

Program Structure Template

School of Dental Sciences
BDS
(Bachelor of Dental Surgery)

SDS0101
(2018-23)

1. Standard Structure of the Program at University Level

1.1 Vision, Mission and Core Values of the University

Vision of the University

To serve the society by being a global University of higher learning in pursuit of academic excellence, innovation and nurturing entrepreneurship.

Mission of the University

1. Transformative educational experience
2. Enrichment by educational initiatives that encourage global outlook
3. Develop research, support disruptive innovations and accelerate entrepreneurship
4. Seeking beyond boundaries

Core Values

1. Integrity
2. Leadership
3. Diversity
4. Community

1.2 Vision, Mission and Core Values of the School

Vision of the School

To serve the society by being a global center in pursuit of academic and professional excellence in the field of dentistry.

Mission of the School

1. Creating a stimulating and flexible learning environment amongst the faculty and students
2. Strongly promoting research, innovation, clinical excellence
3. Promote and inculcate ethical values and continued betterment in the dental profession and in all facets of life.

Core Values

1. Integrity
2. Leadership
3. Diversity
4. Community

1.3 Program Educational Objectives (PEO)

1.3.1 Writing Program Educational Objectives (PEO)

Program educational objectives are broad statements that describe the career and professional accomplishments that the program is preparing graduates to achieve.

- PEO1** Adequate knowledge of the scientific foundations on which dentistry is based and good understanding of various relevant scientific methods, principles of Biological functions and be able to evaluate and analyse scientifically various established facts and data.
- PEO2** Adequate knowledge of the development, structure and function of the teeth, mouth and jaws and associated tissues both in health and disease and their relationship and effect on general state of health and also bearing on physical and social well-being of the patient.
- PEO3** Adequate knowledge of clinical disciplines and methods which provide a coherent picture of anomalies, lesions and diseases of the teeth, mouth and jaws and preventive diagnostic and therapeutic aspects of dentistry.
- PEO4** Adequate clinical experience required for general dental practice.
- PEO5** Adequate knowledge of the constitution, biological function and behavior of persons in health and sickness as well as the influence of the natural and social environment on the state of health in so far as it affects dentistry.

1.3.3 Program Outcomes (PO's)

- PO1** A graduate should be able to diagnose and manage various common dental problems encountered in general dental practice keeping in mind the expectations and the right of the society to receive the best possible treatment available wherever possible.
- PO2** A graduate should acquire the skill to prevent and manage complications if encountered while carrying out various surgical and other procedures.
- PO3** A graduate should possess skill to carry out certain investigative procedures and ability to interpret laboratory findings.
- PO4** A graduate should Promote oral health and help prevent oral diseases where possible.
- PO5** A graduate should be Competent enough to control of pain and anxiety among the patients during dental treatment.
- PO6** A graduate should maintain a high standard- of professional ethics and conduct and apply these in all aspects of professional life.
- PO7** A graduate should seek to improve awareness and provide possible solutions for oral health problems and needs throughout the community.
- PO8** Willing to apply the current knowledge of dentistry in the best interest of the patients and the community.
- PO9** Willingness to participate in the CPED Programs to update the knowledge and professional skill from time to time. To help and participate in the implementation of the national oral health policy.
- PSO1** A graduate should be sound and able to diagnose and plan out the treatment options for the patient including referral to specialist, where required.
- PSO2** A graduate should be keen on inculcating life-long learning process and should have instilled him or her the ethical values of the profession

Program Structure Template
School of Dental Sciences
Bachelor of Dental Surgery (BDS)
Batch: 2018-2023
Year-1

| S.No. | Paper ID | Subject Code | Subjects | Teaching Load | | | Type of Course ¹ - 1. CC, 2. AECC 3. SEC, 4.DSE |
|--------------------------|----------|--------------|---|---------------|---|-----|--|
| | | | | L | T | P | |
| Theory Subjects | | | | | | | |
| 1. | BDS101 | BDS101 | General Human Anatomy including head and neck | 100 | - | - | CC |
| 2. | BDS102 | BDS102 | Bio Chemistry | 120 | - | - | CC |
| 3. | BDS102 | BDS102 | General Human Physiology | 120 | - | - | CC |
| 4. | BDS103 | BDS103 | Dental Anatomy; Embryology and Histology | 105 | - | - | CC |
| Practical/Viva-Voce/Jury | | | | | | | |
| 5. | BDS101 | BDS101 | General Human Anatomy including head and neck | - | - | 175 | CC |
| 6. | BDS102 | BDS102 | Bio Chemistry | - | - | 60 | CC |
| 7. | BDS102 | BDS102 | General Human Physiology | - | - | 60 | CC |
| 8. | BDS103 | BDS103 | Dental Anatomy; Embryology and Histology | - | - | 250 | |
| TOTAL CREDITS | | | | | | | NA |

Program Structure Template
School of Dental Sciences
Bachelor of Dental Surgery (BDS)
Batch: 2018-2023

Year-2

| S.No. | Paper ID | Subject Code | Subjects | Teaching Load | | | Type of Course ¹ - 1.CC, 2. AECC, 3.SEC, 4.DSE |
|--------------------------|------------|--------------|--------------------------------|---------------|---|-----|---|
| | | | | L | T | P | |
| Theory Subjects | | | | | | | |
| 1. | BDS20 1 | BDS201 | General Pathology | 120 | - | 105 | CC |
| 2. | BDS20 1 | BDS201 | Microbiology | 120 | - | 105 | CC |
| 3. | BDS20 2 | BDS202 | General & Dental Pharmacology | 70 | - | 20 | CC |
| 4. | BDS20 3 | BDS203 | Dental Materials | 80 | - | 240 | CC |
| Practical/Viva-Voce/Jury | | | | | | | |
| 5. | BDS25 1 | BDS251 | Pre-Clinical Prosthodontics an | 25 | - | 300 | CC |
| 6. | BDS25 2 | BDS252 | Pre-Clinical Conservative Dent | 25 | - | 200 | CC |
| TOTAL CREDITS | | | | | | | NA |

¹ CC: Core Course, AECC: Ability Enhancement Compulsory Courses, SEC: Skill Enhancement Courses, DSE: Discipline Specific Courses

Program Structure Template
School of Dental Sciences
Bachelor of Dental Surgery (BDS)
Batch: 2018-2023
Year-3

| S.No. | Paper ID | Subject Code | Subjects | Teaching Load | | | Type of Course ² - 1.CC, 2.AECC, 3.SEC, 4.DSE |
|--------------------------|----------|--------------|---------------------------------|---------------|---|----|--|
| | | | | L | T | P | |
| THEORY SUBJECTS | | | | | | | |
| 1. | BDS301 | BDS301 | General Medicine | 60 | - | - | CC |
| 2. | BDS302 | BDS302 | General Surgery | 60 | - | - | CC |
| 3. | BDS303 | BDS303 | Oral Pathology and Microbiology | 145 | - | - | CC |
| Practical/Viva-Voce/Jury | | | | | | | |
| 4. | BDS301 | BDS301 | General Medicine | - | - | 90 | CC |
| 5. | BDS302 | BDS302 | General Surgery | - | - | 90 | CC |
| 6. | BDS303 | BDS303 | Oral Pathology and Microbiology | - | - | 80 | CC |
| TOTAL CREDITS | | | | | | | NA |

² CC: Core Course, AECC: Ability Enhancement Compulsory Courses, SEC: Skill Enhancement Courses, DSE: Discipline Specific Courses

Program Structure Template
School of Dental Sciences
Bachelor of Dental Surgery (BDS)
Batch: 2018-2023
Year-4

| S.No. | Paper ID | Subject Code | Subjects | Teaching Load | | | Type of Course ³ - 1.CC, 2. AECC, 3.SEC, 4.DSE |
|--------------------------|----------|--------------|--------------------------------|---------------|---|-----|---|
| | | | | L | T | P | |
| Theory Subjects | | | | | | | |
| 1. | BDS401 | BDS401 | Public Health Dentistry | 60 | - | - | CC |
| 2. | BDS402 | BDS402 | Periodontology | 80 | - | - | CC |
| 3. | BDS403 | BDS403 | Orthodontics & Dentofacial Ort | 50 | - | - | CC |
| 4. | BDS404 | BDS404 | Oral Medicine & Radiology | 65 | - | - | CC |
| 5. | BDS405 | BDS405 | Oral & Maxillofacial Surgery | 70 | - | - | CC |
| 6. | BDS406 | BDS406 | Conservative Dentistry & Endod | 110 | - | - | CC |
| 7. | BDS407 | BDS407 | Prosthodontics and Crown & Bri | 110 | - | - | CC |
| 8. | BDS408 | BDS408 | Paediatric and Preventive Dent | 65 | - | - | CC |
| Practical/Viva-Voce/Jury | | | | | | | |
| 9. | BDS401 | BDS401 | Public Health Dentistry | - | - | 290 | CC |
| 10. | BDS402 | BDS402 | Periodontology | - | - | 200 | CC |
| 11. | BDS403 | BDS403 | Orthodontics & Dentofacial Ort | - | - | 200 | CC |
| 12. | BDS404 | BDS404 | Oral Medicine & Radiology | - | - | 200 | CC |
| 13. | BDS405 | BDS405 | Oral & Maxillofacial Surgery | - | - | 360 | CC |
| 14. | BDS406 | BDS406 | Conservative Dentistry & Endod | - | - | 460 | CC |
| 15. | BDS407 | BDS407 | Prosthodontics and Crown & Bri | - | - | 460 | CC |
| 16. | BDS408 | BDS408 | Paediatric and Preventive Dent | - | - | 200 | CC |
| TOTAL CREDITS | | | | | | | NA |

³ CC: Core Course, AECC: Ability Enhancement Compulsory Courses, SEC: Skill Enhancement Courses, DSE: Discipline Specific Courses

Course Templates – Year 1

2.1 Template A1: Syllabus

| | | |
|--|------------------------------|---|
| School: School of Dental Sciences | | Batch: 2018-2023 |
| Program: | | BDS (Bachelor of Dental Surgery) |
| 1 | Course Code | BDS101 |
| 2 | Course Title | General Human Anatomy including embryology & histology |
| 3 | Credits | NA |
| 4 | Contact Hours (L-T-P) | 100-0-175 |
| Course Type | | Compulsory (CORE) |
| 5 | Course Objective | <ol style="list-style-type: none"> 1. To know the normal disposition of the structures in the body while clinically examining a patient and while conducting clinical procedures. 2. To know the anatomical basis of disease and injury. 3. To know the microscopic structure of the various tissues, a pre-requisite for understanding of the disease processes. 4. To know the nervous system to locate the site of lesions according to the sensory and or motor deficits encountered. 5. To have an idea about the basis of abnormal development, critical stages of development, effects of teratogens, genetic mutations and environmental hazards. 6. To know the sectional anatomy of head neck and brain to read the features in radiographs and pictures taken by modern imaging techniques. 7. To know the anatomy of cardio-pulmonary resuscitation. |
| 6 | Course Outcomes | <p>CO101.1: Dental student with knowledge on normal disposition of the structures in the body, microscopic structure of the various tissues, nervous system to locate the site of lesions, sectional anatomy of head neck and brain</p> <p>CO101.2: Dental student possessing skills to locate various structures of head and neck of the body, identify various tissues under microscope</p> <p>CO101.3: Dental student with an integrated knowledge on basic sciences and clinical subjects</p> |
| 7 | Course Description | The course provides knowledge and insight into, the functional anatomy of the normal human head and neck, functional histology and an appreciation of the genetic basis of inheritance and disease, and the embryological development of clinically important structures |

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| 8 | Outline syllabus | |
| BDS101.A | Unit A INTRODUCTION | |
| BDS101.A1 | Unit A Topic 1 | Anatomical terms. Skin, superficial fascia & deep fascia Cardiovascular system, portal system collateral circulation and arteries. |
| BDS101.A2 | Unit A Topic 2 | Lymphatic system, regional lymph nodes. Osteology - Including ossification & growth of bones. Myology – Including types of muscle tissue & innervations. |
| BDS101.A3 | Unit A Topic 3 | Syndesmology – Including classification of Joints. Nervous system |
| BDS101.B | Unit B HEAD & NECK | |
| BDS101.B1 | Unit B Topic 1 | Head and neck |
| BDS101.B2 | Unit B Topic 2 | Thorax |
| BDS101.B3 | Unit B Topic 3 | Abdomen |
| BDS101.B4 | Unit B Topic 4 | Clinical procedures |
| BDS101 C | Unit C EMBRYOLOGY | |
| BDS101.C1 | Unit C Topic 1 | Oogenesis, Spermatogenesis, Fertilisation, Placenta, Primitive streak, Neural crest, |
| BDS101.C2 | Unit C Topic 2 | Bilaminar and trilaminar embryonic disc, Intra embryonic mesoderm |
| BDS101.C3 | Unit C Topic 3 | Formation and face, notochord formation & fate, Pharyngeal arches, pouches & clefts |

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| BDS101.C4 | Unit C Topic 4 | Development of face, tongue, palate, thyroid gland, pituitary gland, salivary glands, and anomalies in their development |
| BDS101.C5 | Unit C Topic 5 | Tooth development in brief. |
| BDS101 D | Unit D HISTOLOGY | |
| BDS101 D1 | Unit D Topic 1 | The Cell |
| BDS101 D2 | Unit D Topic 2 | Basic tissues - Epithelium, Connective tissue including cartilage and bone, Muscle Tissue, Nervous tissue: Peripheral nerve, optic nerve, sensory ganglion, motor ganglion, Skin |
| BDS101 D3 | Unit D Topic 3 | Classification of Glands Salivary glands (serous, mucous and mixed gland) |

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| | BDS101 D4 | Unit D Topic 4 | Blood vessels, Lymphoid tissue |
| | BDS101 D5 | Unit D Topic 5 | Tooth, lip, tongue, hard palate, oesophagus, stomach, duodenum, ileum, colon, vermiform appendix Liver, Pancreas, Lung, Trachea, Epiglottis |
| | BDS101 D6 | Unit D Topic 6 | Thyroid gland, para thyroid gland, supra renal gland and pituitary gland, Kidney, Ureter, Urinary bladder, Ovary and testis. |
| | BDS101 E | Unit E MEDICAL GENETICS | |
| | BDS101.E1 | Unit E Topic 1 | Mitosis, meiosis |
| | BDS101 E2 | Unit E Topic 2 | Chromosomes, gene structure |
| | BDS101.E3 | Unit E Topic 3 | Mendelism, modes of inheritance |
| 1 | Course evaluation | Attendance | Minimum 75% is Needed for both theory and clinical practical |
| | | Quizzes | Taken in every 3 months |
| | | Presentations | Video Presentation |
| | | Any Other | Project based learning, Assignments |
| | | Annual examination | Theory-100 Marks Practical – 100 Marks |
| 2 | Text book/s* | 1. SNELL (Richard S.) Clinical Anatomy for Medical Students, Ed. 5, 2. RJ LAST'S Anatomy – ^{9th} edition. 3. Cunningham Manual of Practical Anatomy: Head & Neck & Brain Ed.15.Vol.III, Oxford Medical publication. 4. Functional Histology, Ed. 2, Churchill Livingstone. 5. Medical Embryology, Ed. 6. 6. Grant's Atlas of Anatomy. Williams & Wilkins. 7. WILLIAMS, Gray's Anatomy, Ed.38. , Churchill Livingstone. 8. EMERY, Medical Genetics. 9. B. D. Chaurasia | |
| 3 | Other References | TED learning EBSCOHOST Various scientific articles from various sources | |

Course Templates –

2.1 Template A1: Syllabus

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|--|------------------------------|--|
| School: School of Dental Sciences | | Batch: 2018-2023 |
| Program: | | BDS (Bachelor of Dental Surgery) |
| 1 | Course Code | BDS 102 |
| 2 | Course Title | Bio Chemistry; General Human Physiology |
| 3 | Credits | NA |
| 4 | Contact Hours (L-T-P) | 120-0-60 |
| Course Type | | Compulsory (CORE) |
| 5 | Course Objective | <ol style="list-style-type: none"> 1. To provide a sound but crisp knowledge on the biochemical basis of the life processes relevant to the human system and to dental/medical practice. 2. The chemistry portion should strive towards providing information on the functional groups, hydrophobic and hydrophilic moieties and weak valence forces that organise macromolecules. |
| 6 | Course Outcomes | <p>CO102.1: Dental student with knowledge on normal functioning of all the organ systems and their interactions, relative contribution of each organ system towards the maintenance of total body function, physiological principles underlying the pathogenesis of various diseases and oral and para - oral structures.</p> <p>CO102.2: Dental student with basic skill to conduct and interpret experimental and investigative data</p> <p>CO102.3: Dental student with knowledge on biochemical agents related to dentistry, various micro and macro nutrients.</p> |
| 7 | Course Description | <p>Students will be able to excel in their knowledge about the human body, its various organ systems, their compositions and functions. Students will also be efficient to determine and to undertake various investigatory lab procedures, biochemical analysis and advanced diagnostic procedures prevalent in the medical field.</p> |

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| 8 | Outline syllabus | |
| | BDS102.A | Unit A CHEMISTRY OF BIOORGANIC MOLECULES |

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| BDS102.A1 | Unit A Topic 1 | Carbohydrates |
| BDS102.A2 | Unit A Topic 2 | proteins |
| BDS102.A3 | Unit A Topic 3 | Lipids |
| BDS102.A4 | Unit A Topic 4 | Nucleic Acids |
| BDS102.B | Unit B MACRONUTRIENTS AND DIGESTION, MICRONUTRIENTS | |
| BDS102.B1 | Unit B Topic 1 | Energy needs: Basal metabolic rate |
| BDS102 B2 | Unit B Topic 2 | Enzymatic hydrolysis of dietary carbohydrates |
| BDS102 B3 | Unit B Topic 3 | Vitamins |
| BDS102 B4 | Unit B Topic 4 | Minerals |
| BDS102 C | Unit C ENERGY METABOLISM | |
| BDS102 C1 | Unit C Topic 1 | Overview: Outlines of glycolysis, pyruvate oxidation and citric acid cycle. |
| BDS102 C2 | Unit C Topic 2 | CO102.1 |
| BDS102 C3 | Unit C Topic 3 | Importance of pentose phosphate pathway. Formation of glucuronic acid. Outlines of cholesterol synthesis and breakdown. |
| BDS102 C4 | Unit C Topic 4 | BIOCHEMICAL GENETICS AND PROTEIN SYNTHESIS |
| BDS102 C5 | Unit C Topic 5 | ENZYME AND METABOLIC REGULATION |
| BDS102 D | Unit D STRUCTURAL COMPONENTS AND BLOOD PROTEINS | |
| BDS102 D1 | Unit D Topic 1 | Connective Tissue |
| BDS102 D2 | Unit D Topic 2 | Haemoglobin |
| BDS102 E | Unit E MEDICAL BIOCHEMISTRY | |
| BDS102 E1 | Unit E Topic 1 | Regulation of blood glucose. Diabetes mellitus and related disorders |
| BDS102 E2 | Unit E Topic 2 | Liver function tests |

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| | BDS102.E3 | Unit E Topic 3 | Hyperthyroidism and Hypothyroidism: Biochemical evaluation. |
| | BDS102 E4 | Unit E Topic 4 | Inborn errors of amino acid metabolism and muscular dystrophy |
| | BDS102 F | Unit F GENERAL PHYSIOLOGY | |
| | BDS102 F1 | Unit F Topic 1 | Composition and functions of Blood |
| | BDS102 F2 | Unit F Topic 2 | Muscles and Nerve |
| | BDS102 F3 | Unit F Topic 3 | Digestive system |
| | BDS102 F4 | Unit F Topic 4 | Excretory system |
| | BDS102 F5 | Unit F Topic 5 | Body temperature and functions of skin |
| | BDS102 F6 | Unit F Topic 6 | Endocrinology |
| | BDS102 F7 | Unit F Topic 7 | Reproduction |
| | BDS102 F8 | Unit F Topic 8 | Cardiovascular system |
| | BDS102 F9 | Unit F Topic 9 | Respiratory system |
| | BDS102 F10 | Unit F Topic 10 | Central nervous system |
| | BDS102 G | PRACTICAL PHYSIOLOGY | |
| | BDS102 G1 | Unit G Topic 1 | Physiologic procedures |
| | BDS102 G2 | Unit G Topic 1 | Demonstrations |
| | BDS102 G3 | Unit G Topic 1 | Electrocardiography |
| | BDS102 G4 | Unit G Topic 1 | Clinical examinations of Organ systems |

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| 1. | Course evaluation | Attendance | Minimum 75% is Needed for both theory and clinical practical |
| | | Quizzes | Taken in every 3 months |
| | | Presentations | Video Presentation |
| | | Any Other | Project based learning, flip learning, Assignments, Webinars |
| | | Annual examination | Theory-100 Marks Practical – 100 Marks |
| 2. | Text book/s* | 1. Guyton; Text book of Physiology, 9th edition. 2. Ganong; Review of Medical Physiology, 19th edition Vander; Human physiology, 5th edition 3. Choudhary; Concise Medical Physiology, 2nd edition Chaterjee; Human Physiology, 10th edition 4. A.K. Jain; Human Physiology for BDS students, 1st edition 5. Concise text book of Biochemistry (3 rd edition) 2001, 6. Nutritional Biochemistry 1995, 7. Text book of Biochemistry with clinical correlations 1997, 8. Biochemistry, 1996. R.K. Murray et. Basic and applied Dental Biochemistry, 1979, R.A.D. | |
| 3. | Other References | TED learning EBSCOHOST Various scientific articles from various sources | |

2.1 Template A1: Syllabus

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|--|--------------------------|--|
| School: School of Dental Sciences | | Batch:2018-23 |
| Program: | | BDS (Bachelor of Dental Surgery) |
| 1 | Course Code | BDS103 |
| 2 | Course Title | Dental Anatomy, Embryology & Oral Histology |
| 3 | Credits | |
| 4 | Contact Hours (L-T-P) | 105-0-250 |
| | Course Status | Compulsory (CORE) |
| 5 | Course Objective | 1. To make students learn about anatomy of teeth. 2. To educate students about histology of oral tissues. 3. To prepare students about understanding of clinical applications of teeth anatomy. 4. To make students competent about understanding of clinical applications of oral histology. |
| 6 | Course Outcomes | CO103.1: At the end of the course, student is expected to appreciate the normal development, morphology, structure and function of oral tissues & variations in different pathological/non-pathological states. CO103.2: The student should understand the histological basis of various dental treatment procedures. CO103.3: The students must know the basic knowledge of physiologic ageing process in the dental tissues. CO103.4: Professional honesty and integrity are to be fostered |
| 7 | Course Description | Under dental anatomy we make students thoroughly understand about anatomy of teeth. Under histology they are made aware of all the tissues in the oral cavity. We also teach them about basic embryology pertaining to oral tissues. |
| 8 | Outline syllabus | |

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| | | Unit A | Tooth Morphology | |
| | BDS-103. A.1 | Topic 1 | Human dentition, types of teeth and functions, Tooth numbering systems, Tooth surfaces and their junctions- line angles and point angles. Definition of terms used in dental morphology, geometric concepts in tooth morphology, contact areas and embrasures- Clinical significance. | |
| | BDS-103. A.2 | Topic 2 | Morphology of deciduous & permanent teeth | |
| | BDS-103. A.3 | Topic 3 | Occlusion | |
| | | Unit B | Oral Embryology | |
| | BDS-103. B.1 | Topic 1 | Brief Review of Development of face, jaws, lip, palate and tongue with applied aspects. | |
| | BDS-103. B.2 | Topic 2 | Development of teeth with applied aspects. | |
| | BDS-103. B.3 | Topic 3 | Eruption of deciduous and permanent teeth. Applied aspect of eruption and Shedding of teeth and its complications | |
| | | Unit C | Oral Histology of hard tissues | |
| | BDS-103. C.1 | Topic 1 | Detailed microscopic study of enamel | |
| | BDS-103. C.2 | Topic 2 | Dentin, cementum | |
| | BDS-103. C.3 | Topic 3 | Alveolar bone, Temporomandibular joint | |
| | | Unit D | Oral histology of soft tissues | |
| | BDS-103. D.1 | Topic 1 | Pulp tissue Periodontal Ligament, | |
| | BDS-103. D.2 | Topic 2 | Oral Mucosa, Salivary glands, Maxillary sinus | |
| | BDS-103. D.3 | Topic 3 | Processing of hard and soft tissues for microscopic studies | |
| | | Unit E | Oral Physiology | |
| | BDS-103. E.1 | Topic 1 | Saliva, Mastication, Deglutition | |
| | BDS-103. E.2 | Topic 2 | Calcium, Phosphorus and Fluoride Metabolism | |
| | BDS-103. E.3 | Topic 3 | Theories of mineralization, Physiology of taste and speech | |
| 1. | Course Evaluation | Attendance | Minimum 75% is needed for both theory and clinical practical | |
| | | Quizzes | Taken every 3 months | |
| | | Presentations | Video presentations | |
| | | Any other | Project based learning, assignments | |
| | | Annual Examination | Theory | 100 Marks |
| | | | Practical | 100 Marks |
| | Attendance | Minimum 75% is needed for both theory and clinical practical | | |
| 2. | | Text book/s* | Tencate, Orbans, Wheelers, James & Avery | |
| 3. | | Other References | LMS TED learning EBSCOHOST Scientific articles Webinars | |

Course Templates –

2.1 Template A1: Syllabus for Theory Subjects

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|--|------------------------------|--|
| School: School of Dental Sciences | | Batch: 2018-2023 |
| Program: | | BDS (Bachelor of Dental Surgery) |
| 1 | Course Code | BDS201 |
| 2 | Course Title | General Pathology & Microbiology |
| 3 | Credits | NA |
| 4 | Contact Hours (L-T-P) | 120-0-105 |
| Course Type | | Compulsory (CORE) |
| 5 | Course Objective | <ol style="list-style-type: none"> 1. To demonstrate and apply basic facts, concepts and theories in the field of Pathology. 2. To recognize and analyze pathological changes at macroscopically and microscopical levels and explain their observations in terms of disease processes. 3. To integrate knowledge from the basic sciences, clinical medicine and dentistry in the study of Pathology. 4. To demonstrate understanding of the capabilities and limitations of morphological Pathology in its contribution to medicine, dentistry and biological research. 5. Understand the basics of various branches of microbiology and able to apply the knowledge relevantly. 6. Have a sound understanding of various infectious diseases and lesions in the oral cavity. 7. To demonstrate ability to consult resource materials outside lectures, laboratory and tutorial classes. |
| 6 | Course Outcomes | <p>CO201.1 Dental student with knowledge on pathological changes at macroscopic and microscopic levels, capabilities and limitations of morphological pathology in its contribution to dentistry.</p> <p>CO201.2 Dental student with an ability to integrate knowledge from the basic sciences to clinical application in dentistry.</p> <p>CO201.3 Dental student with sound understanding of various infectious diseases and lesions in the oral cavity, various methods of Sterilisation and disinfection.</p> <p>CO201.4 Dental student with basic skills to select, collect and transport clinical specimens to the laboratory and be able to carry out proper aseptic procedures in the dental clinic.</p> |

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| 7 | Course Description | <p>At the end of the course the student should be competent to:</p> <ul style="list-style-type: none"> ● Apply the scientific study of disease processes, which result in morphological and functional alterations in cells, tissues and organs to the study of pathology and the practice of dentistry. ● Able to apply this knowledge in their clinical practice. ● Apply the knowledge gained in related medical subjects like General Medicine and General Surgery and Dental subjects like Oral Pathology, Community Dentistry, Periodontics, Oral Surgery, Pedodontics, Conservative Dentistry and Oral medicine in higher classes. ● Understand and practice various methods of Sterilisation and disinfection in dental clinics. |
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| 8 | Outline syllabus | |
| | BDS-201 A | Unit A |
| | BDS-201 A1 | <p>Topic 1</p> <p>Introduction to Pathology, etiology and Pathogenesis of Disease.</p> <p>General Microbiology:</p> <ul style="list-style-type: none"> - History, Introduction, Scope, Aims and Objectives. - Morphology and Physiology of bacteria. - Bacterial Genetics and Drug Resistance in bacteria. |
| | BDS-201 A2 | <p>Topic 2</p> <p>Degenerations Amyloidosis, Fatty change, apoptosis, necrosis, gangrene, calcifications.</p> <p>Detail account of Sterilization and Disinfection.</p> <p>Brief account of Culture media and Culture techniques.</p> <p>Basic knowledge of selection, collection, transport, processing of clinical specimens and identification of bacteria</p> |
| | BDS-201 A3 | <p>Topic 3</p> <p>Inflammation</p> <ul style="list-style-type: none"> - Definition, causes types, and features: Acute inflammation, chronic inflammation. <p>Healing</p> <ul style="list-style-type: none"> - Regeneration - Repair <p>Bacterial Genetics and Drug Resistance in bacteria.</p> |
| | BDS-201 B | Unit B |
| | BDS-201 B1 | <p>Topic 1</p> <p>Tuberculosis- (Epidemiology, Pathogenesis, Pathological features of Primary and secondary TB, complications and fate)</p> <p>Syphilis- (Epidemiology, types and stages of syphilis, Pathological features, diagnostic criteria, oral lesions)</p> |

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| | | <p>Typhoid- (Epidemiology, Pathogenesis, Pathological features, Diagnostic criteria)</p> <p>Immunology:</p> <ul style="list-style-type: none"> - Infection - Definition, Classification, Source, - Mode of transmission and types of Infectious disease. - Immunity - Structure and functions of Immune system - The Complement System - Antigen - Immunoglobulins - Antibodies - General structure and the role played in defense mechanism of the body. - Immune response - Antigen - Antibody reactions - with reference to clinical utility. - Immuno deficiency disorders - a brief knowledge of various types of immunodeficiency disorders - A sound knowledge of immuno deficiency disorders relevant to dentistry. - Hypersensitivity reactions - Autoimmune disorders - Basic knowledge of various types - sound knowledge of autoimmune disorders of oral cavity and related structures. - Immunology of Transplantation and Malignancy - Immune haematology |
| BDS-201 B2 | Topic 2 | <p>Thrombosis, Embolism, Ischaemia and Infraction</p> <p>Systematic bacteriology:</p> <ul style="list-style-type: none"> - Pyogenic cocci - Staphylococcus, Streptococcus, Pneumococcus, Gonococcus, - Meningococcus— brief account of each coccus - detailed account of mode of spread, laboratory diagnosis, Chemo therapy and prevention - Detailed account of Cariogenic Streptococci. - Corynebacterium diphtheriae - mode of spread, important clinical feature, Laboratory diagnosis, Chemotherapy and Active immunisation. - Mycobacteria - Tuberculosis and Leprosy - Clostridium - Gas gangrene, food poisoning and tetanus. - Non-sporing Anaerobes - in brief about classification and morphology, - Spirochaetes - Treponema pallidum - detailed account of Oral Lesions of syphilis, - Borrelia vincentii. - Actinomycetes. |

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| BDS-201 B3 | Topic 3 | Derangements of body fluids- Oedema Disorders of circulation <ul style="list-style-type: none"> - Hyperaemia - Shock Virology: <ul style="list-style-type: none"> - Introduction - General properties, cultivation, host - virus interaction with special reference to Interferon. - Brief account of Laboratory diagnosis, Chemotherapy and immuno prophylaxis in general. - A few viruses of relevance to dentistry. <ul style="list-style-type: none"> ● Herpes Virus ● Hepatitis B Virus - brief about other types ● Human Immunodeficiency Virus (HIV) ● Mumps Virus ● Brief - Measles and Rubella Virus ● Bacteriophage - structure and significance | |
| BDS-201 C | Unit C | | |
| BDS-201 C1 | Topic 1 | Nutritional Disorders: Common Vitamin Deficiencies Mycology: <ul style="list-style-type: none"> - Brief Introduction | |
| BDS-201 C2 | Topic 2 | Immunological mechanisms in disease <ul style="list-style-type: none"> - Humoral & cellular immunity - Hypersensitivity & autoimmunity AIDS and Hepatitis. Hypertension <ul style="list-style-type: none"> - Definition, classification - Pathophysiology - Effects in various organs Diabetes Mellitus <ul style="list-style-type: none"> - Def, Classification, Pathogenesis, Pathology in different organs Candidosis – in detail | |
| BDS-201 C2 | Topic 3 | Adaptive disorders of growth <ul style="list-style-type: none"> - Atrophy & Hypertrophy, Hyperplasia, Metaplasia and Dysplasia Briefly on oral lesions of systemic mycoses. | |

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| BDS-201 D | Unit D | | |
| BDS-201 D1 | Topic 1 | 2. General Aspects of neoplasia <ul style="list-style-type: none"> a. Definition, terminology, classification | |

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| | | b. Differences between benign and malignant neoplasms c. The neoplastic cell d. Metastasis e. Aetiology and pathogenesis of neoplasia, carcinogenesis f. Tumour biology g. Oncogenes and anti-oncogenes h. Diagnosis i. Precancerous lesions j. Common specific tumours, Sq papilloma & Ca, Basal cell Ca, Adenoma & Adenoma, Fibroma & Fibrosarcoma, Lipoma and liposarcoma Parasitology: Brief introduction - protozoans and helminths Brief knowledge about the mode of transmission and prevention of commonly seen parasitic infection in the region |
| BDS-201 D2 | Topic 2 | Anaemias: Iron Deficiency anaemia, Megaloblastic anaemia Leukemia: acute and chronic leukemia, diagnosis & clinical features |
| BDS-201 D3 | Topic 3 | Diseases of Lymph nodes <ul style="list-style-type: none"> - Hodgkin's disease, - Non-Hodgkins lymphoma - Metastatic carcinoma Diseases of oral cavity <ul style="list-style-type: none"> - Lichen planus, Stomatitis, Leukoplakia, Sq cell Ca, Dental caries, Dentigerous cyst, Ameloblastoma Diseases of salivary glands <ul style="list-style-type: none"> - Normal structure, Sialadenitis, Tumours |

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| BDS-201 E | Unit E | |
| BDS-201 E1 | Topic 1 | Common diseases of Bones <ul style="list-style-type: none"> - Osteomyelitis, Metabolic bone diseases, Bone Tumours, Osteosarcoma, Osteocalstoma, Giant cell Tumour, Ewing's sarcoma, Fibrous dysplasia, Aneurysmal bone cyst |
| BDS-201 E2 | Topic 2 | Diseases of Cardiovascular system <ul style="list-style-type: none"> - Cardiac failure - Congenital heart disease - ASD, VSD, PDA - Fallot's Tetralogy - Infective Endocarditis - Atherosclerosis - Ischaemic heart disease |
| BDS-201 E3 | Topic 3 | Haemorrhagic disorders (coagulation cascade, coagulation disorders) Platelet function, platelet disorders |

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| 1. | Course evaluation | Attendance | Minimum 75% is Needed for both theory and clinical practical | | | |
| | | Quizes | Taken in every 3 months | | | |
| | | Presentations | Video Presentation | | | |
| | | Any Other | Project based learning, flip learning, Assignments | | | |
| | | Annual Theory & Practical Examination | 100 Marks 100 Marks | | | |
| 2. | Text book/s* | | | | | |
| | | SR. | Author | Title | | |
| | | 1 | Robbins | Pathologic Basis of Disease | | |
| | | 2 | Ivan Damjanov & James Linder | Anderson’s Pathology Voll&2 Editio | | |
| | | 3 | Lee, Bithell, Foerster, Athens, Lukens | Wintrobe’s clinical Haematology | | |
| | | 4 | R.Ananthanarayan & C.K. Jayaram Paniker | Text book of Microbiology | | |
| | | 5 | David Greenwood etal. | Medical Microbiology | | |
| | | 6 | Prescott,etal | Microbiology | | |
| | | 7 | Bernard D. Davis, etal | Microbiology | | |
| | | 8 | Barbara J Howard, etal. | Clinical & Pathogenic Microbiology | | |
| | | 9 | Moselio Schaechter, etal. | Mechanisms of Microbial diseases | | |
| | | 10 | Tizard | Immunology an Introduction | | |
| | | 11 | Evan Roitt et al. | Immunology 3 rd edition | | |
| 3. | Other References | | | | | |

Course Templates – Year 2

2.1 Template A1: Syllabus

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| School: School of Dental Sciences | | Batch: 2018-2023 |
| Program: | | BDS (Bachelor of Dental Surgery) |
| 1 | Course Code | BDS202 |
| 2 | Course Title | General & Dental Pharmacology and Therapeutics |
| 3 | Credits | NA |
| 4 | Contact Hours (L-T-P) | 070-0-020 |
| Course Type | | Compulsory (CORE) |
| 5 | Course Objective | At the end of the course the student shall be able to: <ol style="list-style-type: none"> 1. Prescribe drugs for common dental and medical ailments. 2. To appreciate adverse reactions and drug interactions of commonly used drugs. 3. Observe experiments designed for study of effects of drugs. 4. Critically evaluate drug formulations and be able to interpret the clinical pharmacology of marketed preparations commonly used in dentistry. 5. INTEGRATION: Practical knowledge of use of drugs in clinical practice will be acquired through integrated teaching with clinical departments. |
| 6 | Course Outcomes | <p>CO 202.1 Dental student with knowledge on indications contraindications interactions, allergies and adverse reactions of commonly used drugs, use of appropriate drugs in disease with consideration to its efficacy, safety for individual and mass therapy needs</p> <p>CO 202.2 Dental student with an ability to advice special care in prescribing common and essential drugs in special medical situations such as pregnancy, lactation old age, renal, hepatic damage and immune compromised patients</p> <p>CO202.3 Dental student with skills to prescribe drugs for common dental and medical ailments appreciate adverse reactions and drug interactions of commonly used drugs</p> |
| 7 | Course Description | The broad goal of teaching under graduate students in pharmacology is to inculcate rational and scientific basis of therapeutics keeping in view of dental curriculum and Profession. |

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| 8 | Outline syllabus | |
| | BDS 202 A | Unit A GENERAL PHARMACOLOGY |
| | BDS 202 A1 | Unit A Topic 1 General principles of pharmacology; sources and nature of drugs dosage forms; prescription writing; pharmacokinetics (absorption, distribution, metabolism and excretion of drugs), mode of action of drugs, combined effects of drugs, receptor mechanism of drug action, factors modifying drug response, adverse drug reactions; drug interactions, Implications of General Principles in clinical dentistry. |
| | BDS 202 A2 | Unit A Topic 2 CNS drugs; General anaesthetics, hypnotics, analgesics psychotropic drugs, anti – epileptics, muscle relaxants, local anaesthetics, Implications of these drugs in clinical dentistry. |

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| BDS 202 A3 | Unit A Topic 3 | Autonomic drugs; sympathomimetics, antiadrenergic drugs; parasympathomimetics and parasympatholytics, Implications of Autonomic drugs in clinical dentistry |
| BDS 202 A4 | Unit A Topic 4 | Cardiovascular drugs; Cardiac stimulants; antihypertensive drugs, vasopressor agents, treatment of shock, Antianginal agents and diuretics, Implications of these drugs in clinical dentistry. |
| BDS 202 A5 | Unit A Topic 5 | Autocoids: Histamine, antihistamines, prostaglandins, leukotriens and bronchodilators, Implications of Autocoids in clinical dentistry. |
| BDS 202 A6 | Unit A Topic 6 | G.I.T. Drugs, Purgatives, anti-diarrhoeal, antacids, anti-emetics, Implications of these drugs in clinical dentistry. |
| BDS 202 A7 | Unit A Topic 7 | Endocrines; Emphasis on treatment of diabetes and glucocorticoids, thyroid and antithyroid agents, drugs affecting calcium balance and anabolic steroids, Implications of these drugs in clinical dentistry. |
| BDS 202 A8 | Unit A Topic 8 | Chemotherapy: Antimicrobial agents (against bacteria, anaerobic infections, fungi, virus and broad spectrum). Infection management in dentistry. Pharmacotherapy of Tuberculosis, leprosy and chemotherapy of malignancy in general. Implications of Chemotherapy in clinical dentistry. |
| BDS 202 A9 | Unit A Topic 9 | Chemotherapy: Antimicrobial agents (against bacteria, anaerobic infections, fungi, virus and broad spectrum). Infection management in dentistry. Pharmacotherapy of Tuberculosis, leprosy and chemotherapy of malignancy in general. Implications of Chemotherapy in clinical dentistry. |
| BDS 202 A10 | Unit A Topic 10 | Vitamins: Water soluble vitamins, Vit. D, Vit.K. and Vit. E, Implications of Vitamins in clinical dentistry. |
| BDS 202 A11 | Unit A Topic 11 | Pharmacotherapy of emergencies in dental office and emergency drugs tray Implications of Pharmacotherapy in clinical dentistry. |
| BDS 202 A12 | Unit A Topic 12 | Chealating agents – BAL, EDTA and desferrioxamine, |

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| BDS 202 B | Unit B DENTAL PHARMACOLOGY | |
| BDS 202 B1 | Unit B Topic 1 | Anti - septics, astrigents, obtundents, mummifying agents, bleaching agents, styptics, disclosing agents, dentifrices, mouth washes, caries and fluorides. |
| BDS 202 B2 | Unit B Topic 2 | Pharmacotherapy of common Oral conditions in dentistry, Practical's & Demonstrations |

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| 1 . | Course evaluation | Attendance | Minimum 75% is Needed for both theory and clinical practical |
| | | Quizzes | Taken in every 3 months |
| | | Presentations | Video Presentation |
| | | Any Other | Project based learning, Assignments |
| | | Annual examination | Theory-100 marks Practical-100 marks |
| 2 . | Text book/s* | <ol style="list-style-type: none"> 1. R.S.Satoskar, Kale Bhandarkar's Pharmacology and Pharmacolherapentics, 10th Edition, Bombay Popular Prakashan 1991. 2. Bertam G Katzung, Basic and Clinical pharmacology 6th ed. Appleton & Lange 1997. 3. Lauerence D.R. Clinical Pharmacology 8th ed. Churchill Livingstone 1997. 4. Satoskar R.S. & Bhandarkar S.D., Pharmacology and Pharmacotherapeutics part I & part ii, 13th Popular Prakashan Bombay 1993. 5. Tripathi K.D., Essentials of Medical Pharmacology 4th ed Jaypee Brothers 1999. | |
| 3 . | Other References | TED learning Various scientific articles from various sources | |

Course Templates –

2.1 Template A1: Syllabus for Theory Subjects (SAMPLE)

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| School: School of Dental Sciences | | Batch: 2018-2023 |
| Program: | | BDS (Bachelor of Dental Surgery) |
| Branch: | | Dental |
| 1 | Course Code | BDS-203 |
| 2 | Course Title | DENTAL MATERIALS |
| 3 | Credits | NA |
| 4 | Contact Hours (L-T-P) | 80-0-240 |
| | Course Type | Compulsory (CORE) |
| 5 | Course Objective | <ol style="list-style-type: none"> 1. To understand the evolution and development of science of dental material. 2. To explain purpose of course in dental materials to personnel concerned with the profession of the dentistry. Knowledge of physical, chemical properties and biomechanical requirements of particular restorative procedure. 3. Search for newer and better materials to answer daily requirements with greater satisfaction. 4. To understand and evaluate the claims made by manufactures of dental materials. 5. To present basic chemical and physical properties of Dental materials as they are related to its manipulation to give a sound educational background so that the practice of the dentistry emerged from art to empirical status of science as more information through further research becomes available |
| 6 | Course Outcomes | CO203.1- Dental student will have knowledge of physical/chemical/biological & mechanical properties of all materials in dentistry. CO203.2- Dental students will be able to manipulate the various dental materials in dentistry. |
| 7 | Course Description | The course offers knowledge of diagnosis and basic chemical and physical properties of Dental materials as they are related to its manipulation to give a sound educational background so that the practice of the dentistry emerged from art to empirical status of science as more information through further research becomes available. It also aims to provide with certain criteria of selection and which will enable to discriminate between facts and propaganda with regards to claims of manufactures. |

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| 8 | Outline syllabus | |
| | BDS-203.A | Unit A Structure of matter and principles of adhesion |
| | BDS-203.A1 | Unit A Topic 1 Change of state |
| | BDS-203.A2 | Unit A Topic 2 Interatomic bond distance and bonding energy |
| | BDS-203.A3 | Unit A Topic 3 Crystalline and non crystalline structures |
| | BDS-203.B | Unit B Important physical properties applicable to dental materials |
| | BDS-203.B1 | Unit B Topic 1 Physical properties –law of mechanics, acoustics, optics, thermodynamics, electricity, magnetism, radiation |
| | BDS-203. B2 | Unit B Topic 2 Hue, value, chroma and translucency- law of optics, dealing with phenomenon of light, vision and sight. |
| | BDS-203. B3 | Unit B Topic 3 Thermal conductivity, COTE |
| | BDS-203.B4 | Unit B Topic 4 Stress, strain, proportional limit, elastic limit, yield strength, MOE, ductility, malleability, hardness, rheology, abrasion resistance, thixotropic, creep, static creep, dynamic creep, Munsell color system, metamerism, fluorescence |
| | BDS-203 C | Unit C Biological considerations in use of dental materials |
| | BDS-203.C1 | Unit C Topic 1 Biocompatibility of dental materials, its classification based on contact with soft tissues, affecting vitality of pulp, used for root canal fillings affecting hard tissues of teeth |
| | BDS-203.C2 | Unit C Topic 2 Hazards associated with materials, pH affecting pulp, polymers causing chemical irritation, mercury toxicity |
| | BDS-203.C3 | Unit C Topic 3 Microleakage, thermal changes, galvanism, toxic effect of materials, biological evaluation for systemic toxicity |
| | BDS-203 D | Unit D GYPSUM AND GYPSUM PRODUC |
| | BDS-203 D1 | Unit D Topic 1 GYPSUM- Origin, chemical formulae, products manufactured from gypsum, dental plaster, dental stone, die stone, high strength, high expansion stone (Application and manufacturing of each, Macroscopic and microscopic structure of each. |
| | BDS-203 D2 | Unit D Topic 2 Chemistry of setting, setting reaction, theories of setting, gauging water. |
| | BDS-203 D3 | Unit D Topic 3 Setting time, working time, measurement of setting time and factors controlling setting time. |
| | BDS-203 D4 | Unit D Topic 4 Strength, factors affecting strength: wet strength, dry strength, tensile strength. |
| | BDS-203 D5 | Unit D Topic 5 Slurry: Need & Use. |

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| | BDS-203 D6 | Unit D Topic 6 | Care of Cast |
| | BDS-203 D7 | Unit D Topic 7 | ADA Classification of Gypsum Products. |
| | BDS-203 D8 | Unit D Topic 8 | Manipulation including recent methods and advanced methods. |
| | BDS-203 D9 | Unit D Topic 9 | Disinfection: Infection Control, liquid, sprays, radiation methods, use of disinfectants, storage of materials. |
| | BDS-203 E | Unit E IMPRESSION MATERIALS USED IN DENTISTRY | |
| | BDS-203 E1 | Unit E Topic 1 | Impression Plaster, Impression compound, Zinc Oxide Eugenol Paste, Bite Registration Paste, Non- Eugenol Paste, Hydrocolloids (Reversible and Irreversible) |
| | BDS-203E2 | Unit E Topic 2 | Elastomeric impression materials, polysulphide, condensation silicones, addition silicones, polyether |
| | BDS-203.E3 | Unit E Topic 3 | Visible light cure polyurethane dimethacrylate |
| | BDS-203.E4 | Unit E Topic 4 | Historical background, definition, purpose, ideal properties, application, composition, setting chemistry, recent advances |
| | BDS-203.E5 | Unit E Topic 5 | Study of properties: working time, setting time, flow, accuracy, strength, flexibility, tear strength, dimensional stability, biological properties, shelf life , infection control, |
| | BDS 203 F | Unit F Synthetic Resins | |
| | | Unit F Topic 1 | Acrylic resins |
| | | Unit F Topic 2 | Restorative resins |
| | BDS 203 G | Unit G Metal and Alloys | |
| | | Unit G Topic 1 | Amalgam |
| | | Unit G Topic 2 | Direct filling Gold |
| | | Unit G Topic 3 | Dental Casting Alloys |
| | BDS 203 H | Unit H Dental Waxes Including Inlay Casting Wax | |
| | | Unit H Topic 1 | Introduction, classification, properties, Dental waxes, manipulation, applications |
| | BDS 203 I | Unit I Dental Casting Investments | |
| | | Unit I Topic 1 | Definition, classification, Technical considerations, Defects in casting |
| | BDS 203 J | Unit J Soldering, Brazing and Welding | |
| | | Unit J Topic 1 | Definitions, requirements, applications, properties |
| | BDS 203 K | Unit K Wrought Base Metal Alloys | |
| | | Unit K Topic 1 | Applications, properties |

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| | BDS 203 L | Unit L | Dental Cements |
| | | Unit L Topic 1 | Definition, requirements, properties |
| | BDS 203 M | Unit M | Dental Ceramics |
| | | Unit M Topic 1 | Definitions, Applications, Properties, Composition |
| | BDS 203 N | Unit N | Abrasion and Polishing Agents |
| | | Unit N Topic 1 | Definition, types, |
| | | Unit N Topic 2 | Abrasive action, Technical considerations |
| | BDS 203 O | Unit O | Die and Counter Die materials including Electroforming and Electropolishing |
| | | Unit O Topic 1 | Types of gypsum products, electroforming, Epoxy resins, Amalgam |
| | BDS 203 P | Unit P | Dental implants |
| | | Unit O Topic 1 | Evolution, Types, materials |
| | BDS 203 Q | Unit Q | Mechanics of Cutting |
| | | Unit Q Topic 1 | Burs, points |

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| 1. | Course evaluation | Attendance | Minimum 75% is Needed for both theory and clinical practical | |
| | | Quizzes | Taken in every 3 months | |
| | | Presentations | Video Presentation | |
| | | Any Other | Project based learning, flip learning, Assignments | |
| | | Annual Exam | 100 Marks Theory | |
| | | | 100 Marks Practical | |
| 2. | Text book/s* | 1. Phillips Science of Dental Materials – 10th edition 2. Restorative Dental Materials 3. Notes on Dental Materials | | Kenneth J. Anusavice Robert G. Craig Notes on Dental Materials |
| 3. | Other References | TED learning EBSCOHOST Various scientific articles from various sources | | |

2.1 Template A1: Syllabus

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| School: School of Dental Sciences | | Batch: 2018-2023 |
| Program: | | BDS (Bachelor of Dental Surgery) |
| Branch: | | Dental |
| 1 | Course Code | BDS-251 |
| 2 | Course Title | PRE-CLINICAL PROSTHODONTICS |
| 3 | Credits | NA |
| 4 | Contact Hours (L-T-P) | 25-0-300 |
| Course Type | | Compulsory (CORE) |
| 5 | Course Objective | 1: To introduce students to laboratory and clinical procedures involved in the fabrication of complete dentures in preclinical settings and provide opportunity for deliberate practice. |
| 6 | Course Outcomes | CO251.1 Dental student will have sound knowledge on landmarks in edentulous patients and would be able to do all lab procedures to make a conventional complete denture. |
| 7 | Course Description | The course offers Knowledge of all procedures to be performed in the clinical appointments in coming years. The Students are given hands-on training on ideal models for practice and learning. |

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| 8 | Outline syllabus | |
| | BDS-251.A | Unit A TEETH ARRANGEMENT SCHEDULE |
| | BDS-251.A1 | Unit A Topic 1 Fabrication of Record Base |
| | BDS-251.A2 | Unit A Topic 2 Fabrication of Occlusal Rims |
| | BDS.251.A3 | Unit A Topic 3 Articulation |
| | BDS-251.A4 | Unit A Topic 4 Anterior Teeth Arrangement |
| | BDS-251.A5 | Unit A Topic 5 Posterior Teeth Arrangement |

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| BDS.251.A6 | Unit A Topic 6 | Fabrication of Occlusal Rims |
| BDS-251.A7 | Unit A Topic 7 | 1 st Teeth Arrangement |
| BDS-251.A8 | Unit A Topic 8 | 2 nd Teeth Arrangement |
| BDS.251.A9 | Unit A Topic 9 | 3 rd Teeth Arrangement |
| BDS-251.A10 | Unit A Topic 10 | 4 th Teeth Arrangement |
| BDS-251.A11 | Unit A Topic 11 | 5 th Teeth Arrangement |
| BDS.251.A12 | Unit A Topic 12 | 6 th teeth Arrangement |
| BDS-251.A13 | Unit A Topic 13 | 8 th teeth Arrangement |
| BDS-251.A14 | Unit A Topic 14 | 9 th Teeth Arrangement |
| BDS.251.A15 | Unit A Topic 15 | 10 th teeth Arrangement |
| BDS-251.A16 | Unit A Topic 16 | 11 th Teeth Arrangement |

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| 1. | Course evaluation | Attendance | Minimum 75% is Needed for both theory and clinical practical |
| | | Quizzes | Taken in every 3 months |
| | | Presentations | Video Presentation |
| | | Any Other | Project based learning, flip learning, Assignments |
| | | Annual Examination | 100 Marks |
| 2. | Text book/s* | 1. Essentials of Complete Prosthodontics | Sheldon Winkler |
| 3. | Other References | TED learning EBSCOHOST Various scientific articles from various sources | |

Course Templates –

2.1 Template A1: Syllabus

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| School: School of Dental Sciences | | Batch: 2018-2023 |
| Program: | | BDS (Bachelor of Dental Surgery) |
| 1 | Course Code | BDS252 |
| 2 | Course Title | Pre-Clinical Conservative Dentistry |
| 3 | Credits | NA |
| 4 | Contact Hours (L-T-P) | 025-0-200 |
| Course Type | | Compulsory (CORE) |
| 5 | Course Objective | <p>1: Students are introduced to the pre-clinical conservative dentistry to make them more acquainted to the new dental subject. Students are told about this branch of dentistry, what it deals in & what benefits we can provide to patients after rendering treatment.</p> <p>2: Students are provided with knowledge to diagnose dental caries and skilled to treat it.</p> <p>3: Students are geared to maintain high standard of professional ethics and conduct and apply it willingly in all aspects of professional life</p> |
| 6 | Course Outcomes | <p>CO252.1: Students will have sound knowledge on hand and rotary cutting instruments</p> <p>CO252.2 Students have basic skills to prepare cavity designs to receive various restorative materials on typhodont.</p> |
| 7 | Course Description | <p>The Pre-Clinical Conservative training program offers students to apply knowledge, skill and ethics in day to day practice. Students gear to have sound knowledge of the hand and rotary cutting instruments and know their application.</p> <p>Students are able to correctly diagnose all caries lesions and have knowledge to manage it. They are skilled to analyse the outcomes of treatment.</p> <p>Students are capable of self- assessment in the end of the program and are confident and competent to accomplish and execute the knowledge and skills for managing the patient in clinics.</p> |

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| 8 | Outline syllabus | |
| BDS252.A | Unit A Introduction to Conservative Dentistry | |
| BDS252.A1 | Unit A Topic 1 | Nomenclature |
| BDS252.A2 | Unit A Topic 2 | Fundamental |
| BDS252.A3 | Unit A Topic 3 | Contacts & Contour |
| BDS252.B | Unit B Caries and Its Management | |
| BDS252.B1 | Unit B Topic 1 | Dental Caries |
| BDS252 B2 | Unit B Topic 2 | Management of Deep caries |
| BDS252 B3 | Unit B Topic 3 | Pulp Protection |
| BDS252C | Unit C Fundamentals of Amalgam Restoration | |
| BDS252 C1 | Unit C Topic 1 | Tooth Preparation for amalgam |
| BDS252 C2 | Unit C Topic 2 | Dental cements |
| BDS252 C3 | Unit C Topic 3 | Failures of amalgam restoration |

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| BDS252 D | Unit D Isolation Concepts and Barrier Techniques | |
| BDS252 D1 | Unit D Topic 1 | Concepts of Isolation |
| BDS252 D2 | Unit D Topic 2 | Barrier Techniques |
| BDS252 D3 | Unit D Topic 3 | Basic concept of Sterilization |
| BDS252 E | | |
| BDS252 E1 | Unit E Topic 1 | Concepts of RCT in Single rooted tooth |
| BDS252 E2 | Unit E Topic 2 | Introduction to C I Composites restoration |
| BDS252 E3 | Unit E Topic 3 | Finishing & Polishing |

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| 1. | Course evaluation | Attendance |
| | | Quizzes |
| | | Presentations |
| | | Any Other |
| | | Annual Examination |
| 2. | Text book/s* | 1. Pre-Clinical Conservative Dentistry 2. Text Book of Conservative Dentistry |
| 3. | Other References | LMS TED learning EBSCOHOST Various scientific articles from various sources |

Course Templates – III year

2.1 Template A1: Syllabus

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| School: | School of Dental Sciences | |
| Program: | BDS (Bachelor of Dental Surgery) | |
| Batch | 2018-23 | |
| 1 Course Code | BDS301 | |
| 2 Course Title | GENERAL MEDICINE | |
| 3 Credits | NA | |
| 4 Contact Hours (L-T-P) | 60 - 0 - 90 | |
| Course Type | Compulsory (CORE) | |
| 5 Course Objective | Training the student for: <ul style="list-style-type: none"> • General superficial examination of the body and recording all the necessary vitals. • To correlate various oral manifestations with systemic conditions. • Deal with various medical emergencies in dental practice. | |
| 6 Course Outcomes | <p>CO301.1Dental student with sound knowledge on oral manifestations of systemic diseases, medical emergencies in dental practice. special precautions/ contraindication of aesthesia</p> <p>CO301.2Dental students with ability to diagnose and manage various common medical problems encountered in general, dental practice and dental emergencies.</p> <p>CO301.3Dental student with basic skill to prevent and manage complications encountered while carrying out various dental surgical and other procedures</p> | |

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| BDS301.A | Unit A | |
| | Introduction to general medicine | |
| BDS301.A1 | Unit A Topic 1 | Aims of medicine, definition of Signs & Symptoms. |
| BDS301.A2 | Unit A Topic 2 | Diagnosis and its types. Treatment |
| BDS301.B | Unit B | |
| | Infections | |
| BDS301.B1 | Unit B Topic 1 | Enteric fever, AIDS, Herpes Simplex, Herpes Zoster, |
| BDS301 B2 | Unit B Topic 2 | Syphilis, Diphtheria, Infectious mononucleosis |

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| BDS301 B3 | Unit B Topic 3 | Mumps, Measles, Rubella, Malaria. |
| BDS301 C | Unit C Systemic Medicine | |
| BDS301 C1 | Unit C Topic 1 | GIT- Stomatitis, gingival hyperplasia, dysphagia, acid peptic disease, jaundice, acute and chronic hepatitis, cirrhosis of liver ascites. |
| BDS301 C2 | Unit C Topic 2 | CVS- Acute rheumatic fever rheumatic valvular heart disease, hypertension, ischemic heart disease, infective endocarditis, common arrhythmias, congenital heart disease, congestive cardiac failure. |
| BDS301 C3 | Unit C Topic 3 | Respiratory System- Pneumonia, COPD, Pulmonary TB, Bronchial Asthma |

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| BDS301 C4 | Unit C Topic 4 | Renal System- Acute nephritis Nephrotic syndrome |
| BDS301 C5 | Unit C Topic 5 | CNS- Facial palsy, facial pain including trigeminal neuralgia, epilepsy, headache including migraine. |
| BDS301 D | Unit D Hematology | |
| BDS301 D1 | Unit D Topic 1 | Anemias, Bleeding & Clotting disorders, |
| BDS301 D2 | Unit D Topic 2 | leukemias, lymphomas, agranulocytosis, splenomegaly, |
| BDS301 D3 | Unit D Topic 3 | Oral manifestations of hematologic disorders, generalized Lymphadenopathy. |

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| BDS301 E | Unit E Nutrition | |
| BDS301 E1 | Unit E Topic 1 | Macro and Micro Nutrients |
| BDS301 E2 | Unit E Topic 2 | Deficiency disorders |
| BDS301 F | Unit F Endocrines | |
| BDS301 F1 | Unit F Topic 1 | Diabetes Mellitus Acromegaly, Hypothyroidism, |
| BDS301 F2 | Unit F Topic 2 | Thyrotoxicosis, Calcium metabolism and Parathyroids. |
| BDS301 G | Unit G Critical Care | |
| BDS301 G1 | Unit G Topic 1 | Syncope, cardiac arrest, CPR, shock |

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| 1. | Course evaluation | Attendance |
| | | Quizzes |
| | | Presentations |
| | | Any Other |
| | | Annual Examination |
| 2. | Text book/s* | 1. Text Book of Medicine 2. Textbook of Medicine |
| 3. | Other References | LMS TED learning EBSCOHOST Various scientific articles from various sources |

2.1 Template A1: Syllabus

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| School: | | School of Dental Sciences |
| Program: | | BDS (Bachelor of Dental Surgery) |
| Batch | | 2018-23 |
| 1 | Course Code | BDS302 |
| 2 | Course Title | GENERAL SURGERY |
| 3 | Credits | NA |
| 4 | Contact Hours (L-T-P) | 60 - 0 - 90 |
| Course Type | | Compulsory (CORE) |
| 5 | Course Objective | <ul style="list-style-type: none"> To acquaint the student with various diseases, which may require surgical expertise and to train the student to analyze the history and be able to do a thorough physical examination of the patient. Student will have a good theoretical knowledge of various ailments, and be practically trained to differentiate benign and malignant diseases and be able to decide which patient requires further evaluation. |
| 6 | Course Outcomes | <p>CO302.1Dental student with sound surgical knowledge on anomalies, lesions and diseases of the teeth, mouth and jaws</p> <p>CO302.2Dental student with ability to diagnose and manage various common surgical problems encountered in general, dental practice and dental emergencies.</p> |
| 7 | Course Description | Understanding various diseases, that may require surgical expertise and training to do thorough examination. The diseases as related to head and neck region are to be given due importance, at the same time other relevant surgical problems are also to be addressed. Thorough knowledge of various ailments, benign and malignant diseases both related to oral and systemic health. Skills to be developed by the end of teaching are to examine a routine swelling, ulcer and other related diseases and to perform minor surgical procedures such as draining an abscess, taking a biopsy etc. |

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| 8 | Outline syllabus | |
| BDS302.A | Unit A | |
| | Introduction to general surgery | |
| BDS302.A1 | Unit A Topic 1 | History of Surgery |
| BDS302.A2 | Unit A Topic 2 | General Principles of Surgery |
| BDS302.B | Unit B | |
| | Wounds | |
| BDS302.B1 | Unit B Topic 1 | Classification Wound Healing |
| BDS-302. B2 | Unit B Topic 2 | Repair of Wounds Treatment of Wounds Complications of Wounds. |
| BDS302.B3 | Unit B Topic 3 | Medico-Legal Aspects of Accidental Wounds |
| BDS-302. C | Unit C | |
| | Inflammation & Infection | |
| BDS302.C1 | Unit C Topic 1 | Inflammation of Soft and Hard Tissues. Causes of Inflammation. |
| BDS302.C2 | Unit C Topic 2 | Varieties, Treatment and Sequelae |
| BDS302.C3 | Unit C Topic 3 | Acute and Chronic Abscess Skin Infections, Cellulitis, Carbuncle, and Erysipelas. |
| BDS302.C4 | Unit C Topic 4 | Specific Infections Such As Tetanus, Gangrene, Syphilis, Gonorrhoea, Tuberculosis, Actinomycosis, Vincents Angina, Cancrum Oris. |
| BDS302.C5 | Unit C Topic 5 | Pyæmia, Toxaemia and Septicaemia |
| BDS302.D | Unit D | |
| | Viral Infections | |
| BDS302.D1 | Unit D Topic 1 | HIV and Hepatitis B with special reference to their prevention and precautions to be taken in treating patients in a carrier state. |

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| BDS302. E | Unit E Shock and Haemorrhage | |
| BDS302.E1 | Unit E Topic 1 | Classification, causes, clinical features and management of various types of shock. |
| BDS302.E2 | Unit E Topic 2 | Syncope, Circulatory collapse. Haemorrhage – different types, causes, clinical features and management |
| BDS302.E3 | Unit E Topic 3 | Blood groups, blood transfusion, precautions and complications of blood and their products. Hemophilia's, their transmission, clinical features and management especially in relation to minor dental procedures. |
| BDS302.E4 | Unit E Topic 4 | Hemophilia's, their transmission, clinical features and management especially in relation to minor dental procedures. |
| BDS302.F | Unit F Tumours, Ulcers, Cysts, Sinus and Fistulae | |
| BDS302. F1 | Unit F Topic 1 | Classification, clinical examination and treatment principles in various types of benign and malignant tumours. |
| BDS302.F2 | Unit F Topic 2 | Classification, clinical examination and treatment principles in various types of ulcers, cysts, sinus and fistulae. |
| BDS302. G | Unit G Diseases of Lymphatic System | |
| BDS302.G1 | Unit G Topic 1 | Head and Neck Region, Tubercular Infection, Lymphomas, Leukaemia's, Metastatic Lymph Node Diseases. |
| BDS302. H | Unit H Diseases of The Oral Cavity, Larynx, Nasopharynx | |
| BDS302.H1 | Unit H Topic 1 | Infective and malignant diseases of the oral cavity and oropharynx and salivary glands, |
| BDS302.H2 | Unit H Topic 2 | Preventive aspects of premalignant and malignant diseases of the oral cavity. |
| BDS302.H3 | Unit H Topic 3 | Infections and tumours affecting these sites. Indications, procedure and complications of tracheostomy |
| BDS302.I | Unit I Nervous System | |
| BDS302. I1 | Unit I Topic 1 | Peripheral nerve injuries and related surgical procedures. |
| BDS302.I2 | Unit I Topic 2 | Facial and Trigeminal Nerve. |
| BDS302.J | Unit J Fractures | |
| BDS-302. J1 | Unit J Topic 1 | Principles and Clinical Presentation |
| BDS302. J2 | Unit J Topic 2 | Treatment and Healing |

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| BDS302. K | Unit K Principles of Surgery | |
| BDS302.K1 | Unit K Topic 1 | Principles, Asepsis, Antiseptics, Sterilisation, |
| BDS302.K2 | Unit K Topic 2 | Principles of anaesthesia and principles of tissue replacement. Knowledge of sutures, drains, |
| BDS302.K3 | Unit K Topic 3 | Diathermy, cryosurgery and use of Laser in surgery. |
| BDS302.L | Unit L Anomalies of Face and Jaw | |
| BDS302. L1 | Unit L Topic 1 | Surgical anatomy and development of face. Cleft lip and cleft palate— principles of management. |
| BDS302.L2 | Unit L Topic 2 | Differential diagnosis and management of different types of swellings of the jaw. |
| BDS302.M | Unit M Biopsy | |
| BDS302. M1 | Unit M Topic 1 | Different types of biopsies routinely used in surgical practice. |
| BDS302. N2 | Unit N Thyroid and Parathyroid | |
| BDS302. N1 | Unit N Topic 1 | Surgical anatomy, pathogenesis, clinical features and management of dysfunction of thyroid and parathyroid glands. |

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| 1. | Course evaluation | Attendance | Minimum 75% is Needed for both theory and clinical practical | |
| | | Quizzes | Taken in every 3 months | |
| | | Presentations | Video Presentation | |
| | | Any Other | Assignments | |
| | | Annual examination | Theory - 100 Marks Practical – 100 Marks | |
| 2. | Text book/s* | 3. Short practice of surgery | | Bailey & Love |
| 3. | Other References | LMS TED learning EBSCOHOST Various scientific articles from various sources | | |

2.1 Template A1: Syllabus

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| School: School of Dental Sciences | | | Batch:2018-23 |
| Program: | | | BDS (Bachelor of Dental Surgery) |
| 1 | | Course Code | BDS303 |
| 2 | | Course Title | Oral Pathology & Oral Microbiology |
| 3 | | Credits | NA |
| 4 | | Contact Hours (L-T-P) | 145-0-80 |
| | | Course Status | Compulsory |
| 5 | | Course Objective | 1. To make students learn about various types of diseases occurring in the oral cavity. 2. To educate students about the diagnosis of oral diseases. 3. To make students understand about the correlation of clinical signs & symptoms with pathological processes in the oral cavity. 4. To make students competent about identification of oral diseases through microscopic features. 5. To make students aware about basic aspects of Forensic Odontology. |
| 6 | | Course Outcomes | CO303.1: At the end of the oral pathology course, student should be able to comprehend different types of pathologies in the oral cavity. CO303.2: The student should understand manifestations of common diseases, their diagnosis & pathogenesis. CO303.3: Student should also be able to understand oral manifestations of systemic diseases. CO303.4: Student should know basic aspects of Forensic Odontology. CO303.5: Professional honesty and integrity are to be fostered. |
| 7 | | Course Description | Oral Pathology represents the confluence of basic sciences and clinical dentistry. Knowledge of the subject is acquired through gross & microscopic examination of tissues, along with information obtained from clinical history of the patients. Through the science of Oral Pathology, an attempt is made to correlate human biology with signs & symptoms of the disease so that it can be properly diagnosed & adequately treated. |
| 8 | | Outline syllabus | |
| | | Unit A | Developmental disturbances of oral cavity & Forensic Odontology |
| | BDS-303.A.1 | Topic 1 | Developmental disturbances of oral & paraoral structures and forensic odontology |
| | BDS-303.A.2 | Topic2 | Benign & malignant tumors of the oral cavity & salivary glands |
| | BDS-303.A.3 | Topic3 | Cysts & tumors of odontogenic origin |
| | | Unit B | Diseases of microbial origin |
| | BDS-303. | Topic1 | Bacterial, viral & mycotic infections of the oral cavity |

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| | B.1 | | |
| | BDS-303. B.2 | Topic2 | Diseases of periodontium & dental caries |
| | BDS-303. B.3 | Topic3 | Diseases of pulp & periapical tissues & spread of oral infections |
| | | Unit C | Injuries & repair |
| | BDS-303. C.1 | Topic1 | Physical & chemical injuries of the oral cavity |
| | BDS-303. C.2 | Topic2 | Regressive alterations of teeth |
| | BDS-303. C.3 | Topic3 | Healing of oral wounds |
| | | Unit D | Disturbances of metabolism & immunologic diseases |
| | BDS-303. D.1 | Topic1 | Oral aspects of metabolic diseases |
| | BDS-303. D.2 | Topic2 | Allergic & immunologic diseases of the oral cavity |
| | BDS-303. D.3 | Topic3 | Diseases of blood & blood forming organs |
| | | Unit E | Diseases of specific systems |
| | BDS-303. E.1 | Topic1 | Diseases of bone & joints |
| | BDS-303. E.2 | Topic2 | Diseases of skin |
| | BDS-303. E.3 | Topic3 | Diseases of nerves & muscles |
| 1 | Course Evaluation | Attendance | Minimum 75% is needed for both theory and clinical practical |
| | | Quizzes | Taken every 3 months |
| | | Presentations | Video presentations |
| | | Any other | Project based learning, assignments |
| | | Annual Examination | Theory Practical |
| 2 | | Text book/s* | Shafer's, Neville, Regezi, Cawson, Soames & Southam, Eversole |
| 3 | | Other References | LMS TED learning EBSCOHOST Scientific articles Webinars |

Course Templates – IV year

2.1 Template A1: Syllabus

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| School: | | School of Dental Sciences |
| Program: | | BDS (Bachelor of Dental Surgery) |
| Batch | | 2018-23 |
| 1 | Course Code | BDS401 |
| 2 | Course Title | Public Health Dentistry |
| 3 | Credits | NA |
| 4 | Contact Hours (L-T-P) | 60 - 0 - 290 |
| Course Type | | Compulsory (CORE) |
| 5 | Course Objectives | <ol style="list-style-type: none"> 1. Knowledge: At the conclusion of the course the student shall have a knowledge of the basis of public health, preventive dentistry, public health problems in India, Nutrition, Environment and their role in health, basics of dental statistics, epidemiological methods, National oral health policy with emphasis on oral health policy. 2. Skill and Attitude: At the conclusion of the course the students shall have require at the skill of identifying health problems affecting the society, conducting health surveys, conducting health education classes and deciding health strategies. Students should develop a positive attitude towards the problems of he society and must take responsibilities in providing health. 3. Communication abilities: At the conclusions of the course the student should be able to communicate the needs of the community efficiently, inform the society of all the recent methodologies in preventing oral disease. |
| 6 | Course Outcomes | <p>CO401.1 Student would be able to understand the community aspects of oral health care delivery.</p> <p>CO401.2 Student would be able to carry out proficiently the collection of statistical data (demographic) among Indian Population, birth rates, morbidity and mortality, literacy, per capita income.</p> |
| 7 | Course Description | <p>Understanding the provision of health care in the community and prevalence of common dental conditions in India. To prevent and control oral diseases and promote oral health through organized community efforts. Understand the community aspects of dentistry and take up leadership role</p> |

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| | | <p>in solving community oral health problems. Teaching how to communicate with the patients by constant emphasis on behavioural modifications. Understanding the concept of oral health programs and policies.</p> <p>Applying the principles of health promotion and disease prevention. Have knowledge of community based preventive measures. Contribution of social, cultural and environmental factors in health and illness. Administer oral hygiene instructions and preventive measures like fluoride application and fissure sealing</p> |
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| 8 | Outline syllabus | |
| BDS401.A | Unit A Introduction to Dentistry | |
| BDS401.A1 | Unit A Topic 1 | Introduction to Dentistry: Definition of Dentistry, Scope, aims and objectives of Dentistry. |
| BDS401.A2 | Unit A Topic 2 | History of dentistry |
| BDS401.B | Unit B Public Health | |
| BDS401.B1 | Unit B Topic 1 | Health & Disease |
| BDS401 B2 | Unit B Topic 2 | Public Health |
| BDS401 B3 | Unit B Topic 3 | Epidemiology |
| BDS401 B4 | Unit B Topic 4 | Environmental Health |
| BDS401 B5 | Unit B Topic 5 | Health Education |
| BDS401 B6 | Unit B Topic 6 | Health Care Delivery System |
| BDS401 C | Unit C Dental Public Health | |
| BDS401 C1 | Unit C Topic 1 | Epidemiology of dental diseases |
| BDS401 C2 | Unit C Topic 2 | Nutrition in dental diseases |
| BDS401 C3 | Unit C Topic 3 | Survey |
| BDS401 C4 | Unit C Topic 4 | Payments in Dentistry |

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| BDS401 C5 | Unit C Topic 5 | Preventive Dentistry |
| BDS401 D | Unit D Research Methodology and Dental Statistics | |
| BDS401 D1 | Unit D Topic 1 | Sampling |
| BDS401 D2 | Unit D Topic 2 | Biostatistics |
| BDS401 D3 | Unit D Topic 3 | Research Methodology |

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| 1. Course evaluation | Attendance | Minimum 75% is Needed for both theory and clinical practical |
| | Quizzes | Taken in every 3 months |
| | Presentations | Video Presentation |
| | Any Other | Project based learning, Assignments, Field trips, Camps |
| | Annual examination | Theory-100 Marks Practical- 100 Marks |
| 2. Text book/s* | 4. Essentials of public health dentistry 5. Text Book of Preventive and Social Medicine 6. Textbook of public health dentistry 7. Text book of Preventive and Community Dentistry | Soben Peter K.Park CM Marya SS Hiremath |
| 3. Other References | LMS TED learning EBSCOHOST Various scientific articles from various sources | |

Course Templates –

2.1 Template A1: Syllabus

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| School: | | School of Dental Sciences |
| Program: | | BDS (Bachelor of Dental Surgery) |
| Batch: | | 2018-2023 |
| 1 | Course Code | BDS 402 |
| 2 | Course Title | Periodontology |
| 3 | Credits | NA |
| 4 | Contact Hours (L-T-P) | 80 -200 |
| | Course Type | Compulsory (CORE) CC |
| 5 | Course Objective | <ol style="list-style-type: none"> 1. Knowledge of the development, structure and function of tissues both in periodontal health and disease and their relationship with and effect on general health of the patient. 2. Knowledge of diagnosis, prevention and treatment of various gingival and periodontal diseases. 3. Maintain high standard of professional ethics and conduct and apply these in all aspects of professional life 4. Improve awareness and provide possible solutions for periodontal problems throughout the community |
| 6 | Course Outcomes | <p>CO402.1: Able to diagnose patients' periodontal problems, plan appropriate periodontal treatment and make appropriate decision regarding referral to a specialist wherever required</p> <p>CO402.2: Competent to educate and motivate the patient, give proper instructions to the patients and do periodic recall and evaluation.</p> <p>CO402.3: Competent to perform thorough oral prophylaxis, subgingival scaling, root planing and minor periodontal surgical procedures with familiarization to concept of osseointegration and basic surgical aspects of Implantology</p> |
| 7 | Course Description | Periodontology is the science dealing with the health and disease of the investing and supporting structures of the teeth and oral mucous membrane. The student shall acquire the skill to perform dental scaling, diagnostic tests of periodontal diseases, prevent periodontal diseases, use instruments to perform treatment with full aseptic precaution, periodontal maintenance and refer the patients who require specialist care. |

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| 8 | Outline syllabus | | |
| | BDS 402 | Unit A | Biologic Basis of Periodontology |
| | | Topic 1 | Normal Periodontium |
| | | Topic 2 | Classification and Epidemiology of Periodontal Diseases |
| | | Topic 3 | Evidence based Decision Making |
| | | Unit B | Etiopathogenesis of Periodontal Diseases |
| | | Topic 1 | Etiology of Periodontal Diseases |

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| | Topic 2 | Periodontal pathology |
| | Topic 3 | Relationship between Periodontal Diseases and Systemic Health |
| | Unit C | Treatment of Periodontal Diseases |
| | Topic 1 | Diagnosis, Prognosis and Treatment Plan |
| | Topic 2 | Non-Surgical and Surgical Treatment |
| | Topic 3 | Periodontal Maintenance |
| | Unit D | Multidisciplinary Periodontics |
| | Topic 1 | Endodontic – Periodontics Interrelationship |
| | Topic 2 | Periodontal – Restorative Interrelationship |
| | Topic 3 | Periodontal – Orthodontic Interrelationship |
| | Unit E | Oral Implantology |
| | Topic 1 | Biologic aspects of Dental Implants |
| | Topic 2 | Clinical Aspects of Dental Implants |
| | Topic 3 | Implant Complications and Supportive Implant Care |

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| 1. | Course Evaluation | Attendance | Minimum 75% | | | |
| | | Annual Examination | Theory 100 Marks | Written Exam 70 Marks | Viva Voce 20 Marks | Internal assessment 10 Marks |
| | | | Practical 100 Marks | Clinical case 60 Marks | Viva Voce 30 Marks | Internal assessment 10 Marks |
| 2. | Text book/s* | Carranza's Clinical Periodontology, 12 th Edition | | | | |
| 3. | Other References | Clinical Periodontology and Implantology – Lindhe Contemporary Periodontics – Cohen Oral Health Survey – WHO Various scientific articles from various sources | | | | |

Course Templates –

1.1 Template A1: Syllabus for Theory Subjects

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| School: School of Dental Sciences | | Batch: 2018-2023 |
| Program: | | BDS (Bachelor of Dental Surgery) |
| 1 | Course Code | BDS403 |
| 2 | Course Title | ORTHODONTICS & DENTOFACIAL ORTHOPEDICS |
| 3 | Credits | NA |
| 4 | Contact Hours (L-T-P) | 50-0-200 |
| Course Type | | Compulsory (CORE) |
| 5 | Course Objective | <ol style="list-style-type: none"> 1. This course is intended to give the student an introduction of orthodontic diagnosis, evaluation and treatment planning with the emphasis on the in elements of orthodontics which the general practitioner should be familiar with in order to treat limited orthodontic cases. 2. The student will learn orthodontic triage: separating patients who can be treated by a general practitioner and those who will require referral to a dental specialist. 3. Orthodontic problems of a dental nature and skeletal are covered as well as the surgical Orthognathic surgery. 4. Different orthodontic treatments are presented in general. Simple orthodontic procedures which the general practitioner can perform to control disease and restore function as part general dental work are discussed and implemented as part of the laboratory requirement. |
| 6 | Course Outcomes | <p>CO 403.1 Be able to diagnose and treat common orthodontic problems.</p> <p>CO 403.2 Be able to gather an appropriate and complete data base on each patient to provide a strong foundation for diagnosis, treatment planning, treatment consultation, treatment and retention of the patient</p> <p>CO 403.3 Be able to identify all types dental malocclusion and perform necessary counselling.</p> <p>CO 403.4 Be able to utilize craniofacial growth and development knowledge in planning and carrying out patient treatment.</p> |
| 7 | Course Description | Undergraduate programme in Orthodontics is designed to enable the qualifying dental surgeon to diagnose, analyse and treat common orthodontic problems by preventive, interceptive and corrective orthodontic procedures. |

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| 8 | Outline syllabus | |
| | BDS-403 A | Unit A |
| | BDS-403 A1 | Topic 1 Introduction, Definition, Historical background, Aims and Objectives of Orthodontics and need for orthodontics care. |
| | BDS-403 A2 | Topic 2 Growth and Development: In General a. Definition b. Growth spurts and Differential growth c. Factors influencing growth and Development d. Methods of measuring growth e. Growth theories (Genetic, Sicher's, Scott's, Moss's, Petrovics, Multifactorial) f. Genetic. and epigenetic factors in growth g. Cephalocaudal gradient in growth. |
| | BDS-403 A3 | Topic 3 Morphologic Development of Craniofacial Structures a. Methods of bone growth b. Prenatal growth of craniofacial structures c. Postnatal growth and development of: cranial base, maxilla, mandible, dental arches and occlusion. |
| | BDS-403 B | Unit B |
| | BDS-403 B1 | Topic 1 Functional Development of Dental Arches and Occlusion a. Factors influencing functional development of dental arches and occlusion. b. Forces of occlusion c. Wolfe's law of transformation of bone d. Trajectories of forces |
| | BDS-403 B2 | Topic 2 Clinical Application of Growth and Development |
| | BDS-403 B3 | Topic 3 Malocclusion - In General a. Concept of normal occlusion b. Definition of malocclusion c. Description of different types of dental, skeletal and functional malocclusion. |
| | BDS-403 C | Unit C |
| | BDS-403 C1 | Topic 1 Classification of Malocclusion Principle, description, advantages and disadvantages of classification of malocclusion by Angle, Simon, Lischer and Ackerman and Proffitt, Normal and Abnormal Function of Stomatognathic System Aetiology of Malocclusion a. Definition, importance, classification, local and general aetiological factors. b. Etiology of following different types of malocclusion: 1) Midline diastema 2) Spacing |

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| | | 3) Crowding 4) Cross-Bite: Anterior/ Posterior 5) Class III Malocclusion 6) Class II Malocclusion 7) Deep Bite 8) Open bite |
| BDS-403 C2 | Topic 2 | 10. Diagnosis and Diagnostic Aids a. Definition, Importance and classification of diagnostic aids b. Importance of case history and clinical examination in orthodontics c. Study Models: - Importance and uses - Preparation and preservation of study models d. Importance of intraoral X-rays in orthodontics e. Panoramic radiographs: - Principles, Advantages, disadvantages and uses 1. Cephalometrics: Its advantages, disadvantages 1. Definition 2. Description and use of cephalostat 3. Description and uses of anatomical landmarks lines and angles used in cephalometric analysis 4. Analysis- Steiner's, Down's, Tweed's, Ricket's-E- line g. Electromyography and its use in orthodontics. h. Wrist X-rays and its importance in orthodontics |
| BDS-403 C2 | Topic 3 | General-Principles in Orthodontic Treatment Planning Of Dental And Skeletal Malocclusions Anchorage in Orthodontics - Definition, Classification, Types and Stability Of Anchorage Biomechanical Principles in Orthodontic Tooth Movement a. Different types of tooth movements b. Tissue response to orthodontic force application c. Age factor in orthodontic tooth movement |

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| BDS-403 D | Unit D | |
| BDS-403 D1 | Topic 1 | Preventive Orthodontics a. Definition b. Different procedures undertaken in preventive orthodontics and their limitations. Interceptive Orthodontics a. Definition b. Different procedures undertaken in interceptive orthodontics c. Serial extractions: Definition, indications, contra-indication, technique, advantages and disadvantages. d. Role of muscle exercises as an interceptive procedure Corrective Orthodontics a. Definition, factors to be considered during treatment planning. I. b. Model analysis: Pont's, Ashley Flowe's, Bolton, Careys, Moyer* Mixed Dentition Analysis c. Methods of gaining space in the arch: - Indications, relative merits and demerits of proximal stripping, arch expansion and extractions d. Extractions in Orthodontics - indications and selection of teeth for extraction. |
| BDS-403 D2 | | Orthodontic Appliances: General |

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| | Topic 2 | a. Requisites for orthodontic appliances b. Classification, indications of Removable and Functional Appliances c. Methods of force application d. Materials used in construction of various orthodontic appliances - use of stainless. steel, technical considerations in curing of acrylic, Principles of welding and soldering, fluxes and antiluxes. e. Preliminary knowledge of acid etching and direct bonding. Ethics |
| BDS-403 D3 | Topic 3 | REMOVABLE ORTHODONTIC APPLIANCES 1) Components of removable appliances 2) Different types of clasps and their use 3) Different types of labial bows and their use 4) Different types of springs and their use 5) Expansion appliances in orthodontics: i) Principles ii) Indications for arch expansion iii) Description of expansion appliances and different types of expansion devices and their uses. iv) Rapid maxillary expansion |

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| BDS-403 E | | |
| BDS-403 E1 | Topic 1 | FIXED ORTHODONTIC APPLIANCES 1. Definition, Indications & Contraindications 2. Component parts and their uses 3. Basic principles of different techniques: Edgewise, Begg straight wire. |
| BDS-403 E2 | Topic 2 | EXTRAORAL APPLIANCES 1. Headgears 2. Chincup 3. Reverse pull headgears MYOFUNCTIONAL APPLIANCES 1. Definition and principles 2. Muscle exercises and their uses in orthodontics 3. Functional appliances: i) Activator, Oral screens, Frankel's function regulator, bionator twin blocks, lip bumper ii) Inclined planes - upper and lower 18. Orthodontic Management Of Cleft Lip And Palate 19. Principles Of Surgical Orthodontics Brief knowledge of correction of: a. Mandibular Prognathism and Retrognathism b. Maxillary Prognathism and Retrognathism c. Anterior open bite and deep bite d. Cross bite 20. Principle, Differential Diagnosis & Methods of Treatment of: 1. Midline diastema 2. Cross bite 3. Open bite |

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| | | | 4. Deep bite 5. Spacing 6. Crowding 7. Class II - Division 1, Division 2 8. Class III Malocclusion - True and Pseudo Class III |
| | BDS-403 E3 | Topic 3 | Retention and Relapse Definition, Need for retention, Causes of relapse, Methods of retention, Different types of retention devices, Duration of retention, Theories of retention. |

Course Templates –

2.1 Template A1: Syllabus

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| School: School of Dental Sciences | | Batch: 2018-2023 |
| Program: | | BDS (Bachelor of Dental Surgery) |
| 1 | Course Code | BDS404 |
| 2 | Course Title | ORAL MEDICINE & RADIOLOGY |
| 3 | Credits | NA |
| 4 | Contact Hours (L-T-P) | 65-0-200 |
| Course Type | | Compulsory (CORE) |
| 5 | Course Objective | <p>1: To train the students to diagnose the common disorders of Orofacial region by clinical examination and with the help of such investigations as may be required and medical management of oro-facial disorders with drugs and physical agents.</p> <p>2: To train the students about the importance, role, use and techniques of radiographs/digital radiographs and other imaging modalities in diagnosis.</p> <p>3: To train the students in various investigatory procedures like biopsy, exfoliative cytology, Hematological, Microbiological and other tests and investigations necessary for diagnosis and prognosis.</p> |
| 6 | Course Outcomes | <p>CO404.1: Generate graduates that demonstrate the necessary knowledge, skills and attitude in Oral & Maxillofacial Diagnosis procedure and medical management of such disorder.</p> <p>CO404.2 To create confident and competent dental professionals who can accomplish and execute clinical deftness in the diagnosis and management of Orofacial disorders.</p> |
| 7 | Course Description | <p>The course offers</p> <p>Knowledge: Possess a thorough knowledge and comprehension of diagnosis and medical management of the oro-facial diseases and systemic diseases with oral manifestations, in addition to, the infection control measures in the dental clinical environment and laboratories.</p> <p>Patient management: Take proper chair side history, clinical examination of patient and perform medical and dental diagnostic procedures including radiographs and formulate a proper treatment plan.</p> <p>Investigations: Carry out appropriate chair side and radiological investigations to obtain the diagnosis. Develop the skill to advise advanced radiological investigations.</p> |

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| | | <p>Patient treatment: Carry out appropriate and effective medical management of patients, once the diagnosis and treatment plan has been outlined. To motivate, educate and counsel the patient regarding the side effects of Tobacco.</p> <p>Communication skills: Develop communication skills- in particular to explain various options available regarding management and to obtain a true informed consent from the patient. Ask for help from colleagues or seniors when required without hesitation.</p> <p>Life-long Learning: Teach and/or guide, colleagues and other students. Use information technology tools and carries out research in both medicine and radiological fields with the aim of publishing his/her work and presenting the same at scientific platform on a regular basis.</p> <p>Ethics: Adopt ethical principles in all aspects of Oral Medicine & Radiology, special emphasis on Radiation protection measures. Apply high moral and ethical standards while carrying on human or animal</p> |
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| 8 | Outline syllabus | |
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| | BDS404.A | Unit A DIAGNOSTIC METHODS |
| | BDS404.A1 | Unit A Topic 1 Definition and importance of Diagnosis and various types of diagnosis |
| | BDS404.A2 | Unit A Topic 2 Method of clinical examinations |
| | BDS404.A3 | Unit A Topic 3 Investigations |
| | BDS404.B | Unit B DIAGNOSIS & DIFFERENTIAL DIAGNOSIS |
| | BDS404.B1 | Unit B Topic 1 Teeth: Developmental abnormalities, causes of destruction of teeth and their sequelae and discoloration of teeth |
| | BDS404 B2 | Unit B Topic 2 Diseases of bone and Osteodystrophies, Development disorders, Metabolic disorders. |
| | BDS404 B3 | Unit B Topic 3 Temporomandibular joint Disorders. |
| | BDS404 B4 | Unit B Topic 4 Common cysts and Tumors. |
| | BDS404 C | Unit C TUMORS |
| | BDS404 C1 | Unit C Topic 1 Soft tissue tumors |
| | BDS404 C2 | Unit C Topic 2 Hard tissue tumors |
| | BDS404 C3 | Unit C Topic 3 Periodontal diseases |

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| BDS404 C4 | Unit C Topic 4 | Granulomatous disorders |
| BDS404 C5 | Unit C Topic 5 | Miscellaneous Disorders: Burkitt lymphoma, sturge - Weber syndrome, CREST syndrome, rendu-osler-weber disease. |
| BDS404 D | Unit D ORAL MEDICINE & THERAPEUTICS | |
| BDS404 D1 | Unit D Topic 1 | Infections of oral and paraoral structures |
| BDS404 D2 | Unit D Topic 2 | Important common mucosal lesions |
| BDS404 D3 | Unit D Topic 3 | Cervico-facial lymphadenopathy. |
| BDS404 D4 | Unit D Topic 4 | Facial pain |
| BDS404 D5 | Unit D Topic 5 | Altered sensations: Cacogeusia, halitosis |
| BDS404 D6 | Unit D Topic 6 | Tongue in local and systematic disorder |
| BDS404 D7 | Unit D Topic 7 | Oral manifestations of metabolic disorders, endocrine disorders, nutritional deficiencies, blood disorders |
| BDS404 D8 | Unit D Topic 8 | Disease of salivary glands |
| BDS404 D9 | Unit D Topic 9 | Dermatological diseases with oral manifestations |
| BDS404 D10 | Unit D Topic 10 | Immunological diseases with oral manifestations |
| BDS404 D11 | Unit D Topic 11 | Allergy: Local allergic reactions, anaphylaxis, serum sickness |
| BDS404 D12 | Unit D Topic 12 | Foci of oral infection and their ill effects on general health |

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| BDS404 D13 | Unit D Topic 13 | Management of dental problems in medically compromised persons |
| BDS404 D14 | Unit D Topic 14 | Precancerous lesions and conditions |
| BDS404 D15 | Unit D Topic 15 | Nerve and muscle diseases |
| BDS404 D16 | Unit D Topic 16 | Forensic odontology |
| BDS404 D17 | Unit D Topic 17 | Therapeutics |
| BDS404 E | | |
| BDS404 E1 | Unit E Topic 1 | Scope of the subject and history of origin |
| BDS404 E2 | Unit E Topic 2 | Physics of radiation, radiation units |
| BDS404.E3 | Unit E Topic 3 | Biological effects of radiation. |
| BDS404 E4 | Unit E Topic 4 | Radiation safety and protection measures. |
| BDS404 E5 | Unit E Topic 5 | Principles of image production. |
| BDS404 E6 | Unit E Topic 6 | Radiographic techniques: Intra oral, cephalometric & Specialised radiographs. |
| BDS404 E7 | Unit E Topic 7 | Factors in production of good radiographs |
| BDS404 E8 | Unit E Topic 8 | Radiographic normal anatomical landmarks |
| BDS404 E9 | Unit E Topic 9 | Faculty radiographs and artefacts in radiographs |
| BDS404 E10 | Unit E Topic 10 | Interpretation of radiographs in various abnormalities of teeth, bones and other orofacial tissues |
| BDS404 E11 | Unit E Topic 11 | Principles of radiotherapy of oro-facial malignancies and complications of radiotherapy |
| BDS404 E12 | Unit E Topic 12 | Contrast radiography and basic knowledge of radio-active isotopes |
| BDS404 E13 | Unit E Topic 13 | Radiography in Forensic Odontology |

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| 1. | Course evaluation | Attendance | Minimum 75% is Needed for both theory and clinical practical | |
| | | Quizzes | Taken in every 3 months | |
| | | Presentations | Video Presentation | |
| | | Any Other | Project based learning, Assignments, Webinars | |
| | | Annual examination | Theory - 100 Marks Practical – 100 Marks | |
| 2. | Text book/s* | 1. Burket's Oral Medicine diagnosis and treatment 10 th edn 2. Dental Radiography: Principles and Techniques 3 rd Edn 3. Oral Radiology: Principles and Interpretation 5 th edn 4. Oral and Maxillofacial Pathology 3 rd edn | | Greenberg, Martin S. Haring, Joen White and Pharoah Neville and Brad W |
| 3. | Other References | LMS TED learning EBSCOHOST Various scientific articles from various sources | | |

Course Templates –

2.1 Template A1: Syllabus

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| School: School of Dental Sciences | | Batch: 2018-2023 |
| Program: | | BDS (Bachelor of Dental Surgery) |
| 1 | Course Code | BDS405 |
| 2 | Course title | ORAL AND MAXILLOFACIAL SURGERY |
| 3 | Credits | NA |
| 4 | Contact Hours (L-T-P) | 70-0-360 |
| Course Type | | Compulsory (CORE) |
| 5 | Course Objective | <p>1: To train the students to diagnose the common disorders of Orofacial region by clinical examination and with the help of such investigations as may be required and medical management of oro-facial disorders with drugs and physical agents.</p> <p>2: To train the students about the importance, role, use and techniques of radiographs/digital radiographs and other imaging modalities in diagnosis.</p> <p>3: To train the students in various investigatory procedures like biopsy, exfoliative cytology, Hematological, Microbiological and other tests and investigations necessary for diagnosis and prognosis.</p> |
| 6 | Course Outcomes | <p>CO405.1: Application of knowledge of related medical subjects in management of patients with oral surgical problem.</p> <p>CO405.2: Sufficient knowledge to diagnose manage and treat minor oral surgical procedures</p> <p>CO405.3: Understanding and exposure to the management of major oral surgical problems and principles involved in inpatient management</p> |
| 7 | Course Description | <p>The course offers Knowledge: Possess a thorough knowledge and comprehension of diagnosis and medical management of the oro-facial diseases and systemic diseases with oral manifestations, in addition to, the infection control measures in the dental clinical environment and laboratories.</p> <p>Patient management: Take proper chair side history, clinical examination of patient and perform medical and dental diagnostic procedures including radiographs and formulate a proper treatment plan.</p> <p>Investigations: Carry out appropriate chair side and radiological investigations to obtain the diagnosis. Develop the skill to advise advanced radiological investigations.</p> |

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| | | <p>Patient treatment: Carry out appropriate and effective medical management of patients, once the diagnosis and treatment plan has been outlined. To motivate, educate and counsel the patient regarding the side effects of Tobacco.</p> <p>Communication skills: Develop communication skills- in particular to explain various options available regarding management and to obtain a true informed consent from the patient. Ask for help from colleagues or seniors when required without hesitation.</p> <p>Life-long Learning: Teach and/or guide, colleagues and other students. Use information technology tools and carries out research in both medicine and radiological fields with the aim of publishing his/her work and presenting the same at scientific platform on a regular basis.</p> <p>Ethics: Adopt ethical principles in all aspects of Oral Medicine & Radiology, special emphasis on Radiation protection measures. Apply high moral and ethical standards while carrying on human or animal research.</p> |
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| 8 | Outline syllabus | |
| | BDS405.A | Unit A Introduction |
| | BDS405.A1 | Unit A Topic 1 Definition, Aims and Objectives. |
| | BDS405.A2 | Unit A Topic 2 Scope of Oral and Maxillofacial Surgery |
| | BDS405.B | Unit B Diagnosis in oral surgery |
| | BDS405.B1 | Unit B Topic 1 History taking |
| | BDS405. B2 | Unit B Topic 2 Clinical examination |
| | BDS405. B3 | Unit B Topic 3 Investigations. |
| | BDS405. C | Unit C Infection Control |
| | BDS405.C1 | Unit C Topic 1 Principles of infection control and cross-infection control with particular reference to HIV/AIDS and Hepatitis |

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| | BDS405. D | Unit D Principles of Oral Surgery | |
| | BDS405. D1 | Unit D Topic 1 | Asepsis |

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| | BDS405. D2 | Unit D Topic 2 | Important common mucosal lesions |
| | BDS405. D3 | Unit D Topic 3 | Painless Surgery |
| | BDS405. D4 | Unit D Topic 4 | Access – Intra Oral & Extra Oral |
| | BDS405. D5 | Unit D Topic 5 | Control of haemorrhage during surgery Normal Haemostasis, Local measures available to control bleeding, Hypotensive anaesthesia, etc |
| | BDS405. D6 | Unit D Topic 6 | Drainage & Debridement Purpose of drainage in surgical wounds |
| | BDS405. D7 | Unit D Topic 7 | Closure of wounds |
| | BDS405. D8 | Unit D Topic 8 | Post- operative care |

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| | BDS405. E | | |
| | BDS405. E1 | Unit E Topic 1 | General considerations Ideal Extraction. Indications for extraction of teeth Extractions in medically compromised patients |
| | BDS405. E2 | Unit E Topic 2 | Forceps or intra-alveolar or closed method. Principles, types of movement, force etc. |
| | BDS405.E3 | Unit E Topic 3 | Trans-alveolar, surgical or open method, Indications, surgical procedure. Dental elevators: uses, classification, principles in the use of elevators, commonly used elevators |
| | BDS405. E4 | Unit E Topic 4 | Complications of Exodontia - Complications during exodontia Common to both maxilla and mandible. Post-operative complications -Prevention and management of complications. |
| BDS405. F | | | |
| | BDS405. F1 | Unit F Topic 1 | Incidence, definition, aetiology |
| | BDS405. F2 | Unit F Topic 2 | Impacted mandibular third molar. Classification, reasons for removal, Assessment - both Clinical & radiological Surgical procedures for removal. Complications during and after removal, Prevention and management. |
| | BDS405. F3 | Unit F Topic 3 | Maxillary third molar, Indications for removal, classification, Surgical procedure for removal. |
| | BDS405. F4 | Unit F Topic 4 | Impacted maxillary canine Reasons for canine impaction, Localization, indications for removal, Methods of management, labial and palatal approach, Surgical exposure, transplantation, removal etc |
| | BDS405. G | | |

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| | BDS405.G1 | Unit G Topic 1 | Definition, classification of procedures |
| | BDS405.G2 | Unit G Topic 2 | Corrective procedures: Alveoloplasty, Reduction of maxillary tuberosities, Frenectomies and removal of tori. |
| | BDS405.G3 | Unit G Topic 3 | Ridge extension or Sulcus extension procedures Indications and various surgical procedures |
| | BDS405.G4 | Unit G Topic 4 | Ridge augmentation and reconstruction. Indications, use of bone grafts, Hydroxyapatite Implants - concept of osseointegration Knowledge of various types of implants and surgical procedure to place implants. |
| | BDS405. H | | |
| | BDS405.H1 | Unit H Topic 1 | Surgical anatomy of the sinus. Sinusitis both acute and chronic |
| | BDS405.H2 | Unit H Topic 2 | Surgical approach of sinus - Caldwell-Luc procedure Removal of root from the sinus. |
| | BDS405.H3 | Unit H Topic 3 | Oro-antral fistula - aetiology, clinical features and various surgical methods for closure. |
| | BDS405. I | | |
| | BDS405.I1 | Unit I Topic 1 | Applied surgical anatomy of the joint. |
| | BDS405.I2 | Unit I Topic 2 | Dislocation -Types, aetiology, clinical features and management. ankylosis - Definition, aetiology, clinical features and management. |
| | BDS405.I3 | Unit I Topic 3 | Myo-facial pain dysfunction syndrome, aetiology, clinical features, Management- Non surgical and surgical. |
| | BDS405.I4 | Unit I Topic 4 | Internal derangement of the joint. Arthritis of T.M. Joint. |
| | BDS405. J | | |
| | BDS405.J1 | Unit J Topic 1 | Introduction, factors responsible for infection, course of odontogenic infections, spread of odontogenic infections through various facial spaces. Dento-alveolar abscess - aetiology, clinical features and management. |
| | BDS405.J2 | Unit J Topic 2 | Osteomyelitis of the jaws - definition, aetiology, pre-disposing factors, classification, clinical features and management. |
| | BDS405.J3 | Unit J Topic 3 | Ludwigs angina - definition, aetiology, clinical features, management and complications. |

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| | BDS405. K | | |
| | BDS405.K1 | Unit K Topic 1 | Definition, classification, pathogenesis. |
| | BDS405.K2 | Unit K Topic 2 | Diagnosis - Clinical features, radiological, aspiration biopsy, use of contrast media and histopathology. |
| | BDS405.K3 | Unit K Topic 3 | Management - Types of surgical procedures, Rationale of the techniques, indications, procedures, complications etc. |
| | BDS405. L | | |
| | BDS405.L1 | Unit L Topic 1 | Non odontogenic benign tumours occurring in oral cavity - fibroma, papilloma, lipoma, ossifying fibroma, myeloma etc. |
| | BDS405.L2 | Unit L Topic 2 | Ameloblastoma - Clinical features, radiological appearance and methods of management. |
| | BDS405.L3 | Unit L Topic 3 | Carcinoma of the oral cavity - Biopsy – types Outline of management of squamous |

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| | | | Cell carcinoma: surgery, radiation and chemotherapy TNM classification. |
| | BDS405.L4 | Unit L Topic 4 | Role of dental surgeons in the prevention and early detection of oral cancer. |
| | BDS405. M | | |
| | BDS405.M1 | Unit M Topic 1 | General considerations, types of fractures, etiology, clinical features and general principles of management. |
| | BDS405.M2 | Unit M Topic 2 | mandibular fractures - Applied anatomy, classification. Diagnosis – Clinical and radiological. |
| | BDS405.M3 | Unit M Topic 3 | Management - Reduction closed and open Fixation and immobilization Methods Outline of rigid and semi-rigid internal fixation. |
| | BDS405.M4 | Unit M Topic 4 | Fractures of the condyle - etiology, classification, clinical features, principles of management. |
| | BDS405.M5 | Unit M Topic 5 | Fractures of the middle third of the face. Definition of the mid face, applied surgical anatomy, classification, clinical features and outline of management. |
| | BDS405.M6 | Unit M Topic 6 | Alveolar fractures - methods of management Fractures of the Zygomatic Complex Classification, clinical features, indications for treatment, various methods of reduction and fixation. |
| | BDS405.M7 | Unit M Topic 7 | Complications of fractures - delayed union, non-union and malunion. |
| | BDS405. N | | |
| | BDS405.N1 | Unit N Topic 1 | Diagnosis of salivary gland diseases. |
| | BDS405.N2 | Unit N Topic 2 | Sialography, contrast media, procedure. |
| | BDS405.N3 | Unit N Topic 3 | Infections of the salivary glands Sialolithiasis - Sub mandibular duct and gland and parotid duct. Clinical features, management. |
| | BDS405.N4 | Unit N Topic 4 | Salivary fistulae |
| | BDS405.N5 | Unit N Topic 5 | Common tumours of salivary glands like Pleomorphic adenoma including minor salivary glands. |
| | BDS405. O | | |
| | BDS405.O1 | Unit O Topic 1 | Basic forms - Prognathism, Retrognathism and open bite. Reasons for correction. |
| | BDS405.O2 | Unit O Topic 2 | Outline of surgical methods carried out on mandible and maxilla. |
| | BDS405. P | | |
| | BDS405.P1 | Unit P Topic 1 | Trigeminal neuralgia - definition, aetiology, clinical features and methods of management including surgical. |
| | BDS405.P2 | Unit P Topic 2 | Facial paralysis - Aetiology, clinical features, Management |
| | BDS405.P3 | Unit P Topic 3 | Nerve injuries - Classification |
| | BDS405. Q | | |
| | BDS405.Q1 | Unit Q Topic 1 | Aetiology of the clefts, incidence, classification, role of dental surgeon in the management of cleft patients. |

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| | BDS405.Q2 | Unit Q Topic 2 | Outline of the closure procedures. |
| | BDS405. R | | |
| | BDS405.R1 | Unit R Topic 1 | Primary care of medical emergencies in dental practice particularly - Cardio Vascular, Respiratory, Endocrine |
| | BDS405. R2 | Unit R Topic 2 | Primary care of medical emergencies in dental practice particularly - Anaphylactic reaction, Epilepsy, Epilepsy |
| | BDS405. S | | |
| | BDS405.S1 | Unit S Topic 1 | Applied anatomy, Ideal location for giving these injections |
| | BDS405.S2 | Unit S Topic 2 | Types and techniques |
| | BDS405. T | Unit T | Oral Implantology |
| | BDS405. T1 | Unit T Topic1 | Introduction |
| | BDS405. T2 | Unit T Topic 2 | Types of implants, and surgical procedure to install implants |
| | BDS405. U | Unit U | Ethics |
| | BDS405. U1 | Unit U Topic 1 | General ethics towards work and patient |
| | BDS405. U2 | Unit U Topic 2 | Ethics towards fellow doctor |
| | BDS405. V | | |
| | BDS405.V1 | Unit V Topic 1 | Introduction, concept of L.A., classification of local anaesthetic agents, ideal requirements, mode of action, types of local anaesthesia, complications. |
| | BDS405.V2 | Unit V Topic 2 | Various Nerve Block Techniques |
| | BDS405. W | Unit W Topic 1 | Concept of general anaesthesia. Indications of general anaesthesia in dentistry. |
| | BDS405.W1 | Unit W Topic 2 | Pre-anaesthetic evaluation of the patient. Pre-anaesthetic medication, advantages, drugs used. Commonly used anaesthetic agents. Complication during and after G.A. |
| | BDS405.W2 | Unit W Topic 3 | Cardiopulmonary resuscitation, Use of oxygen and emergency drugs. Tracheostomy. |
| | BDS405.W3 | Unit W Topic 1 | Concept of general anaesthesia. Indications of general anaesthesia in dentistry. |

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| 1. | Course evaluation | Attendance | Minimum 75% is Needed for both theory and clinical practical | |
| | | Discussions | Every day in Practicals | |
| | | Any Other | Various Surgical Procedures Demonstration on Patients | |
| | | Annual examination | 200 Marks (100 marks Theory + 100 marks Practical) | |
| 2. | Text book/s* | 1. Text book of Oral And Maxillofacial Surgery 2. Handbook of LOCAL ANESTHESIA 3. MEDICAL EMERGENCIES in the DENTAL OFFICE | | Neelima Anil Malik Stanley F. Malamed Stanley F. Malamed |
| 3. | Other References | TED learning, EBSCOHOST Various scientific articles from various sources | | |

Course Templates –

2.1 Template A1: Syllabus

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| School: School of Dental Sciences | | Batch: 2018-2023 |
| Program: | | BDS (Bachelor of Dental Surgery) |
| 1 | Course Code | BDS406 |
| 2 | Course Title | CONSERVATIVE DENTISTRY & ENDODONTICS |
| 3 | Credits | NA |
| 4 | Contact Hours (L-T-P) | 110-0-460 |
| Course Type | | Compulsory (CORE) |
| 5 | Course Objective | <p>1: Students are provided with knowledge to diagnose dental caries and skilled to treat it.</p> <p>2: To train the students about the importance, role, use and techniques of radiographs/digital radiographs and other imaging modalities in diagnosis.</p> <p>3: Be Competent to perform Class I and Class II cavities and their restoration with amalgam.</p> <p>4: Be able to restore class V and Class III cavities with glass ionomer cement.</p> <p>5: Be able to diagnose and appropriately treat pulpally involved teeth (pulp capping procedures).</p> <p>6: Be able to perform RCT for anterior teeth.</p> <p>7: Be competent to carry out small composite restorations</p> <p>8: Understand the principles of aesthetic dental procedures</p> <p>9: Students are geared to maintain high standard of professional ethics and conduct and apply it willingly in all aspects of professional life.</p> |

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| 6 | Course Outcomes | <p>CO406.1: Impart clinical skills to student which will help them in providing quality treatment and basic endodontic procedure skill.</p> <p>CO406.2: Practice Dentistry in a competent and ethical manner which will contribute to the oral health and general well- being of patient.</p> <p>CO406.3: Professional Behaviour, basic skills to carry out range of Dental Procedure in General dental Practice.</p> <p>CO406.4: Importance of life -long learning and updating the knowledge in the field of Restorative Dentistry & Endodontics.</p> |
| 7 | Course Description | <p>The course offers Knowledge: Possess a thorough knowledge and comprehension of diagnosis and dental management of the Caries in addition to the infection control measures in the dental clinic setting.</p> <p>Patient management: Take proper chair side history, clinical examination of patient and perform dental diagnostic procedures including radiographs and formulate a proper treatment plan.</p> <p>Patient treatment: Carry out appropriate and effective dental management of patients, once the diagnosis and treatment plan has been outlined. To motivate, educate and counsel the patient regarding the importance of dental care.</p> |

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| 8 | Outline syllabus | |
| | BDS406.A | UNIT A INTRODUCTION TO ENDODONTICS |
| | BDS406.A1 | Unit A Topic 1 Definition |
| | BDS406.A2 | Unit A Topic 2 Importance of Endodontics |
| | BDS406.A3 | Unit A Topic 3 Scope & Future of Endodontics |
| | BDS406.B | UNIT B RATIONALE &PRINCIPLES OF ENDODONTICS |
| | BDS406.B1 | Unit B Topic 1 Case selection, indication and contraindications for root canal treatments |
| | BDS406 B2 | Unit B Topic 2 Clinical diagnostic methods Case history, diagnosis and treatment plan. |
| | BDS406 B3 | Unit B Topic 3 Microbiology of endodontic infection. |

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| BDS406 B4 | Unit B Topic 4 | Isolation and infection control in Endodontics (Rubber dam application) |
| BDS406. C | UNIT C ENDODONTIC INSTRUMENTS | |
| BDS406 C1 | Unit C Topic 1 | Hand instruments |
| BDS406 C2 | Unit C Topic 2 | Power driven instruments |
| BDS406C3 | Unit C Topic 3 | Standardization |

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| BDS406 C4 | Unit C Topic 4 | Principles of using endodontic instruments |
| BDS406 C5 | Unit C Topic 5 | Sterilization |
| BDS406 D | Unit D PULPAL DISEASES | |
| BDS406 D1 | Unit D Topic 1 | Classification, etiology, diagnosis, management. |
| BDS406E | UNIT E PERIAPICAL DISEASES | |
| BDS406E1 | Unit E Topic 1 | Classification, etiology, diagnosis, management. |
| BDS406F | UNIT F VITAL PULP THERAPY: | |
| BDS406F1 | Unit F Topic 1 | Indirect and direct pulp capping |
| BDS406F2 | Unit F Topic 2 | Pulpotomy - types and medicaments used |
| BDS406F3 | Unit F Topic 3 | Apexogenesis and apexification and problems of open apex |
| BDS406G | Unit G Esthetics in dentistry | |
| BDS406 G1 | Unit G Topic 1 | Introduction and scope |
| BDS406 G2 | Unit G Topic 2 | Anatomy and physiology of smile |
| BDS406G3 | Unit G Topic 3 | Role of colour and translucency |
| BDS406 G4 | Unit G Topic 4 | Esthetic recontouring & Management of discoloured teeth |

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| BDS406 H | UNIT H : COMPOSITE RESTORATIONS | |
| BDS406H1 | Unit H | Indications, contraindications, advantages and disadvantages |

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| | | Topic 1 | |
| | BDS406H2 | Unit H Topic 2 | Stepwise procedure of tooth preparation for composite restoration. |
| | BDS406 H3 | Unit H Topic 3 | Clinical technique for posterior direct composite restorations |
| | BDS406 H4 | Unit H Topic 4 | Finishing and polishing of composite restoration |
| | BDS406 I | | |
| | BDS406I1 | Unit I Topic 1 | Indications, contraindications, advantage and disadvantages |
| | BDS406I2 | Unit I Topic 2 | Materials used & Types of bevels in cast restoration |
| | BDS406 I3 | Unit I Topic 3 | Fabrication of wax patterns |
| | BDS406 I4 | Unit I Topic 4 | Differences in tooth preparation for amalgam and cast restorations |
| | BDS406J | UNIT J: CASTING | |
| | BDS406J1 | Unit J Topic 1 | Die materials and preparation of dies |
| | BDS406 J2 | Unit J Topic 2 | Alloys used for casting & Casting procedure |
| | BDS406 J3 | Unit J Topic 3 | Casting defects |

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| BDS406K | Unit K: Temporisation or interim restoration | |
| BDS406K1 | Unit K Topic 1 | Materials and procedure |
| BDS406L | UNIT L: ROOT CARIES | |
| BDS406L1 | Unit L Topic 1 | Etiology, clinical features and management |
| BDS406M | UNIT M: NON- CARIOUS DESTRUCTION OF TOOTH STRUCTURE | |
| BDS406 N | UNIT N: Ceramic Restorations | |
| BDS406 N1 | Unit N Topic 1 | Indications, contraindications, advantages, disadvantages |
| BDS-406N2 | Unit N Topic 2 | Recent Advances & Techniques in Brief |
| BDS406 O | UNITO: DIRECT FILLING GOLD RESTORATIONS | |
| BDS406O1 | Unit O Topic 1 | Tooth preparation and Restoration |
| BDS406O2 | Unit O Topic 2 | Indications, contraindications, advantages, disadvantages |
| BDS406 P | UNIT P: ANATOMY OF PULP SPACE | |
| BDS406 Q | UNIT Q: ACCESS PREPARATION | |
| BDS406 Q1 | UNIT Q Topic1 | Objectives& Principles |
| BDS406 Q2 | UNIT Q Topic2 | Instruments & Steps |
| BDS406 R | UNIT R: DISINFECTION OF ROOT CANAL SPACE | |
| BDS406 R1 | UNIT R Topic1 | Irrigants: Functions & Types |
| BDS406 R2 | UNIT R Topic2 | Intracanal Medicaments: Function & Types |
| BDS406 S | UNIT S: OBTURATION OF THE ROOT CANAL SYSTEM | |
| BDS406 S1 | UNIT S TOPIC1 | Materials- Ideal root canal filling material, classification of materials |
| BDS406 S2 | UNIT S TOPIC2 | Classification and procedure |
| BDS406 T | UNIT T: POST ENDODONTIC RESTORATION | |
| BDS406 T1 | UNIT T TOPIC1 | Materials used |
| BDS406 T2 | UNIT T | Procedure |

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| | | TOPIC 2 | |
| | BDS406 U | UNIT U: TRAUMATIZED TEETH | |
| | BDS406 U1 | UNIT U TOPIC1 | Classification of fractured teeth |
| | BDS406 U2 | UNIT U TOPIC2 | Management of fractured tooth |
| | BDS406 V | UNIT V: ENDODONTIC SURGERIES | |
| | BDS406 V1 | UNIT V TOPIC1 | Indication & contraindications |
| | BDS406 V2 | UNIT V TOPIC2 | Surgical instruments and techniques |
| | BDS406 W | UNIT W: RETREATMENT IN ENDODONTICS | |

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| 1. | Course evaluation | Attendance | Minimum 75% is Needed for both theory and clinical practical | |
| | | Quizzes | Taken in every 3 months | |
| | | Presentations | Video Presentation | |
| | | Any Other | Project based learning, Assignments. | |
| | | Annual examination | Theory - 100 Marks Practical – 100 Marks | |
| 2. | Text book/s* | The Art & Science of Operative Dentistry Principle & Practice of Operative Dentistry Grossman's Endodontic Practice | | Sturdivant, Mosby U.S.A Charbeneau, Varghese Publishing, Mumbai B. Suresh Chandra & V. Gopi Krishna, Wolters Kluwer |
| 3. | Other References | LMS TED learning EBSCOHOST Various scientific articles from various sources | | |

Course Templates –

2.1 Template A1: Syllabus

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| School: School of Dental Sciences | | Batch: 2018-23 |
| Program: | | BDS (Bachelor of Dental Surgery) |
| | | |
| 1 | Course Code | BDS-407 |
| 2 | Course Title | PROSTHODONTICS, CROWN AND BRIDGE |
| 3 | Credits | NA |
| 4 | Contact Hours (L-T-P) | 110-0-460 |
| | Course Type | Compulsory (CORE) |
| 5 | Course Objective | <p>1. Training programme for graduates in prosthetic dentistry including Crown & Bridge & Implantology is structured to achieve knowledge and skill in theoretical and clinical laboratory, attitude, communicative skills and ability to research with understanding of social, cultural, educational & environmental background of the society.</p> <p>2. The undergraduate training programme provides lectures, seminars, clinical experience and clinical teaching in the period of five year dental curriculum, students are exposed to a wide range of patients with prosthetic problem and all students get extensive pre-clinical and clinical experience in the department.</p> |
| 6 | Course Outcomes | <p>C0407.1 Dental graduate with knowledge on prosthetics needs of patients, fabrication of all Prosthodontic modes of treatment.</p> <p>C0407.2 Dental graduate who is able to diagnose motivate and treat patients who are completely and partially edentulous (including geriatric patients) with complete & partial dentures</p> <p>C0407.3 Dental graduate skilled enough to identify cases requiring prosthodontics specialist treatment needs and refer them for further follow up.</p> |
| 7 | Course Description | It is the dental speciality pertaining to the diagnosis, treatment planning, rehabilitation and maintenance of the oral function, comfort, appearance & health of patients with clinical conditions associated with missing or deficient teeth & or maxillofacial tissues by using biocompatible tissues. |

| Outline syllabus | | |
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| BDS-407.A | Unit A | COMPLETE DENTURES |
| BDS-407.A1 | Unit A Topic 1 | Applied Anatomy and Physiology- Introduction, Biomechanics of the edentulous state, Residual Ridge Resorption. |
| BDS-407.A2 | Unit A Topic 2 | Communicating with the patient-Understanding the patients, mental attitude, Instructing the patient |
| BDS.407.A3 | Unit A Topic 3 | Diagnosis and Treatment Planning for patients- (i) with some teeth remaining, (ii) with no teeth remaining. (Systemic status, Local Factor, The geriatric patient, Diagnostic procedures) |
| BDS-407.A4 | Unit A Topic 4 | Articulators- Discussion |
| BDS-407.A5 | Unit A Topic 5 | Improving the patients denture foundation and ridge relation- an overview. a) Pre-Operative Examination b) Initial hard & soft Tissue procedure c) Secondary hard & soft tissue procedure d) Implant procedure e) Congenital deformities f) Postoperative procedure |
| BDS.407.A6 | Unit A Topic 6 | Principles of Retention, Support and Stability |
| BDS-407.A7 | UnitA Topic 7 | Impressions-detail a) Muscles of facial expression b) Biological Considerations for maxillary and mandibular impression including anatomy landmark and their interpretation. c) Impression Objectives d) Impression materials e) Impression techniques f) Maxillary & Mandibular Impression procedures i) Preliminary Impressions ii) Final Impressions g) Laboratory procedures involved with impression making (Beading & Boxing, Cast preparation) |
| BDS-407.A8 | Unit A Topic 8 | Record Bases and Occlusion Rims a) Materials & Techniques b) Useful Guidelines and Ideal Parameters c) Recording and transferring bases and occlusal rims |
| BDS.407.A9 | UnitA Topic 9 | Biological Consideration in jaw relation & jaw movements- Craniomandibular relations. |

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| | | A) Mandibular Movements B) Maxillo-mandibular relation including vertical and horizontal jaw relations C) Concept of occlusion |
| BDS-407.A10 | Unit A Topic 10 | Relating the patient to the Articulator a) Face bow types & Uses b) Face bow transfer procedure |
| BDS-407.A11 | Unit A Topic 11 | Recording maxillomandibular relation a) Vertical Relations b) Centric Relation Records c) Eccentric Relation Records d) Lateral relation records |
| BDS.407.A12 | Unit A Topic 12 | Tooth Selection and Arrangement a) Anterior teeth b) Posterior teeth c) Esthetic & Functional harmony |
| BDS-407.A13 | Unit A Topic 13 | Relating Inclination of teeth to concept of occlusion a) Neutrocentric Concept b) Balanced Occlusal Concept |
| BDS-407.A14 | Unit A Topic 14 | Trial Dentures |
| BDS.407.A15 | Unit A Topic 15 | Laboratory Procedures a) Wax Contouring b) Investing of Dentures c) Preparing of mold d) Preparing & packing acrylic resin e) Processing of Dentures f) Recovery of Dentures g) Lab Remount procedures h) Recovering of Complete Denture i) Finishing and polishing of Complete Denture j) Plaster Cast for Clinical Denture Remount Procedure |
| BDS-407.A16 | Unit A Topic 16 | Denture Insertion a) Insertion procedures b) Clinical errors c) Correction Occlusal disharmony d) Selective Grinding Procedures |
| BDS-407.A17 | Unit A Topic 17 | Treating Problems with associated denture use |

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| BDS.407.A18 | Unit A Topic 18 | Treating Abused Tissues |
| BDS-407.A19 | Unit A Topic 19 | Relining and rebasing of dentures |
| BDS-407.A20 | Unit A Topic 20 | Immediate Complete dentures construction procedure |
| BDS.407.A21 | Unit A Topic 21 | The Single Complete Denture |
| BDS-407.A22 | Unit A Topic 22 | Overdentures |
| BDS-407.A23 | Unit A Topic 23 | Dental Implants in Complete Denture |
| BDS.407.B | Unit B REMOVABLE PARTIAL DENTURES | |
| BDS.407.B1 | Unit B Topic 1 | Diagnosis and Treatment planning of Removable Partial Denture Cases. |
| BDS.407.B2 | Unit B Topic 2 | Introduction, terminologies and Scope (patient selection/ treatment planning) |
| BDS.407.B3 | Unit B Topic 3 | Components of Removable Partial Denture |
| BDS.407.B4 | Unit B Topic 4 | Major Connectors |
| BDS.407.B5 | | Minor Connectors Rest and Rest seats |
| BDS.407.B6 | Unit B Topic 5 | Components of Removable Partial Denture A) Direct retainers B) Indirect Retainers C) Tooth Replacement |
| BDS.407.B7 | Unit B Topic 6 | Principles of Removable Partial Denture Design |
| BDS.407.B8 | Unit B Topic 7 | Survey and Design a) Surveyors b) Surveying c) Designing |
| BDS.407.B9 | Unit B Topic 8 | Mouth preparation and Master Cast |
| BDS.407.B10 | Unit B Topic 9 | Impression materials and procedures for RPD |
| BDS.407.B11 | Unit B Topic 10 | Preliminary Jaw relation and esthetic try-in form some anterior replacement teeth |
| BDS.407.B12 | Unit B Topic 11 | Laboratory procedures for framework construction |

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| BDS.407.B 13 | Unit B Topic 12 | Fitting the framework |
| BDS.407.B 14 | Unit B Topic 13 | Tri-in of the partial denture |
| BDS.407.B 15 | Unit B Topic 14 | Completion of the partial denture |
| BDS.407.B 16 | Unit B Topic 15 | Inserting the RPD |
| BDS.407.B 17 | Unit B Topic 16 | Postinsertion observations |
| BDS.407.B 18 | Unit B Topic 17 | Temporary acrylic Partial Dentures |
| BDS.407.B 19 | Unit B Topic 18 | Immediate RPD |
| BDS.407.B 20 | Unit B Topic 19 | RPD opposing Single Complete Denture |
| BDS.407.B 21 | Unit B Topic 20 | Maintenance phase |
| BDS-407 C | Unit C | FIXED PARTIAL DENTURES |
| BDS-407 C1 | Unit C Topic 1 | Introduction |
| BDS-407 C2 | Unit C Topic 2 | Fundamentals of Occlusion |
| BDS-407 C3 | Unit C Topic 3 | Articulators |
| BDS-407 C4 | Unit C Topic 4 | Treatment planning for single tooth restorations |
| BDS-407 C5 | Unit C Topic 5 | Treatment planning for the replacement of missing teeth including selection and choice of abutment teeth |
| BDS-407 C6 | Unit C Topic 6 | Fixed Partial denture Configurations |
| BDS-407 C7 | Unit C Topic 7 | Principles of tooth preparation |
| BDS-407 C8 | Unit C Topic 8 | Preparations for full veneer crowns |
| BDS-407 C9 | Unit C Topic 9 | Preparations for partial veneer crowns |
| BDS-407 C10 | Unit C Topic 10 | Provisional Restorations |
| BDS-407 C11 | Unit C Topic 11 | Fluid Control & Soft Tissue Management |
| BDS-407 C12 | Unit C Topic 12 | Impressions |
| BDS-407 C13 | Unit C Topic 13 | Working Casts and Dies |
| BDS-407 | Unit C | Wax Patterns |

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| C14 | Topic 14 | |
| BDS-407 C15 | Unit C Topic 15 | Pontics and Edentulous Ridges |
| BDS-407 C16 | Unit C Topic 16 | Esthetic Considerations |
| BDS-407 C17 | Unit C Topic 17 | Finishing and Cementation |
| BDS-407 C18 | Unit C Topic 18 | Topics to be covered in brief- <ul style="list-style-type: none"> a) Solder joints and other connectors b) All-Ceramic Restorations c) Metal-Ceramic Restorations d) Preparations of Intracoronal Restorations e) Preparations for extensively damaged teeth f) Preparations for periodontally weakened teeth g) The functionally generated path technique h) Investing and Casting i) Resin-Bonded Fixed Partial Dentures |

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| 1. | Course evaluation | Attendance | Minimum 75% is Needed for both theory and clinical practical | |
| | | Quizzes | Taken in every 3 months | |
| | | Presentations | Video Presentation | |
| | | Any Other | Project based learning, flip learning, Assignments | |
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| | | Annual Examination | Theory-100 Marks Practical-100Marks | |
| 2. | Text book/s* | 8. Syllabus of Complete denture 9. Bouchers "Prosthodontic Treatment for Edentulous Patients 10. Essentials of Complete Prosthodontics 11. Mc. Craken's RPD | Charles M. Heartwell Jr, Arthur O. Rahn Boucher Sheldon Winkler | |
| 3. | Other References | TED learning EBSCOHOST Various scientific articles from various sources | | |

Course Templates –

2.1 Template A1: Syllabus

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| School: School of Dental Sciences | | Batch: 2018-2023 |
| Program: | | BDS (Bachelor of Dental Surgery) |
| 1 | Course Code | BDS408 |
| 2 | Course Title | PEDIATRIC & PREVENTIVE DENTISTRY |
| 3 | Credits | NA |
| 4 | Contact Hours (L-T-P) | 65-0-200 |
| Course Type | | Compulsory (CORE) |
| 5 | Course Objective | <ol style="list-style-type: none"> 1. Complete and comprehensive oral assessment of a child patient. 2. Organise a treatment plan that will fulfill a child's behavior, preventive, restorative and interceptive orthodontic needs. 3. Assess a pediatric patient, counsel the parent/guardian and use appropriate behavior management effective communication strategies to make dental experience positive for children 4. Perform and provide both preventive and therapeutic dental treatment for infants, children and adolescents including those with special health care needs and demonstrate professionalism and ethical practice in patient care clinics. |
| 6 | Course Outcomes | <p>CO 408.1: Adequate knowledge of the development, structure and function of the teeth, mouth and jaws and associated tissues both in health and disease and their relationship and effect on general-state of health and also the bearing on physical and social well-being of the child patient.</p> <p>CO 408.2: Adequate knowledge of biological function and behavior of child in health and sickness as well as the influence of the natural and social environment on the state of health so far as it affects dentistry.</p> <p>CO 408.3: Able to diagnose and manage various common dental problems encountered in pediatric dental practice, keeping in mind the expectations and the right of the society to receive the best possible treatment available wherever possible.</p> <p>CO 408.4: Able to communicate effectively with patient, parent or guardian.</p> |
| 7 | Course Description | In Paediatric dentistry, the students should concentrate on clinical management, efficacy of preventive measures, treatment needs particularly for children with disabilities. In oral medicine and oral diagnosis, the student should receive instruction in various lesions, occurring in the oral cavity with particular reference to oral cancer. |

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| 8 | Outline syllabus | |
| | BDS-408 A | Unit A |
| | BDS-408 A1 | Unit A Topic 1 Introduction To Pedodontics And Preventive Dentistry, Growth & Development, Development Of Occlusion, Dental Anatomy And Histology |
| | BDS-408 A2 | Unit A Topic 2 Dental Materials Used In Pediatric Dentistry |
| | BDS-408 A3 | Unit A Topic 3 Dental Radiology Related To Pedodontics, Oral Surgical Procedures In Children. |
| | BDS-408 B | Unit B |
| | BDS-408 B1 | Unit B Topic 1 Dental Caries |
| | BDS-408 B2 | Unit B Topic 2 Gingival & Periodontal Diseases In Children |
| | BDS-408 B3 | Unit B Topic 3 Pediatric Operative Dentistry |
| | BDS-408 C | Unit C |
| | BDS-408 C1 | Unit C Topic 1 Child Psychology |
| | BDS-408 C2 | Unit C Topic 2 Dental Emergencies In Children & Their Management |
| | BDS-404 C2 | Unit C Topic 3 Behaviour Management |
| | BDS-408 D | Unit D |
| | | ORAL MEDICINE & THERAPEUTICS |
| | BDS-408 D1 | Unit D Topic 1 Pediatric Endodontics |
| | BDS-408 D2 | Unit D Topic 2 Traumatic Injuries In Children |
| | BDS-408 D3 | Unit D Topic 3 Preventive And Interceptive Orthodontics |
| | BDS-408 E | |
| | BDS-408 E1 | Unit E Topic 1 Dental Care Of Children With Special Needs |
| | BDS-408 E2 | Unit E Topic 2 Oral Habits In Children |
| | BDS-408 E3 | Unit E Topic 3 Congenital Abnormalities In Children |

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| 1. | Course evaluation | Attendance | Minimum 75% is Needed for both theory and clinical practical | |
| | | Quizzes | Taken in every 3 months | |
| | | Presentations | Video Presentation | |
| | | Any Other | Project based learning, Assignments | |
| | | Annual Examination | Theory-100 marks Practical-100 marks | |
| 2. | Text book/s* | SR. | Author | Title |
| | | 1 | Pinkham, JR | Pediatric Dentistry infancy through adolescence |
| | | 2 | Mc Donald, RE | Dentistry for the child and adolescent |
| | | 3 | Ghai, OP | Ghai essential paediatrics |
| | | 4 | Goran Koch | Pedodontics Clinical Approach |
| | | 5 | Welbury | Pediatric Dentistry |
| | | 6 | Cameron, Angus | Handbook of pediatric dentistry |
| | | 7 | Stephen Wei | Pediatric Dentistry Total Patient Care |
| 3. | Other References | TED learning Various scientific articles from various sources | | |