

BACHELOR OF DENTAL SURGERY PROGRAMME

Semester 9



Faculty of Dental Sciences
University of Peradeniya
2025



Bachelor of Dental Surgery Programme

Course Book

Semesters 9

Faculty of Dental Sciences
University of Peradeniya

2025

CONTENTS

	Page
Introduction	3
9 th Semester Courses	4
1 DS5101 Adult Oral Health Care 3.....	5
2 DS5102 Comprehensive Oral Care 1.....	6
3 DS5103 Advanced Treatment Clinic 1.....	8
4 DS5104 Research Project	10

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. The second phase provided the students thorough supervised hands-on clinical training in dentistry, enabling them to be adequately skilled to proceed to the third and the final phase of clinical training. This final phase aims to prepare the students to make rational decisions in clinical practice and for independent practice later as a General Dental Practitioner.

The ninth semester intends to introduce the students into clinical training through a holistic approach for patient care under the course, 'Comprehensive Oral Health Care 1' (COHC 1) [DS 5102]. COHC training will take place in a polyclinic set-up in Comprehensive Oral Health Care Clinic. The students will also advance their clinical skills training under 'Adult Oral Health Care' stream (AOH 3) [DS 5101], while they receive a good grasp on theoretical concepts and clinical exposure under the course 'Advanced Treatment Clinic 1' (ATC 1) [5103]. At the same time the students will execute a research project under the course 'Research Project' [5104] within the ninth semester. Students have already received the prerequisite knowledge and applications in research as they have completed a course in 'Basic Statistics and Research Methodology' during the 7th semester.

Upon successful completion of the requirements of the ninth semester, the students shall move to the tenth and the last semester in their BDS Study Programme where they will be further trained under four courses namely, Adult Oral Health Care 4 (AOH 4) [DS 5201], Comprehensive Oral Health Care 2 (COHC 2) [DS 5202], 'Advanced Treatment Clinic 2' (ATC 2) [5203] and a new course introduced to them on 'Maxillofacial Surgical Care' [5204] where they will receive a thorough training in maxillofacial surgical care for the training requirement as future House Officers.

Students are expected to follow all appointments diligently, as they should be competent and confident to practice dentistry more independently at the end of this final year of their BDS training.

9TH SEMESTER COURSES

Course No:	DS 5102	
Course title:	Comprehensive Oral Care 1	
Credit value:	6	
Pre-requisites:	Should have followed all courses up to the end of 8th semester	
<p>Aims: This course aims to set up the students with the ‘concept of holistic comprehensive approach to patient care’. They will also have an opportunity to synthesize the knowledge and skills learnt so far to carryout treatment of all common oral diseases and conditions at the level of a general dental practitioner.</p>		
<p>Intended learning outcomes:</p> <p>On successful completion of the course the students should be able to:</p> <ul style="list-style-type: none"> ➤ Carryout diagnosis of a child and adult patient’s total oral and dental disease conditions ➤ Assess a patient’s oral and dental treatment needs precisely and prioritize them ➤ Draw up a comprehensive individualized and prioritized treatment plan for a patient, taking all relevant aspects in to consideration ➤ Carryout the treatment, rehabilitation and secondary prevention of all common oral and dental conditions according to a planned schedule ➤ Keep accurate, comprehensive records of a patient’s dental and oral treatment and oral condition, assess progress of treatment and improvement of patient’s oral health ➤ Maintain professional standards, ethical conduct and demonstrate concern for the patient’s best interest at all times. 		
Time Allocation (Hours):	Clinical 270	Self learning hours: 30
<p>Course content:</p> <p>History taking, clinical examination, radiographic assessments & other relevant investigations, diagnosis and treatment planning with particular attention being paid to prioritizing and sequencing treatment procedures. Carrying out common dental treatment, according to the stages in the treatment plan. Clinical record keeping. Write comprehensive case reports.</p> <p>(Seminar programme – once a week on treatment planning, and discussion/presentation of case scenarios).</p>		

Recommended References/ Prescribed Textbooks

- 1) BS Chong. 2010. Harty's Endodontics in Clinical Practice. 6th ed. /latest
- 2) Edited by M O'Sullivan. 2004. Fixed Prosthodontics in Dental Practice. 1st ed. /latest
- 3) J Lindhe. 2008. Clinical Periodontology and Implant Dentistry. 5th ed. /latest

Assessment		Percentage Mark		
In-course		50%	ICA 1 - 20%	Grades obtained for Academic ability, Clinical ability & Professionalism
			ICA 2 - 15%	Assessment of a child patient suitable for GP level (middle of follow-up care) – History, assessments, diagnosis & Rx planning. Carry out a given treatment procedure (may include a simple orthodontic intervention)
			ICA 3 - 15%	Adult Patient - History, assessments, diagnosis & Rx planning. Carry out a given treatment procedure
End-semester	Clinical	50%	Clinical Assessment 1 - 25%	04 Short Cases –child patients (10 minutes each, for 40 minutes)
			Clinical Assessment 2 - 25%	04 Short Cases –adult patients (10 minutes each, for 40 minutes)
*Allowed procedures will be informed to the students at the time of allocation of patients at the beginning of the semester				

Course No:	DS 5103
Course title:	Advanced Treatment Clinic 1
Credit value:	3
Pre-requisites:	Should have followed all courses up to the end of 8th semester
Aim: This course aims to familiarize students with the newer and more advanced procedures that may be employed in the treatment of dental and oral diseases and conditions.	
Intended learning outcomes: On successful completion of learning the students should be: <ul style="list-style-type: none"> ➤ Able to demonstrate an adequate knowledge and understanding of molar endodontics and restoring endodontically treated teeth ➤ Able to plan and design fixed and removable partial dentures for partially dentate patients ➤ Able to manage traumatized dentition ➤ Familiar with, and able to assist in clinical procedures such as implant-supported prostheses, maxillo-facial prostheses, advanced periodontal surgical procedures, indirect restorations, fixed orthodontic appliances ➤ Familiar with dental management of children and elderly patients with special health needs. 	
Time Allocation (Hours):	Lectures 30 Clinical 45 Self learning hours: 75
Course content: Clinical: Molar endodontics and restoration of endodontically treated teeth, Restoration of partially edentulous space with bridges / RPD, Management of traumatized dentition, caries/discoloration with indirect restorations, Advanced periodontal regenerative techniques, Implants & implant-supported prostheses, maxillo-facial prosthodontics Precision Attachment retained prostheses, Prosthodontic care for elderly patient, Fixed orthodontics, Patients with special treatment needs.	
Lecture topics: <ol style="list-style-type: none"> 1. Oral health epidemiology of elderly, Barriers to oral care, Physiology, pathology, Pharmacology and Psychology of aging 2. Risk assessment, Communication with elderly adults and treatment planning 3. Oral health care for institutionalized elderly 4. Common Oral and Systemic Conditions in Older Patients including Soft Tissue Diseases, Bony Pathology, Neurogenic Based Oral and Facial Pains 5. Oral Rehabilitation of elderly patient. 6. Restoration of edentulous space using removable and fixed prosthesis 7. Restoration of edentulous space with implant retained fixed prosthesis 8. Complications of fixed partial dentures 9. Update on surgical anatomy 10. Bone augmentation ,sinus lifting and other preparation prior to implant therapy 11. Implant supported overdentures 	

12. Management of complications related to implant therapy.
13. Prosthetic rehabilitation of maxillary defects
14. Prosthetic rehabilitation of mandibular defects
15. Use of precision attachments in removable prosthesis
16. Periodontal regenerative techniques and material
17. Recent advancements in periodontal diagnosis and treatment
18. Adjunctive orthodontics
19. Orthodontic management of cleft lip and palate patients
20. Fixed appliance interaction with cleft lip and palate patient management
21. Quality assurance in orthodontic treatment
22. Orthognathic surgery
23. Concepts in molar endodontics
24. Traumatized dentition; concepts of rehabilitation
25. Management of traumatized dentition with indirect restorations
26. Management of discoloured teeth with indirect restorations
27. Current concepts on the management of tooth wear
28. Aesthetic space closure with restorations
29. Comprehensive management of child patient with special health needs
30. Comprehensive management of adult patient with special health needs

Students should complete the log-book on all procedures/clinical activities under this course (5103) and 5203 during the 10th semester with signatures of relevant teachers.

Recommended References/ Prescribed Textbooks

1. J Lindhe. 2008. Clinical Periodontology and Implant Dentistry. 5th ed./latest
2. N Garg and A Garg. 2012. Textbook of Endodontics. 2nd ed. /latest
3. BS Chong. 2010. Harty's Endodontics in Clinical Practice. 6th ed. /latest
4. Edited by M O'Sullivan. 2004. Fixed Prosthodontics in Dental Practice. 1st ed. /latest
5. H Wolf. 2014. Colour Atlas of Dental Medicine. Periodontology. 3rd ed. /latest
6. TD Taylor. 2000. Clinical maxillofacial prosthetics. 1st ed. /latest

Assessment		Percentage Mark
In-course:		20% - 10 MCQ
End-semester	Theory	40% 2 SAQs + 1 Essay
	Clinical	40% - 06 OSCEs

Course No:	DS 5104
Course title:	Research Project
Credit value:	4
Pre-requisites:	Should have followed course DS 4104
Aim: The research project aims to impart skills and knowledge in conducting a research and writing a dissertation in view of dissemination of research findings.	
Intended learning outcomes: On successful completion of the course the students should be able to: <ul style="list-style-type: none"> ➤ Carry out a simple scientific investigation and apply basic statistical methods with well-informed interpretation and arrive at valid conclusions. ➤ Report research findings effectively in an oral presentation and by writing a research report. 	
Time Allocation (Hours):	Independent Work 270 Discussions 15
Course content: Identify a simple research problem and define a research question around the problem; reviewing the available literature on the topic and finalizing specific objectives (and hypotheses if relevant); writing a literature review, outline of the research, and writing the protocol, and proposal; obtaining ethical clearance and permissions, carrying out measurements; data management, analysis and interpretation; use of software in research; writing a simple project report, presenting results to an audience of peers and evaluators using digital media.	
<u>Details/Plan:</u> <ul style="list-style-type: none"> • Students shall refer to the ‘Guidelines of the Research Project’ approved by the Faculty of Dental Sciences, University of Peradeniya. • Students will be randomly grouped in equal numbers during the 7th semester. Each group shall consist of 3 or 4 students and they will be assigned a supervisor. • Each group of students shall - <ol style="list-style-type: none"> 1. Identify a simple research problem and define a research question around the problem with the help of the Supervisor; The Supervisor shall have the freedom to nominate a co-supervisor (a person with adequate research experience) in an appropriate discipline from any Faculty/Institution/Organization to facilitate the research work of students and should be informed to the CC within the 7th Semester; 2. Review the available literature on the topic (use open source software and databases for this; use portable devices such as smart phones with free apps and Wi-Fi for this purpose); 3. Finalize the objective and specific objectives (if relevant), and the hypotheses (if relevant); 4. Prepare an outline of the research; 5. Write the literature review and the proposal; 6. obtain ethical clearance and permission; (Steps 1-6 to be completed in the 7th and 8th Semesters.) 	

At the completion of this stage, students shall present the research proposal to a panel of examiners in the first week of 9th semester. Project proposal and the presentation will be evaluated by the panel of examiners with a feedback/contribution from the supervisor. Approved research proposal shall be marked, and it will carry 30%, under in course assessments.

7. Carry out measurements;
8. Manage and analyze data with appropriate statistical tool and interpret results (use open source software for this);
9. Write a simple project report following guidelines and templates;
10. Present results to an audience of peers and evaluators using digital media (at the end of 9th Semester).

For the CC

CC shall prepare a list of eligible supervisors by the beginning of the 7th Semester and prepare random groups of students. CC shall inform the supervisors and students regarding the grouping and invite supervisors to keep titles for simple research projects appropriate for undergraduate students, where they will not have to spend time and money at an unacceptable level. CC shall send the students to assigned supervisors in the 7th Semester itself and encourage students and supervisors to use self-learning hours (notional hours) for this task during the 7th and 8th Semesters. CC shall keep students informed about the above timeline.

Recommended References/ Prescribed Textbooks

1. SP Glasser. 2014. Essentials of Clinical Research. 2nd ed./latest
2. JE Mauch and N Park. 2003. Guide to the Successful Thesis and Dissertation. 5th ed./latest
3. R Kumar. 2014. Research Methods: a step-by-step guide for beginners. 4th ed. /latest
4. KL Turabian, WC Booth et al. 2013. A Manual for Writers of Research Papers, Theses, and Dissertations: Chicago Style for Students and Researchers. 8th ed. /latest

Assessment		Percentage Mark
Project planning and the proposal		30% : Approved project
End-semester	Research report	40%
	Presentation and defense	30%

