

Year:	Fourth Year
Subject Name:	Prosthodontics and Crown & Bridge
Subject Code:	1DS1010310
Pre-requisite:	-None-

GOALS:

- The dental graduates during training in the institutions should acquire adequate knowledge, necessary
- skills and reasonable attitudes which are required for carrying out all activities appropriate to general
- dental practice involving the prevention, diagnosis and treatment of anomalies and diseases of the teeth,
- mouth, jaws and associated tissues. The graduate also should understand the concept of community
- oral health education and be able to participate in the rural health care delivery programmes existing in the country.

OBJECTIVES:

The objectives are dealt under three headings (a) Knowledge and understanding (b) skills and (c) Attitudes.

(A) KNOWLEDGE AND UNDERSTANDING:

The graduate should acquire the following during the period of training.

1. Adequate knowledge of the scientific foundations on which dentistry is based and good
2. understanding of various relevant scientific methods, principles of biological functions and be able to evaluate and analyse scientifically various established facts and data.
3. 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.
4. 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.
5. Adequate clinical experience required for general dental practice.
6. Adequate knowledge of the constitution, biological function and behaviour 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 affect dentistry.

(B) SKILLS:

A graduate should be able to demonstrate the following skills necessary for practice of dentistry.

1. 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.
2. Acquire the skill to prevent and manage complications if encountered while carrying out various surgical and other procedures.
3. Possess skill to carry out certain investigative procedures and ability to interpret laboratory findings.
4. Promote oral health and help prevent oral diseases where possible.
5. Competent in the control of pain and anxiety among the patients during dental treatment.

(C) ATTITUDES:

A graduate should develop during the training period the following attitudes.

1. Willing to apply the current knowledge of dentistry in the best interest of the patients and the community.
2. Maintain a high standard of professional ethics and conduct and apply these in all aspects of professional life.
3. Seek to improve awareness and provide possible solutions for oral health problems and needs throughout the community.
4. Willingness to participate in the CPED Programmes to update the knowledge and professional skill from time to time.

To help and participate in the implementation of the national oral health policy.

COMPLETE DENTURES

A. Applied Anatomy and Physiology.

1. Introduction
2. Biomechanics of the edentulous state.
3. Residual ridge resorption.

B. Communicating with the patient

1. Understanding the patients.
 - Mental attitude.

2. Instructing the patient.

C. Diagnosis and treatment planning for patients-

1. With some teeth remaining.
2. With no teeth remaining.

a) Systemic status.

- b) Local factor.
- c) The geriatric patient.
- d) Diagnostic procedures.

D. Articulators- discussion

E. Improving the patient's denture foundation and ridge relation -an overview.

- a) Pre-operative examination.
- b) Initial hard tissue & soft tissue procedure.
- c) Secondary hard & soft tissue procedure.
- d) Implant procedure.
- e) Congenital deformities.
- f) Postoperative procedure.
- F. Principles of Retention, Support and Stability
- G. Impressions - detail.
 - a) Muscles of facial expression.
 - b) Biologic considerations for maxillary and mandibular impression including anatomy landmark and their interpretation.
 - c) Impression objectives.
 - d) Impression materials.
 - e) Impression techniques.
 - f) Maxillary and mandibular impression procedures.
 - i. Preliminary impressions.
 - ii. Final impressions.
 - g) Laboratory procedures involved with impression making (Beading & Boxing, and cast Preparation).
- H. Record bases and occlusion rims- in detail.
 - a) Materials & techniques.
 - b) Useful guidelines and ideal parameters.
 - c) Recording and transferring bases and occlusal rims.
- 80
- I. Biological consideration in jaw relation & jaw movements - craniomandibular relations.
 - a) Mandibular movements.
 - b) Maxillo -mandibular relation including vertical and horizontal jaw relations.
 - c) Concept of occlusion- discuss in brief.
- J. Relating the patient to the articulator.
 - a) Face bow types & uses– discuss in brief.
 - b) Face bow transfer procedure - discuss in brief.
- K. Recording maxillo mandibular relation.
 - a) Vertical relations.
 - b) Centric relation records.
 - c) Eccentric relation records.
 - d) Lateral relation records.
- L. Tooth selection and arrangement.
 - a) Anterior teeth.
 - b) Posterior teeth.
 - c) Esthetic and functional harmony.
- M. Relating inclination of teeth to concept of occlusion- in brief.
 - a) Neutrocentric concept.
 - b) Balanced occlusal concept.

- N. Trial dentures.
- O. 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 the complete denture from the cast.
 - i) Finishing and polishing the complete denture.
 - j) Plaster cast for clinical denture remount procedure.
- P. Denture insertion.
 - a) Insertion procedures.
 - b) Clinical errors.
 - c) Correcting occlusal disharmony.
 - d) Selective grinding procedures.
- R. Treating problems with associated denture use – discuss in brief (tabulation/flow-chart form).
- S. Treating abused tissues - discuss in brief.
- T. Relining and rebasing of dentures- discuss in brief.
- V. Immediate complete dentures construction procedure- discuss in brief.
- W. The single complete denture- discuss in brief.
- X. Overdentures denture- discuss in brief.
- Y. Dental implants in complete denture - discuss in brief.

Note: It is suggested that the above mentioned topics be dealt with wherever appropriate in the following order so as to cover –

1. Definition
2. Diagnosis (of the particular situation/patient selection/treatment planning)
3. Types / Classification
4. Materials
5. Methodology – Lab /Clinical
- 6 Advantages & disadvantages
7. Indications, contraindications
8. Maintenance Phase
9. Oral Implantology
10. Ethics

Removable Flexible Dentures

1. Introduction
 - Terminologies and scope
2. Classification.
3. Examination, Diagnosis & Treatment planning & evaluation of diagnostic data.
4. Components of a removable partial denture.

- Major connectors,
- minor connectors,
- Rest and rest seats.
- 5. Components of a Removable Partial Denture.
 - Direct retainers,
 - Indirect retainers,
 - Tooth replacement.
- 6. Principles of Removable Partial Denture Design.
- 7. Survey and design – in brief.
 - Surveyors.
 - Surveying.
 - Designing.
- 8. Mouth preparation and master cast.
- 9. Impression materials and procedures for removable partial dentures.
- 10. Preliminary jaw relation and esthetic try-in for some anterior replacement teeth.
- 11. Laboratory procedures for framework construction-in brief.
- 12. Fitting the framework - in brief.
- 13. Try-in of the partial denture - in brief.
- 14. Completion of the partial denture - in brief.
- 15. Inserting the Removable Partial Denture - in brief.
- 16. Post insertion observations.
- 17. Temporary Acrylic Partial Dentures.
- 18. Immediate Removable Partial Denture.
- 19. Removable Partial Dentures opposing Complete denture.

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6. Advantages & disadvantages
7. Indications, contraindications
8. Maintenance Phase

Fixed Partial Dentures

Topics to Be Covered In Detail -

1. Introduction
2. Fundamentals of occlusion – in brief.
3. Articulators – in brief.
4. Treatment planning for single tooth restorations.
5. Treatment planning for the replacement of missing teeth including selection and choice of Abutment teeth.

6. Fixed partial denture configurations.
7. Principles of tooth preparations.
8. Preparations for full veneer crowns – in detail.
9. Preparations for partial veneer crowns – in brief.
10. Provisional Restorations
11. Fluid Control and Soft Tissue Management
12. Impressions
13. Working Casts and Dies
14. Wax Patterns
15. Pontics and Edentulous Ridges
16. Esthetic Considerations
17. Finishing and Cementation

Topics to Be Covered In Brief -

1. Solder Joints and Other Connectors
2. All - Ceramic Restorations
3. Metal - Ceramic Restorations
4. Preparations of intracoronar restorations.
5. Preparations for extensively damaged teeth.
6. Preparations for periodontally weakened teeth
7. The Functionally Generated Path Technique
8. Investing and Casting
9. Resin - Bonded Fixed Partial Denture

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1. Definition
2. Diagnosis(of the particular situation /patient selection /treatment planning)
3. Types / Classification
4. Materials
5. Methodology – Lab /Clinical
6. Advantages & disadvantages
7. Indications, contraindications
8. Maintenance Phase

MINIMUM TEACHING HOURS

Lectures (Hrs)	Practical (Hrs)	Clinical (Hrs)	Total (Hrs)
80	-	300	380

EXAMINATIONS

Internal Assessment Examination

The continuing assessment examinations may be held frequently at least 3 times in a particular year and the average marks of these examinations should be considered. 10% of the total marks in each subject for both theory, practical and clinical examination separately should be set aside for the internal assessment examinations.

Marks Distribution

There shall be a maximum of 200 marks divided in to theory and Practical.

Exam	Max. Marks
Theory Examination	
University Written exam	70
Viva voce	20
Internal Assessment (Written)	10
TOTAL	100
Practicals/ clinicals	
University Exam	90
Internal Assessment (Written)	10
TOTAL	100
GRAND TOTAL (Theory + Practical)	200

LIST OF TEXTBOOKS

1. Syllabus of Complete denture by - Charles M. Heartwell Jr. and Arthur O. Rahn.
2. Boucher's "Prosthetic treatment for edentulous patients"
3. Essentials of complete denture prosthodontics by – Sheldon Winkler.
4. Maxillofacial prosthetics by – Willam R.Laney.
5. McCracken's Removable partial prosthodontics
6. Removable partial prosthodontics by – Ernest L. Miller and Joseph E. Grasso.