Fixed Prosthodontics III

Course Title: Fixed Restorative Prosthodontics III

Course Number: DEH 336

Credit Hours: 1+3=4

Pre-Requisite: DEH 334

Course Description

This theory and laboratory course expands upon information and techniques into the study and fabrication of multiple unit restorations and will enhance the student's ability to fabrication of multiple unit ceramo-metal restorations Included is the introduction to dental ceramics including characteristics and composition of porcelain, implant supported fixed restorations, semi-precision attachments and all ceramic/porcelain/composite bridge.

COURSE OBJECTIVES:

1. Apply laboratory procedures and guidelines related to the use and maintenance of lab equipment and instruments used in this course

2. Recall knowledge of dental materials used for fabricating fixed prostheses in semesters one and two

3. Identify the properties of the various materials used for non metal fixed restorations.

4. Compare the materials used for non metal fixed restorations related to their indications and contraindications for use and their advantages and disadvantages.

5. Identify the component parts of the prescription that is required for fabricating multiple unit fixed restorations and fabricate multiple unit fixed restorations according to this prescription..

6. Fabricate cantilever bridges including principles relating to their fabrication

7. Fabricate precision attachments including principles relating to their fabrication.

8. Fabricate Maryland bridges including principles relating to their fabrication

9. Identify alternate techniques used during the fabrication of metal and ceramo/metal restorations

10. Recall principles of occlusion and articulation as they relate to fixed restorations

11. Identify the principles of occlusion and articulation as they relate to the fabrication of ceramo/metal restorations.

12. Identify design requirements of occlusal porcelain

13. Describe the distribution of occlusal loads on ceramo/metal restorations.

14. Identify principles and techniques relating to the fabrication of multiple unit ceramo/metal restorations.

15. Practice principles and techniques for waxing ceramo/metal frameworks of multiple unit restorations.

16. Identify modifications to single unit ceramo/metal restoration techniques for the processing and finishing of multiple unit ceramo/metal restorations.

17. Identify further esthetic techniques for ceramo/metal restorations

18. Identify esthetic techniques related to non metal restorations, including porcelain, ceramics, and composite.

19. Describe implant supported fixed restorations, including principles relating to their fabrication.

20. Identify Osseo-integration and implant systems and techniques, including principles relating to the fabrication of implant supported fixed restorations.

21. Describe implant abutment heads appropriate for single or multiple unit fixed metal or ceramo/metal restorations.

22. Describe modifications to fixed prosthodontic procedures that are required for the fabrication of implant supported fixed restorations/prostheses.

23. Determine the esthetics, form and function of ceramo/metal restorations, including the application of concepts relating to the science of light and colour.

1. Discuss problems with bonding and fusion during the fabrication of ceramo/metal restorations

Course outline

Week 1	Overview of previous dental materials and laboratory procedures A. One hour classroom lecture
Week 2 and 3	The materials used for non metal fixed restorations and its comparing. A. One hour classroom lecture
Week 4 and 5	Define Cantilever bridges and Maryland bridges and principles of fabrication. A. One hour classroom lecture B. One hour laboratory demonstration
Week 6	Design of precision attachment A. One hour classroom lecture B. One hour laboratory demonstration
Week 7	Mid term exam 1
Week 8	The principles of occlusion and articulation of ceramo/metal restorations and requirements of occlusal porcelain

	A. One hour classroom lecture B. One hour laboratory demonstration
Week 9	Esthetic techniques for ceramo/metal restorations and non metal restorations A. One hour classroom lecture B. One hour laboratory demonstration
Week 10	Define Osseo-integration and implant systems and implant supported fixed restorations. A. One hour classroom lecture
Week 11	Principles and techniques of fabrication of implant supported fixed restorations. A. One hour classroom lecture B. One hour laboratory demonstration
Week 12	Mid term exam 2
Week 13	Trouble shooting of ceramo/metal restorations A. One hour classroom lecture
Week 14	Revision
Week 15	Final exam

Teaching methods:

Classroom lecture

Practical at the lab

Evaluation:

2 mid term exam 20%

Practical exam 30%

Attendance 5%

Lab bench clean 5%

Final written exam 40%

Total 100%

A. Reference:

1. The Science and Art of Dental Ceramic, Volume II, Bridge design and Laboratory procedures In Dental ceramics. John W. Mclean, Quintessence Books
2. Resin-Bonded Bridges (A practitioner Guide), W M.Tay, Martin Dunitz.

3- Fixed Restorative Techniques, UNC

B. Periodicals:

1. "Journal of Prosthetic Dentistry"

2. "Quientessence of Dental Technology"

3. Journal of Dental Technology

4. Practical Periodontics & Aesthetic Dentistry