BACHELOR OF DENTAL SURGERY PROGRAMME







Bachelor of Dental Surgery Programme Course Book Semesters 8

Faculty of Dental Sciences
University of Peradeniya
2025

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INTRODUCTION

The main aim of the Bachelor of Dental Surgery (BDS) is to impart the graduates with knowledge, skills and attitudes necessary to make a significant contribution towards promotion, restitution, preservation and maintenance of acceptable oral health and function, which are integral parts of overall health of an individual.

The first four semesters of the BDS study programme have provided the students with pre-requisite knowledge and skills necessary to commence the second phase of the programme from fifth to eighth semesters. This second phase intends to offer them with supervised hands-on clinical training in dentistry, to make them adequately skilled to proceed to the final stage of clinical training which aims to prepare them for independent practice as General Dental Practitioners.

The fifth semester intends to introduce the students to clinical training under three main clinical streams where the focus will be on an integrated approach to care rather than a discipline-based training. The five courses in the fifth semester are Operative Dental Procedures (ODP) [3101], Population Oral Health 1 (POH 1) [3102], Introduction to Adult Oral Health (IAOH) [3103], Clinical and Diagnostic Oral Sciences I (CDOS 1) [3104] and Child & Adolescent Oral Health Care 1 (CAOH 1) [3105].

During the fifth semester, the students will receive training in professional care on patients, as they begin to manage patients who are in need of basic preventive and operative interventions. Students will also receive further training on clinical skills in a Skills Lab under the course 'Operative Dental Procedures', while the clinical rotations in different clinical streams would provide them with sufficient clinical exposure. They will receive hands-on training under close supervision of the staff.

Upon successful completion of the requirements of the fifth semester, the students will move to the sixth semester where they will be further trained under four courses namely, Population Oral Health 2 (POH 2) [3201], Management of Adult Dental Diseases (MADD) [3202], Clinical and Diagnostic Oral Sciences 2 (CDOS 2) [3203] and Child & Adolescent Oral Health Care 2 (CAOH 2) [3204]. Clinical and practical training in these two semesters will mainly take place in designated clinics within the teaching units of AOH, CDOS and CAOH.

At the end of the sixth semester, a student is expected to acquire knowledge and skills necessary for management of patients with basic dental and oral health care needs.

The seventh semester aims to make the students be more competent in clinical skills as they follow a more integrated approach for patient care under three main clinical streams as courses in AOH, CDOS and CAOH, while they will also be introduced into basic statistics and research methodology which enable them to engage in a research project in the 9th semester. Thus, the courses in the seventh semester not only aim to enhance competence in clinical skills for patient care; but to provide a strong underpinning for self-directed learning and evidence-based dentistry. The four courses in the seventh semester are Adult Oral Health Care 1 (AOH 1) [4101], Clinical and Diagnostic Oral Sciences 3 (CDOS 3) [4102], Child & Adolescent Oral Health Care 3 (CAOH 3) [4103] and Basic Statistics & Research Methodology (BSRM) [4104].

Upon successful completion of courses in the seventh semester, the students will move to the eighth semester where they will undergo comprehensive clinical training further under three main streams, AOH, CDOS and CAOH. The three courses are Adult Oral Health Care 2 (AOH 2) [4201], Clinical and Diagnostic Oral Sciences 4 (CDOS 4) [4202] and Child & Adolescent Oral Health Care 4 (CAOH 4) [4203].

Students are expected to follow all appointments diligently, as the initial phase of clinical training (5th & 6th semesters) and the next level of more advanced skills acquisition would enable them to be competent in clinical skills before they proceed towards the final part of clinical training in the fifth year. Therefore, the training from 5th to 8th semesters will be crucial in acquiring clinical skills related to the practice of dentistry more independently during 9th and 10th semesters.

8TH SEMESTER COURSES

Course No: DS 4201

Course title: Adult Oral Health Care 2

Credits: 6

Pre-requisites: Should have followed all courses up to the end of 7th semester

Aims: This course aims to empower students in decision-making skills in treatment planning in the overall restorative management of an adult patient. They should be able to perform selected advanced procedures during the process of overall restorative rehabilitation.

Intended learning outcomes:

On successful completion of the course the students should be able to:

- Demonstrate an adequate knowledge and skills to formulate comprehensive treatment plans that include plans for advanced treatment methods.
- > Critically discuss the treatment plans designed for individual patients in the total restorative rehabilitation.
- Carry out clinical procedures routinely practiced on patients sufficient for the level of a general dental practitioner
- Carry out clinical procedures involved in the rehabilitation of adult patients

| Time Allocation (Hours): Lectures: 30 Clinical demonstrations: 15 Clinical | : 135 |
|--|-------|
| Self-learning: 120 | |
| Course Content: | |
| Lectures: | Hours |
| Special impression techniques | 1 |
| 2. Dental care for the elderly | 1 |
| 3. Assessment and management of denture complaints- I, II | 2 |
| 4. Maxillo-facial prosthodontics –I, II | 2 |
| 5. Splints, stents and mouth guards | 1 |
| 6. Additional retentive aids, magnets and precision attachments | 1 |
| 7. Dental implants | 5 |
| 8. Muco-gingival surgery and soft tissue grafts | 1 |
| 9. Periodontal flap designs and bone grafts | 1 |
| 10. Management of furcation involved teeth | 1 |
| 11. Periodontal regeneration and wound healing | 1 |
| 12. Treatment planning modifications for patients with periodontal surgical care needs | 1 |
| 13. Introduction and classification of bridges | 1 |
| 14. Patient assessment and preparation of patients for bridges | |
| 15. Preparation techniques for bridges | 1 |
| 16. Design principles of pontics, abutments and bridges | 1 |
| 17. Complications of crown and bridgework | 1 |
| 18. Management of complex cases with fixed prosthodontics | 1 |
| 19. Tooth preparation for inlay, onlay and veneer | 1 |
| 20. Restoration of a grossly broken down tooth | 1 |
| 21. Rehabilitation of a patient with dental trauma | 1 |
| 22. Rehabilitation of a patient with tooth wear | 1 |
| 23. Periodontal restorative interface | 1 |
| 24. Orthodontic restorative interface | 1 |
| Total | 30 |
| Clinical: | |
| Management of edentulous patients with conventional complete dentures. | |
| Management of adult patients with multiple restorative treatment needs (restoration | 135 |

| of space with removable and fixed prosthesis, management of patients with advanced periodontitis) Continue to maintain a log book for AOH courses | | |
|--|--|-----|
| | Total | 135 |
| Clinica | Demonstrations: | |
| 1. | Special impression techniques: anterior window technique | 1 |
| 2. | Special impression techniques: neutral zone impression | 1 |
| 3. | Special impression techniques: copy dentures | 2 |
| 4. | Relining –clinical procedure | 1 |
| 5. | Types of bridges and preparation principles | 2 |
| 6. | Preparation of a bridge on typodont teeth | 2 |
| 7. | Preparation of a bridge on a patient | 2 |
| 8. | Build up of a grossly broken-down tooth | 2 |
| 9. | Implant placement on a patient | 2 |
| | Total | 15 |

Recommended References/ Prescribed Textbooks

- 1. D Williams, FJ Hughes, EW Odell and P Farthing. 2008. Pathology of Periodontal Disease. 8thed.
- 2. J Lindhe.2008. Clinical Periodontology and Implant Dentistry. 5thed.
- 3. Edited by: M O'Sullivan. 2004. Fixed Prosthodontics in Dental Practice. 1sted.
- 4. Edited by D Bartlett and D Ricketts. 2007. Indirect Restorations. 1sted.
- 5. RM Basker and JC Davenport. 2011. Prosthetic treatment of the edentulous patient. 5thed.

| Assessment | | Percentage Marks | |
|--------------|--------------------|--|--|
| | | 10% - Patient 1 (Assessment of a follow-up patient who was managed with complete dentures) | |
| In-course | Clinical | 20% - Patient 2 (Assessment of a follow-up patient who was treated for multiple restorative needs, and carryout a given treatment procedure) | |
| Theory | | 30% - 3 SAQs | |
| End-semester | Practical/Clinical | 40% - 6 OSPEs/OSCEs | |

Course No: DS 4202

Course title: Clinical and Diagnostic Oral Sciences 4

Credit value: 6

Pre-requisites: Should have followed all courses up to the end of 7th semester

Aims: This course aims to provide an opportunity for students to acquire knowledge and skills required for the diagnosis and management of salivary gland disorders, oral ulceration, maxillofacial anomalies, maxillofacial trauma and to impart sufficient knowledge in Forensic Odontology.

Intended learning outcomes:

On successful completion the students should be able to:

- Demonstrate knowledge of the causation, pathogenesis and natural history of salivary gland disorders and oral ulceration, and have sufficient skills in the management of these conditions
- Demonstrate sufficient knowledge in the diagnosis and management of maxillofacial anomalies and maxillofacial trauma
- Carry out an assessment on a patient with maxillofacial anomalies and maxillofacial trauma
- Refer patients appropriately for definitive / advanced treatment of the above conditions
- ➤ Demonstrate good knowledge in Forensic Odontology and to demonstrate sufficient skills in using the knowledge in the appropriate management of cases.

Time Allocation (Hours): Lectures: 30 Practical: 30 Clinical: 150 Self learning: 90

| Lectures | | |
|----------|--|---|
| 1. Eti | opathogenesis and clinico- pathology of salivary gland diseases(SGD) | 4 |
| 2. Sur | rgical & non-surgical management of SGD | 2 |
| 3. Xei | rostomia and its effects on oral tissues | 1 |
| 4. Eti | opathogenesis and clinico-pathology of oral ulceration | 3 |
| 5. Ma | anagement of oral ulcers | 1 |
| 6. Cra | aniofacial anomalies | 2 |
| 7. Ma | anagement of cleft lip and palate | 1 |
| 8. Ma | anagement of soft tissue anomalies of the oral cavity | 1 |
| 9. Mu | ultidisciplinary management of jaw deformities | 2 |
| 10. Fo | rensic Odontology | 5 |
| 11. Epi | idemiology, causes, clinical features of maxillofacial trauma | 2 |
| 12. lm | aging for maxillofacial trauma | 1 |
| 13. Ma | anagement of maxillofacial injuries | 1 |
| | sics in the management of fractures of the mandible and middle third of the cial skeleton and prevention of maxillofacial trauma | 3 |
| 15. Po: | st-operative management of maxillofacial injuries | 1 |

| Tota | 30 | |
|---|-----|--|
| Practical | | |
| Histopathology of salivary gland disorders | | |
| 2. Histopathology of oral ulceration | 30 | |
| 3. Forensic odontology | 30 | |
| Total | | |
| Clinical | - 1 | |
| Salivary gland disorders | | |
| 2. Oral ulceration | 150 | |
| 3. Maxillo-facial anomalies/ cleft lip and palate | | |
| 4. Maxillofacial trauma | | |
| Tota | 150 | |

Recommended References/ Prescribed Textbooks

- 1. BW Neville, DD Damm, CM Allen and JE Bouquot. 2009.Oral and Maxillofacial Pathology. currented.
- 2. S. Warnakulasooriya and WM Tilakaratne. 2014. Oral Medicine and Pathology. current ed.
- 3. MS Greenberg and M Glick. 2003. Burket's Oral Medicine. current ed.
- 4. TA Turvey, JR Scully, PD Whaite, BJ Costelo and RL Ruiz. 2009. Oral and Maxillofacial Surgery Volume, III. current ed.
- 5. E Odell and R Cawson. 2008. Essentials of Oral Medicine and Pathology. current ed.
- 6. C Scully. 2013. Oral and Maxillofacial Medicine. current ed.
- 7. Raymond J. Fonseca DMD, H. Dexter Barber. 2012, Oral and Maxillofacial Trauma.
- 8. U. J. Moore. 2011. Principles of Oral and Maxillofacial Surgery.
- 9. Raymond J. Fonseca DMD , 2017 .Oral and Maxillofacial Surgery: 3-Volume Set.

Assessments

| Assessment | | Percentage Mark | |
|--------------------|-----------------------|-----------------------|--|
| In-course | ICA 1 - 15% - 10 MCQs | | |
| | ICA 2 - 15% - 4 OSCEs | ICA 2 - 15% - 4 OSCEs | |
| End-semester | Theory | 30%- 3 SAQs | |
| Practical/Clinical | | 40%- 06 OSCEs/OSPEs | |

Course No: DS 4203

Course title: Child and Adolescent Oral Health Care 4

Credits: 04

Pre-requisites: Should have followed all courses up to the end of 7th semester

Aims: This course aims to make the students competent in delivering oral health care to child and adolescent patients. This also aims to empower them in decision making on referrals for tertiary care.

Intended learning outcomes:

On successful completion of the course the students should:

- > Be able to assess, plan treatment and carry out basic and specified intricate treatment procedures in the management of common oral and dental diseases and conditions in children and adolescents and children with special health needs.
- > Be able to plan and provide basic treatment/interventions/advice for simple and local dental irregularities in child and adolescent patients
- > Be able to identify complex dental treatment needs of children and adolescents, and to make appropriate referral.

| Tin | ne Allocation (Hours): Lectures: 15Clinical: 135 Self-learning: 50 | | | |
|-----|--|-------|--|--|
| Lec | ctures: | Hours | | |
| 1. | Comprehensive dental care for children and adolescents and children with 5 special health care needs | | | |
| 2. | Fixed orthodontic appliances | 2 | | |
| 3. | 3. Role of the general dental practitioner in orthodontic practice 2 | | | |
| 4. | Interceptive orthodontics | 5 | | |
| 5. | Case selection and management of patients with class II malocclusion with simple removable appliances | 1 | | |
| | Total | 15 | | |
| Cli | nical: | | | |
| 1. | Pharmacological approaches in the management of an anxious child | | | |
| 2. | . History taking and treatment planning for children with special health care needs | | | |
| 3. | Management of children with dental caries, dental trauma, gingival diseases, mucosal diseases and developmental dental anomalies | | | |
| 4. | | | | |
| 5. | 5. Management of malocclusions with functional appliances | | | |
| 6. | 5. Management of patients with interceptive orthodontics | | | |
| 7. | Fixed orthodontic appliances | | | |
| | Total | 135 | | |

Recommended References/ Prescribed Textbooks

- 1. WR Proffit, HW Fields Jr. and DM Sarver. 2007. Contemporary Orthodontics. 4thed.
- 2. JO Andreasen et al. 2011. Traumatic Dental Injuries: A Manual. 3rded.
- 3. R Welbury et al. 2012. Paediatric Dentistry. 4thed
- 4. AC Cameran and RP Widmer. 2013. Handbook of Pediatric Dentistry. 4thed.

| Assessment | | Percentage Marks |
|--------------|-----------|---|
| In-course | | % - Deciduous pulp therapy in a child patient % - Functional Appliance – Case report |
| End-semester | Theory | 10% - 06 MCQs 20% - 02 SAQs |
| | Practical | 40% - 07 OSCEs/OSPEs |