2. Assess, identify and prioritize patient's problem list.
3. Develop clinical reasoning and decision-making skills to interpret and relate clinical findings, common diagnostic tests and reports
4. Demonstrate skills to generate differential diagnosis for common signs &symptoms in dentistry with proper explanation
5. Formulate treatments plan According to evidence-based rationale with appropriate sequence clearly described in phases with Follow up strategies
6. Demonstrate leadership responsibilities and ability to work independently and in groups.
7. Utilize appropriate medical terminology in order to communicate clinical knowledge and explain diagnostic and treatment planning decisions to faculty and peers.

Educational Methods:

1. Class work and in class discussions.
2. Scenario-based teaching, Assigned Directed Readings.
3. Critical thinking.
4. Self-direct learning "SDL.
5. Group discussion.

6. Individual and group presentation.

Assessment of students:

1. Formative assessment
   - OSCE
2. Checklist
3. Critical thinking reports
4. Scenario comments evaluation

References:

1. Odell E.W. Clinical problem solving in dentistry. Churchill Livingstone, 4th edition, 2020.

Course Specification: DENT 427 – Orthodontic Treatment for Adults			
Course Symbol	DENT 427	Year	5
Course Title	Orthodontic Treatment for Adults	Units	1 Didactic
Prerequisite	DENT 412, DENT 431		

Course Outline:

This is a didactic course include a comprehensive clinical evaluation, selecting the correct diagnostic records, developing a list of the patient's orthodontic problems, formulating treatment objectives and establishing a treatment plan that will include the integration of orthodontic treatment with other aspects of dental care when appropriate.

Course Learning Outcomes:

By the end of this course, student should be able to:

1. Identify various orthodontic problems that occur in adult patients in order to allow the students to diagnosis the adult cases more accurately.
2. Describe the knowledge necessary to integrate orthodontic treatment within the context of general dental practice in term to referral the case to specialist.
3. Discuss varies orthodontic treatment options in order to allow the students to educate the patients about different treatment modalities.
4. Justify the reasons behind the procedures with complex orthodontic needs involving periodontal and/or restorative in order to prepare the student for the interaction between different specialties.

Educational Methods:

1. Lectures.
2. Small group discussion.

Assessment of Students:

1. Summative exams:
    - MCQs.
    - Short essays.

References:

1. Laura Mitchell. An Introduction to Orthodontics, Oxford University Press, USA; 5 edition (2017).
2. Singh G. Text Book of Orthodontics, Jaypee Brothers Medical Publishers Private

Limited; 3 edition (2016).

3. William R. Proffit, Henry W. Fields Jr. Contemporary Orthodontics. Mosby; 5th edition (2013).

Course Specification: DENT 428 – Practice Management			
Course Symbol	DENT 428	Year	5
Course Title	Practice Management	Units	1 Didactic
Co-requisite	DENT 445		

Course Outline:

This course in practice management is designed to teach the fundamentals of developing and running a successful dental practice. The course is taught by dentists and practice management consultants to insure that up-to-date and practical material is presented. Special subject areas of concentration are used in preparing students for residency programs, fees, and third-party payment, collections, associateships and partnerships, hiring, and retaining a five-star dental team. The classes are taught in a relaxed atmosphere for maximum student enjoyment and learning. The overall goal is to make the information as relevant to the student today as it will be in the future.

Course Learning Outcomes:

By the end of this course, student should be able to:

1. Identify the business of dentistry
2. Recognize the different items of dental team management
3. Describe the office design & the equipment placement.
4. Identify how to work with dental office documents
5. Illustrate the basic concept of appointment management systems
6. Employ the basic principles of recall systems
7. Appraise the importance of patient management and the risk management in dental practice in order to develop risk management program and strategies for patient management as a risk management tool
8. Demonstrate how to market your services

Educational Methods:

1. Lectures.
2. Group assignment.

Assessment of Students:

1. Summative exams:
    - MCQ.
    - Short essays.

2. Extended written work (Project report).
3. Individual and group presentations.

References:

1. Finkbeiner BL & Finkbeiner CA. Practice Management of the Dental Team. 5th edition, Mosby; ISBN 0-323-00886-0
2. Dietz E. Dental Office Management. 1st edition, Thomson Learning; ISBN 0-7668-0731-2
3. Risk Management Handbook for Health Care Organizations, student edition. Roberta L Carroll, 2009.
4. M. Almalki, G. Fitzgerald and M. Clark. EMHJ, 2011, 17 (10): 784 – 793.
5. Operations Manual for Health Center Oral Health Programs. Chapter 4: Risk Management. National Network for Oral Health Access, 2011.

Course Specification: DENT 431 – Dental Skills (4)			
Course Symbol	DENT 431	Year	4
Course Title	Dental Skills (4)	Units	1 Didactic2 Practical
Prerequisite	DENT 331		
Co-requisite	DENT 412		

Course Outline:

The laboratory exercises in this course emphasize the fabrication and utilization of contemporary orthodontic and pedodontic appliances.

Course Learning Outcomes:

By the end of this course, student should be able to:

1. Describe the principles of restorative dentistry in primary dentition
2. Recognize different types of mal occlusion, Cephalometric radiography measurements and orthodontic appliances
3. Perform the general principles of restorative techniques using proper materials in primary dentition.
4. Perform arch length analysis and space management in mixed dentition and permanent dentition.
5. Demonstrate the different technique used in construction of orthodontic appliances.

Educational Methods:

1. Lectures.
2. Videos.
3. Teaching models.
4. Simulation.
5. Practical demonstration.
6. Hands-on student's learning activities.

Assessment of Students:

1. Formative assessment.
   - OSCE.

2. Laboratory and clinical requirements.
3. Practical Exams
   - OSCE.
4. Self-evaluations

References:

1. Arthur Nowak & John R. Christensen & Tad R. Mabry & Janice Alisa Townsend & Martha H. Wells. Pediatric Dentistry infancy through adolescence 6th Edition. Elsevier Saunders, St Louis; 2018
2. Jeffry A. Dean. McDonald and Avery's Dentistry for the Child and Adolescent. 11th Edition. Mosby; 2021.
3. An Introduction to Orthodontics by Laura Mitchell. Fifth edition, oxford;2019.

Course Specification: DENT 432 – Recent Modalities in Dental Radiology			
Course Symbol	DENT 432	Year	5
Course Title	Recent Modalities in Dental Radiology	Units	1 Didactic1 Practical
Prerequisite	DENT 411		

Course Outline:

A number of medical imaging modalities have been developed in recent years and these continue to be developed at a great rate. With these advanced imaging techniques as computed tomography (CT) scanning, Cone beam CT (CBCT), magnetic resonance imaging (MRI), Ultrasonography, and digital imaging, the field of dental radiology has greatly expanded. The dental professional should have some familiarity with these newer imaging systems because patients may have to be referred for such imaging or copies of the images may be brought to the office by the patient for opinions and interpretation. Therefore an overview of these imaging systems is included in this course.

Course Learning Outcomes:

By the end of this course, student should be able to:

1. Know the different image-generating equipment (either those producing ionizing radiation, or other energy).
2. Know the Digital image receptors, and there types.
3. Describe the computer software's developed to manipulate the images produced by the generating equipment.
4. Have a basic understand of the basic concepts of computed tomography and magnetic imaging.
5. Have a basic understand of the basic concepts of Con beam CT (CBCT).
6. Know the roles of the new imaging techniques in dentistry.

Educational Methods:

1. Lectures.
2. Laboratory sessions.

Assessment of students:

1. Continuous assessment(MCQ)
2. Final exam (MCQ & SEQ)

References:

1. Herbert H. Frommer; and Jeanine J. Stabulas-Savage: Radiology For The Dental Professional. Published. by ELSEVIER 8th ed., 2005.
2. Whaites,E.: Essentials of Dental Radiography and Radiology. Published by ELSEVIER 4th ed., 2007.

Course Specification: DENT 441 – Dental Clinical Practice (2)			
Course Symbol	DENT 441	Year	4
Course Title	Dental Clinical Practice (2)	Units	12 Training
Prerequisite	DENT 313 , DENT 331 DENT 341		
Co-requisite	DENT 411, DENT 413 DENT 414		

Course Outline:

The purpose of this clinical course is to reinforce and refine the student's knowledge and skills required for the clinical practice of dentistry in the following subjects: Operative, Periodontics, Endodontics, Fixed and removable Prosthesis, Oral Surgery.

As part of their educational experience, dental students must demonstrate competence in behavioral and patient management skills, in addition to the technical skills and knowledge that will be required of a graduated, licensed dental practitioner.

This course is designed to observe, evaluate, and subsequently assist students in understanding and practicing proper comprehensive patient care and management. The course focuses, in particular, on refinement and integration of the following skills introduced in the first, second, and third years:

1. Ethical and professional behavior
2. Patient management, including comprehensive and timely care
3. Proper infection control techniques before, during, and following patient treatment
4. Appropriate record keeping and management of patient records

Course Learning Outcomes:

By the end of this course, student should be able to:

1. Outline infection-control guidelines, law, ethics and professionalism policies.
2. Recognize the dental clinical instruments (both hand and powered forms) and become familiar with various clinical techniques.
3. Utilize critical thinking skills.
4. Develop decision making and problem-solving skills in clinical situations.
5. Apply the ramifications of treatment plan and their long-term chances of success.
6. Perform successful examination and treatment of patient in various disciplines of dentistry, with or without medically compromised condition.

7. Apply principles of professionalism and the principles of instrumentation and diagnosis for good dental practice.
8. Establish good communication and empathy with the patients, leadership and teamwork.

Educational Methods:

1. Individual discussion.
2. Critical thinking.
3. Group discussion.
4. Case presentation.
5. Clinical demonstration.
6. Clinical training.
7. Group assignment.
8. Cooperative learning.

Assessment of Students:

1. Continuous assessment.
    - Competency reports
    - Professionalism reports.
    - Critical thinking reports.
    - Treatment plan Reports.
2. OSCE.
3. Assignment Assessment
    - Patient Portfolio.
    - Case presentation

References:

1. Clinical periodontology and implant dentistry: Jan lindhe ,Thorkildkarring, Niklaus peter lang. 4th ed. 2003.
2. Carranza s clinical periodontology :Michael G Newman, Fermin A Carranza, Henry Taky.10th ed. 2006
3. Periodontics, Medicine, Surgery and Implants: Robert Genco, Brian Mealy, Louis Rose.2004
4. Wilson TG and Kornman KS (2003) Fundamentals of Periodontics, 2nd edition, Quintessence. Chicago USA.
5. Crispian Scully (2008). Oral and Maxillofacial Medicine, 2nd edition, Edinburgh London New York Oxford Philadelphia St Louis Sydney Toronto.

6. Cowson's (2004). Essential Of Oral Pathology And Oral Medicine, 8th edition.
7. Sturtevant's Art and Science of Operative Dentistry, 6th edition Theodore M. Roberson, Harold O. Heymann and Edward J. Swift
8. Fundamentals of Operative dentistry, 3rd edition
9. Jammes B Summit, Richard s Shwartz
10. Atlas of Operative Dentistry, preclinical and clinical procedures Joseph R. Evans, John H. Wetz and Roy A. Wilko. Quintessence publishing Co, Inc. USA
11. Contempory Oral and Maxillofacial Surgery 5th edition by James R. Hupp, Edward Ellis and Myron R. Tucker
12. Textbook of oral and maxillofacial surgery Edited by prof. Ossama A. Sweedan
13. Handbook of Local Anesthesia, 6th Edition by Dr Stanley Malamed
14. Rosenstiel SF, Land MF, Fujimoto J. Contemporary fixed prosthodontics. 5th ed. St. Louis, MO: Mosby/Elsevier; 2016.
15. Clinical manual (fixed prosthodontics)
16. Shillingburg HT. Sather DA. Wilson EL. Cain JR. Mitchell DL. Blanco LJ. Kessler JC. Fundamentals of fixed Prosthodontics. 4th ed. Chicago, IL: Quintessence Pub Co; 2012.
17. George A. Zarb et al.: Prosthodontic Treatment for Edentulous Patients: Complete Dentures and Implant-Supported Prostheses. Mosby; 12th edition (2003).
18. Carr AB. Mc Givney GP. Brown DT, McCracken`s: Removable Partial Denture, Elsevier Mosby 11th edition 2005.
19. Hassaballa M.A, Talic Y.A. principles of complete denture prosthodontics. KSU, 1st ed, 2004.
20. Textbook 2 Phoenix R.D., Cagna D.R. and Defreest C.F.: Stewart's Clinical Removable Partial Prosthodontics. Quintessence Publishing (IL); 4th edition (2008).
21. Hargreaves K. and Cohen S., (2014). Pathways of the pulp. Mosby 10th edition.
22. 2 Torabinijad, M (2009). Endodontics: Principles and Practice. Elsevier Health Sciences, 4th edition.
23. Pinkham JR, Casamassimo PS, Fields HW, McTigue DJ, Nowak AJ. Pediatric Dentistry: infancy through adolescent. 5th edition, Missouri: Elsevier; 2013.
24. McDonald RE, Avery DR, Dean JA.Dentistry for the child and adolescent. 10th edition, St Louis, Missouri: Mosby, Inc; 2016.

Course Specification: DENT 442 – Advanced Periodontics Clinics			
Course Symbol	DENT 442	Year	4-5
Course Title	Advanced Periodontics Clinics	Units	2 Training
Prerequisite	DENT 313		

Course Outline:

The course is planned so that the student will be exposed to various surgical periodontal approaches.

This course will particularly focus on the increasingly requested aesthetic procedures; make sure that the dental student will attain a pragmatic approach to mucogingival plastic surgery through imparting knowledge and expertise.

Course Learning Outcomes:

By the end of this course, student should be able to:

1. Classify and design various flap techniques for different periodontal cases.
2. Recognize the periodontal–restorative relationship as in cases of crown lengthening and recession.
3. Plan and practice regenerative periodontal therapies including various guided tissue regeneration techniques.
4. Identify mucogingival problems and design the appropriate periodontal plastic and esthetic surgery.
5. Observe and perform various suturing techniques.
6. Achieve clinical experience in most aspects of periodontal surgery by assisting residents and faculty in Periodontics.

Educational Materials:

1. Clinical training.

Evaluation of students:

1. Continuous assessment
2. Assessment of clinical cases.

References:

1. Michael G. Newman, Henry Takei, Fermin A. Carranza: Carranza's clinical Periodontology, 10th edition, 2004

Course Specification: DENT 443 – Advanced Endodontics Clinics			
Course Symbol	DENT 443	Year	4-5
Course Title	Advanced Endodontics Clinics		
Prerequisite	DENT 313	Units	2 Training

Course Outline:

This course is designed in a way that the students will acquire knowledge to understand the implication of microsurgery in endodontics. At this level, emphasis will be more on didactic teaching than developing psychomotor skills or problem solving attitude. The course will provide comprehensive knowledge about premedication, presurgical preparation and soft tissue management and apical resection in cases where conventional root canal therapy has fail

Course Learning Outcomes:

By the end of this course, student should be able to:

1. Describe advantages of endodontic microsurgery
2. Explain the indications and contra-indications of microsurgery in endodontics
3. Classify endodontic microsurgical cases
4. Evaluate patient medically and radiographically for the microsurgery
5. Know the extent of apical resection

Educational Methods:

1. Clinical training

Assessment of Students:

1. Continuous assessment(MCQ)
2. Assessment of clinical cases

References:

1. Stephen, C Pathways of the Pulp: Mosby 8th ed , 2002

Course Specification: DENT 444 – Advanced Cosmetics Clinics			
Course Symbol	DENT 444	Year	4-5
Course Title	Advanced Cosmetics Clinics	Units	2 Training
Prerequisite	DENT 313		

Course Outline:

In modern day living, esthetics is a prime demand of dental patients. With advent of new materials and modern technology, many options have become available to practicing dentists to satisfy their patients' genuine demand.

This course is designed to teach the students current treatment modalities available to bring dental esthetics through bleaching. It has a didactic component along with clinical observation of under-treatment patients in operative dentistry department of the Qassim University Dental Hospital.

Course *Learning* Outcomes:

By the end of this course, student should be able to:

1. Explain the mode of action of various bleaching agents
2. Know various types of bleaching therapy
3. Identify the factors that affect bleaching process
4. Recognize indications and contra-indications of bleaching therapy
5. Describe In-office and At-home bleaching techniques

Educational Methods:

1. Clinical training

Assessment of Students:

1. Continuous assessment
2. Assessment of clinical cases.

References:

1. Sumiya Hobo, Lowell D. Whitsett , Richard Jacobi, Susan E. Brackett, and Herbert T. Shillingburg: Fundamentals of Fixed Prosthodontics. Quintessence Publishing (IL); 3rd edition, 2006.
2. Sturdevant,S & Edil Roberson Art & Science of Operative Dentistry : Mosby 4th ed, 2002

Course Specification: DENT 445 – Total Patient Care			
Course Symbol	DENT 445	Year	5
Course Title	Total Patient Care	Units	15 Training
Prerequisite	DENT 441		
Co-requisite	DENT 426, DENT 428		

Course Outline:

Total patient care course is a comprehensive clinical course concerning the patients' management with all various dental clinical disciplines including endodontics, fixed & removable prosthodontics, oral surgery, oral medicine & pathology, pedodontics, orthodontics & special dental care. The student will be trained to propose the treatment plan & treat the dental patients from A to Z utilizing infection control program. The student will be able to treat & follow up the advanced dental cases under the supervision of interdisciplinary staff members.

Course Learning Outcomes:

By the end of this course, student should be able to:

1. Outline infection-control guidelines, law, ethics and professionalism policies.
2. Recognize the dental clinical instruments (both hand and powered forms) and become familiar with various clinical techniques.
3. Interpret the ramifications of treatment plan and their long-term chances of success utilizing critical thinking and problem-solving skills.
4. Operate three dimensional procedures on total care patients practicing the following disciplines (Periodontology, Surgery, Operative, endodontics, Prosthodontics and pediatric dentistry).
5. Clinically apply the principles of instrumentation and principles of diagnosis of different cases for good dental practice. (with proper management of medically compromised condition).
6. Establish good technological skills illustrating clinical cases and presenting ideas and treatment options.
7. Apply principles of professionalism and proper behavior with patients, colleagues and other dental care personnel.
8. Establish good leadership and teamwork with colleagues.

Educational Methods:

1. Individual discussions.
2. Critical thinking.
3. Case presentation.
4. Group discussion.
5. Clinical demonstration.
6. Clinical training.
7. Group assignment
8. Cooperative learning.

Assessment of Students:

1. Continuous assessment.
    - Competency reports
    - Professionalism reports.
    - Treatment plan reports.
    - Critical thinking reports.
    - Mentor reports.
    - Assignment Assessment
    - Patient Portfolio
2. Case presentation
3. OSCE.

References:

1. Clinical periodontology and implant dentistry: Jan lindhe, Thorkildkarring, Niklaus peter lang. 4th ed. 2003.
2. Carranza s clinical periodontology: Michael G Newman, Fermin A Carranza, Henry Taky.10th ed.2006
3. Periodontics, Medicine, Surgery and Implants: Robert Genco, Brian Mealy, Louis Rose.2004
4. Wilson TG and Kornman KS (2003) Fundamentals of Periodontics, 2nd edition, Quintessence. Chicago USA.
5. Crispian Scully (2008). Oral and Maxillofacial Medicine, 2nd edition, Edinburgh London New York Oxford Philadelphia St Louis Sydney Toronto.
6. Cowson's (2004). Essential Of Oral Pathology And Oral Medicine, 8th edition.
7. Sturtevant's Art and Science of Operative Dentistry, 6th edition. Theodore M. Roberson,

Harold O. Heymann and Edward J. Swift

8. Fundamentals of Operative dentistry, 3rd edition. Jammes B Summit, Richard s Shwartz
9. Atlas of Operative Dentistry, preclinical and clinical procedures Joseph R. Evans, John H. Wetz and Roy A. Wilko. Quintessence publishing Co, Inc. USA
10. Contempory Oral and Maxillofacial Surgery 5th edition by James R. Hupp, Edward Ellis and Myron R. Tucker
11. Textbook of oral and maxillofacial surgery Edited by prof. Ossama A. Sweedan
12. Handbook of Local Anesthesia, 6th Edition by Dr. Stanley Malamed
13. Rosenstiel SF, Land MF, Fujimoto J. Contemporary fixed prosthodontics. 5th ed. St. Louis, MO: Mosby/Elsevier; 2016.
14. Clinical manual (fixed prosthodontics)
15. Shillingburg HT. Sather DA. Wilson EL. Cain JR. Mitchell DL. Blanco LJ. Kessler JC. Fundamentals of fixed Prosthodontics. 4th ed. Chicago, IL: Quintessence Pub Co; 2012.
16. George A. Zarb et al.: Prosthodontic Treatment for Edentulous Patients: Complete Dentures and Implant-Supported Prostheses. Mosby; 12th edition (2012).
17. Carr AB. Mc Givney GP. Brown DT, Mc Cracken`s: Removable Partial Denture, Elsevier Mosby 11th edition 2011.
18. Hassaballa M.A, Talic Y.A. principles of complete denture prosthodontics. KSU, 1st ed, 2004.
19. Phoenix R.D., Cagna D.R. and Defreest C.F.: Stewart's Clinical Removable Partial Prosthodontics. Quintessence Publishing (IL); 4th edition (2008).
20. Hargreaves K. and Cohen S., (2014). Pathways of the pulp. Mosby 10th edition.
21. Torabinijad, M (2009). Endodontics: Principles and Practice. Elsevier Health Sciences, 4th edition
22. Pinkham JR, Casamassimo PS, Fields HW, McTigue DJ, Nowak AJ. Pediatric Dentistry: infancy through adolescent. 5th edition, Missouri: Elsevier; 2013.
23. McDonald RE, Avery DR, Dean JA. Dentistry for the child and adolescent. 10th edition, St Louis, Missouri: Mosby, Inc; 2016.

Course Specification: DENT 446 – Advanced Orthodontics Clinics			
Course Symbol	DENT 446	Year	5
Course Title	Advanced Orthodontics Clinics	Units	2 Training
Prerequisite	DENT 441		

Course Outline:

This is a two-hour credit seminar course offered at the graduate level within the specialty program in orthodontics. The course provides in-depth information concerning methods and rationale for gathering a comprehensive data base for orthodontic patients. Analysis and interpretation of the database is approached by using the orthogonal analysis technique and from interdisciplinary perspectives, such as orthognathic surgery and facial pain, as well. The process of developing a treatment plan from the database will be thoroughly explored.

Course Learning Outcomes:

By the end of this course, student should be able to:

1. Evaluate the need for orthodontic treatment.
2. Conduct an interview and examination of the orthodontic patient.
3. Develop appropriate goals for a patient consistent with achieving and maintaining long-term health stability, and facial esthetics.
4. Generate a treatment plan for the orthodontic patient.
5. Develop an appreciation for the history of clinical orthodontics and its influence on our current standard of care.
6. Recognize the normal and abnormal in the development of the dentofacial complex including conditions which interfere with the patients' ability to function.
7. Recognize predisposing conditions and must recognize which require intervention and/or active treatment to prevent disease.

Educational Materials:

1. Clinical training.

Assessments of students:

1. Continuous assessment.
2. Assessment of clinical cases.

References:

1. Contemporary Orthodontics, By William R. Proffit, Henry W. Fields Jr., David M. Sarver. Mosby; 4th edition:2006

Course Specification: DENT 447 – Advanced Implant Dentistry Clinics			
Course Symbol	DENT 447	Year	5
Course Title	Advanced Implant Dentistry Clinics	Units	2 Training
Prerequisite	DENT 441		

Course Outline:

This course is a clinical course, designed to introduce the students to the clinical skill of multidisciplinary implant dentistry. Emphasis is on patient evaluation and selection, diagnosis and treatment planning, implant selection, surgical procedures for implant placement, prosthodontic restorations, patient management, and follow-up care.

Course Learning Outcomes:

By the end of this course, student should be able to:

1. Evaluate, select, and manage the implant patient.
2. Place implants for selected partially edentulous patients.
3. Select and restore the placed implants with the proper prosthesis.
4. Follow-up of the implant patient.

Educational Materials:

1. Clinical training.

Assessments of students:

1. Continuous assessment.
2. Assessment of clinical cases.

References:

1. Misch CE: Contemporary Implant Dentistry. St Louis: Mosby Co. 2007
2. Cranin N: Atlas of Oral Implantology. St Louis: Mosby Co. 1999

Course Specification: DENT 448 – Advanced Oral &

Maxillofacial Surgery Clinics			
Course Symbol	DENT 448	Year	5
Course Title	Advanced Oral and Maxillofacial Surgery Clinics		
Prerequisite	DENT 441	Units	2 Training

Course Outline:

This course is a clinical course, designed to introduce the students to the clinical skill of the advanced oral and maxillofacial surgery cases. Emphasis is on surgical techniques (fractures, orthognathic surgery, distraction osteogenesis, and reconstruction.....etc), patient management, and follow-up care.

Course Learning Outcomes:

By the end of this course, student should be able to:

1. Assess and examine the patient with a scientific identification of the surgical problems
2. Recognize the appropriate sequence of surgical care in the overall treatment plan
3. Refer patients to a specialist when needed.
4. Interpret the results of the physical evaluation and understand the findings that will alter and influence treatment
5. Discuss findings, diagnosis, and treatment plan options with the patient and to obtain informed consent to carry the treatment.
6. Control patients' pain and anxiety through surgical procedures.
7. Assist in advanced surgical procedures.
8. Perform some advanced surgical procedures under complete supervision.

Educational Methods:

1. Clinical training.

Assessments of students:

1. Continuous assessment.
2. Assessment of clinical cases.

References:

1. Text book of general and oral surgery Wray D, Stenhouse D, Lee D ,Clarck E, Churchill livingsone co, 2003
2. Peterson principle of oral and maxillofacial surgery Peterson L,Ellis III E ,Hupy GR,

Truker MR ,Mospy co 2nd ed ,2004

3. Principle of oral and maxillofacial surgery ,Moore UJ, blackwell sciences 5th ed 2001
4. Contemporary of oral and maxillofacial Peterson L, Ellis III E ,Hupy GR, Truker MR, surgery , Mospy co 2nd ed 2003
5. Oral surgery Fragiskos SD , springer, 2007

Course Specification: DENT 449 – Advanced Pedodontics Clinics			
Course Symbol	DENT 449	Year	5
Course Title	Advanced Pedodontics Clinics	Units	2 Training
Prerequisite	DENT 441		

Course Outline:

This course is designed to give the student advanced knowledge about different types of preventive and interceptive appliances, and ensure that they acquire knowledge about different management techniques to control difficult, physically and medically compromised children.

Course Outcomes:

By the end of this course, student should be able to:

1. Describe the problems of premature loss of primary teeth and how to use the suitable appliances.
2. Explain the harmful effect of bad oral habits on teeth, occlusion and soft tissue with references to effective appliances used to stop the habit.
3. Understand why and how to apply the different behavioral management techniques for children.
4. Be aware of the different physical restrain used to control unmanageable children.
5. Illustrate the role of premeditations in controlling defiant children.
6. Elicit the importance of using conscious sedations and general anesthesia in pedodontics.

Educational Materials:

1. Clinical training.

Assessments of students

1. Continuous assessment.
2. Assessment of clinical cases

References:

1. Dentistry for the child and Adolescent, Mc Donald, Avery, Dean, 8th ed., MOSBY, 2004.

جامعة القصيم
المملكة العربية السعودية – القصيم – بريدة
ص.ب ٦٦٦٦ الرمز ٥١٤٥٢
سنترال الجامعة: ٠٥٠٠٣٨٠٠٥٠ ٩٦٦+

Qassim University
KSA - Qassim - Buraydah
P.O.Box 6666-51452
Tel: +966 6 3800050

كلية طب الأسنان
المدينة الجامعية – المليدا
ص.ب ٦٧٠٠ بريدة الرمز البريدي ٥١٤٥٢
هاتف: ٠١٧٦١٣٨٠٩٦٦+ فاكس: ٠١٧٦٢٣٨٠٩٦٦+

College of Dentistry
Campus - Molida
P.O.Box 6700 buraydah, Postal Code 51452
Tel: +966 6 3801761 Fax: +966 6 3801762

http://dent.qu.edu.sa