



ATTACHMENT 2 (e)

Course Specifications

Kingdom of Saudi Arabia

The National Commission for Academic Accreditation & Assessment

**Course Specifications
(CS)**



Course Specifications

| | | | |
|--|----------------------|------------------------------|------------|
| Institution | University of Dammam | Date of Report Academic Year | 2013- 2014 |
| College/Department: College of Dentistry /Substitutive Dental Sciences [SDS] | | | |

A. Course Identification and General Information

| | | | |
|--|-------------------------------------|------------------|-----------------------------------|
| 1. Course title and code Introduction to Fixed Prosthodontics / SDEN 442 | | | |
| 2. Credit hours: 05 | | | |
| 3. Program(s) in which the course is offered. (If general elective available in many programs indicate this rather than list programs) Bachelor of Dental Surgery | | | |
| 4. Name of faculty member responsible for the course Professor Amr Aly Mahrous | | | |
| 5. Level/year at which this course is offered: 04 | | | |
| 6. Pre-requisites for this course (if any) 0703232-3231-3242-3362 | | | |
| 7. Co-requisites for this course (if any) None | | | |
| 8. Location if not on main campus Main campus | | | |
| 9. Mode of Instruction (mark all that apply) | | | |
| a. Traditional classroom | <input checked="" type="checkbox"/> | What percentage? | <input type="text" value="100%"/> |
| b. Blended (traditional and online) | <input type="checkbox"/> | What percentage? | <input type="text"/> |
| c. e-learning | <input type="checkbox"/> | What percentage? | <input type="text"/> |
| d. Correspondence | <input type="checkbox"/> | What percentage? | <input type="text"/> |
| f. Other | <input type="checkbox"/> | What percentage? | <input type="text"/> |
| Comments: | | | |



B Objectives

| |
|---|
| <p>1. What is the main purpose for this course? To familiarize the student with the biological and technical aspects of Fixed Prosthodontics by:</p> <ol style="list-style-type: none"> 1. Giving knowledge to the student for basic concepts of retention and resistance forms while preparing extra-coronal restorations. 2. Teaching the principles applicable to the preparation of complete veneer crowns (CVC), metal ceramic crowns (MCC), three-quarter crowns and fixed partial dentures (FPD). 3. Making students able to list the indications and contraindications for CVCs, MCCs, and FPDs. 4. Delivering the knowledge of biomechanics and how it applies to the design of CVCs, MCCs, and FPDs. 5. Learning the physical properties and manipulation of elastomeric materials and be able to manipulate and select the one appropriate for the specific case. 6. Learning different techniques for fabricating direct and indirect provisional restorations. 7. Giving a practical working knowledge of cast and soldered posterior FPD connector design, and of the technique necessary to solder it. 8. Making students knowledgeable for gypsum products utilized for the fabrication of casts and indices. 9. Educating the students for the properties of dental casting alloys and making them able to select dental casting alloys and solders. 10. Developing ability in the student to determine if the finished prosthesis is clinically acceptable. 11. The student will be able to differentiate between different types of cements used in fixed prosthodontics. |
| <p>2. Briefly describe any plans for developing and improving the course that are being implemented. (e.g. increased use of IT or web based reference material, changes in content as a result of new research in the field)</p> <p>Making self – evaluation forms with rubrics on every steps</p> |

C. Course Description (Note: General description in the form to be used for the Bulletin or handbook should be attached)

| | | |
|--|--------------|---------------|
| 1. Topics to be Covered | | |
| List of Topics | No. of Weeks | Contact Hours |
| A. Lectures | | |
| Introduction and Terminology | 1 | 1 |
| Principles of Tooth Preparation - 1 | 1 | 1 |
| Principles of Tooth Preparation - 2 | 1 | 1 |
| Complete Crown Preparation | 1 | 1 |
| Primary impression & related procedures | 1 | 1 |
| Fluid Control and Tissue Management | 1 | 1 |
| Secondary Impression Materials in fixed Prosthodontics | 1 | 1 |
| Posterior porcelain-fused-to-metal preparation | 1 | 1 |



| | | |
|---|---|---|
| Anterior porcelain-fused-to-metal preparation | 1 | 1 |
| Provisional Restorations -1 | 1 | 1 |
| Provisional Restorations -2 | 1 | 1 |
| Partial Veneer Crowns | 1 | 1 |
| Articulators | 1 | 1 |
| Fabrication of a Working Cast and Die - 1 | 1 | 1 |
| Fabrication of a Working Cast and Die - 2 | 1 | 1 |
| Wax patterns in fixed prosthodontics | 1 | 1 |
| Spruing and Investing - 1 | 1 | 1 |
| Spruing and Investing - 2 | 1 | 1 |
| Burnout and Casting -1 | 1 | 1 |
| Burnout and Casting-2 | 1 | 1 |
| Finishing and Polishing -1 | 1 | 1 |
| Finishing and Polishing -2 | 1 | 1 |
| Pontics | 1 | 1 |
| Cements and cementation techniques -1 | 1 | 1 |
| Cements and cementation techniques -2 | 1 | 1 |
| Solder joint and other connectors | 1 | 1 |
| B. Practical | 1 | 1 |
| Primary Impression Making | 1 | 1 |
| Diagnostic Cast Preparation | 1 | 1 |
| Custom Tray Fabrication | 1 | 1 |
| Complete Crown Preparation (Tooth #30) | 1 | 1 |
| Complete Crown Preparation (Tooth #30) | 1 | 1 |
| Complete Crown Preparation (Tooth #19) | 1 | 1 |
| Complete Crown Preparation (Tooth #14) | 1 | 1 |
| Temporary Crown Fabrication (Tooth #30) | 1 | 1 |
| Temporary Crown Fabrication (Tooth #30) | 1 | 1 |
| Temporary Crown Fabrication (Tooth #19) | 1 | 1 |
| Temporary Crown Fabrication (Tooth #14) | 1 | 1 |
| Tooth Preparation for Posterior PFM Crown | 1 | 1 |
| Tooth Preparation for Anterior PFM Crown | 1 | 1 |
| $\frac{3}{4}$ Posterior Tooth Preparation | 1 | 1 |
| $\frac{3}{4}$ Posterior Tooth Preparation | 1 | 1 |
| Final Impression Making | 1 | 1 |
| Master Cast and Die Preparation | 1 | 1 |
| Mounting on Articulator | 1 | 1 |
| Die Preparation | 1 | 1 |
| Wax Pattern Fabrication | 1 | 1 |
| Wax Pattern Fabrication | 1 | 1 |
| Spruing and Investing | 1 | 1 |
| Burnout and Casting | 1 | 1 |
| Finishing and Polishing | 1 | 1 |



| | | |
|-------------------------|--|---|
| Completing requirements | | 1 |
| Completing requirements | | 1 |
| Completing requirements | | 1 |

2. Course components (total contact hours and credits per semester):

| | Lecture | Tutorial | Laboratory | Practical | Other: | Total |
|---------------|---------|----------|------------|-----------|--------|-------|
| Contact Hours | 30 | | 60 | | | 90 |
| Credit | 3 | | 2 | | | 5 |

3. Additional private study/learning hours expected for students per week.

| |
|---------------------------------|
| <input type="text" value="No"/> |
|---------------------------------|

4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategy

| | NQF Learning Domains And Course Learning Outcomes | Course Teaching Strategies | Course Assessment Methods |
|------------|--|-------------------------------|---|
| 1.0 | Knowledge | | |
| 1.1 | Identify the dental instruments, terminology and anatomy of various types of tooth preparations. | Lectures Topic Seminars | Two Quizzes Final exams composed of MCQs & essays. |
| 1.2 | Describe the oral diagnostic process including clinical and special investigations. | | |
| 1.3 | Describe the fabrication procedures of different fixed prosthetic appliances. | | |
| 2.0 | Cognitive Skills | | |
| 2.1 | Differentiate key findings. | Lectures Topic Seminars | <ul style="list-style-type: none"> • Graded Quizzes • Continuous Practical Assessment • Graded Topic Seminar Presentations • Graded Topic Seminar Assignments • Final exams composed of scenario-based MCQs and essays. • Graded Achieved |
| 2.2 | Makes good clinical decisions. | | |
| 2.3 | Translate knowledge into new contexts. | | |
| 2.4 | Interpret facts, compare and contrast alternative procedures or materials. | | |
| 2.5 | Solve problems using appropriate skills or techniques. | | |
| 2.6 | Selects appropriate procedures or treatment. | | |



| | | | |
|------------|--|---|--|
| | | | <p>Requirements.</p> <ul style="list-style-type: none"> • Oral Exam through a panel of at least two faculty members. |
| 3.0 | Interpersonal Skills & Responsibility | | |
| 3.1 | Discuss methods of managing and maintaining a safe environment in dental clinics and laboratories. | <ul style="list-style-type: none"> • Assigning work to be completed on schedule • Topic presentation with audience discussion & feedback • Group work and discussion | <ul style="list-style-type: none"> • Graded topic assignment and class presentations. • Evaluation of student behavior by instructors. |
| 3.2 | Time management and ability to function effectively under pressure. | | |
| 3.3 | Acting responsibly – personal and professional situations. | | |
| 4.0 | Communication, Information Technology, Numerical | | |
| 4.1 | Communicate effectively with colleagues and faculty both orally and in writing. | <ul style="list-style-type: none"> • Group discussions • Explanation of the basics of effective communication | <ul style="list-style-type: none"> • Evaluation of individual and group discussions and presentations by instructor and peers. |
| 4.2 | Use the Internet and hand-held devices for communication. | | |
| 5.0 | Psychomotor | | |
| 5.1 | 1. Perform and order special investigations, including oral and maxillofacial radiographs to diagnose patient complaint. | <ul style="list-style-type: none"> • Assigning work to be completed on schedule • Topic Presentations. • Group work and discussion | <ul style="list-style-type: none"> • Two Graded Quizzes. • One Written Final Exam. • Oral Exam. • Graded Presentations. • Practical Requirements. • Peer Evaluations. • Observation and Continuous Assessment by the Instructors. |
| 5.2 | Perform proper isolation of operative. | | |
| 5.3 | Perform tooth preparation designs for various restorative materials following modern biomechanical and esthetic principles | | |



| 5. Schedule of Assessment Tasks for Students During the Semester | | | |
|--|---|------------------|--------------------------------|
| | Assessment task (e.g. essay, test, group project, examination, speech, oral presentation, etc.) | Week Due | Proportion of Total Assessment |
| 1 | Quiz 1 | 4 th | 10% |
| 2 | Quiz 2 | 7 th | 10% |
| 3 | Practical exam #1 | 5 th | 5% |
| 4 | Practical exam #2 | 7 th | 10% |
| 5 | Practical exam #3 | 9 th | 10% |
| 6 | Final Practical exam | 13 th | 20% |
| 7 | Topic Presentation | 13 th | 15% |
| 8 | Final Written | 15 th | 20% |

D. Student Academic Counseling and Support

1. Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice. (include amount of time teaching staff are expected to be available each week)
Two Office Hours / Week

E. Learning Resources

1. List Required Textbooks

Fundamentals of Fixed Prosthodontics” by Shillingburg, Hobo and Whitsett, 3rd Ed., Quintessence.

2. List Essential References Materials (Journals, Reports, etc.)

Journal of Prosthetic Dentistry

3. List Recommended Textbooks and Reference Material (Journals, Reports, etc)

4. List Electronic Materials (eg. Web Sites, Social Media, Blackboard, etc.)

PubMed Database for Searching the Dental & Biomedical Literature

5. Other learning material such as computer-based programs/CD, professional standards or regulations and



software.

F. Facilities Required

Indicate requirements for the course including size of classrooms and laboratories (i.e. number of seats in classrooms and laboratories, extent of computer access etc.)

1. Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)

Data Shows

2. Computing resources (AV, data show, Smart Board, software, etc.)

UOD e-library

3. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or attach list)

G Course Evaluation and Improvement Processes

1 Strategies for Obtaining Student Feedback on Effectiveness of Teaching

- Student Surveys
- Teacher- Student discussions

2 Other Strategies for Evaluation of Teaching by the Program/Department Instructor

- **Annual evaluation by departmental chair.**
- **Peer evaluation**

3 Processes for Improvement of Teaching

- Implementing professional faculty development workshops by experts in dental education.
- Enhancing the use of the available smart boards.
- Emphasizing the interactive use of the blackboard e-learning.




4. Processes for Verifying Standards of Student Achievement (e.g. check marking by an independent member teaching staff of a sample of student work, periodic exchange and remarking of tests or a sample of assignments with staff at another institution)

- To check that the standards applied for assessment of the students are valid and appropriate, a faculty member of the same division will be responsible for re-evaluation of the students' answers.

5 Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement.

- Regular preparation of the course report annually and analysis of the students results to determine the points of weakness and establish suitable plans to avoid such weaknesses in the future.

Faculty or Teaching Staff: Prof Amr Mahrous

Signature:  Date Report Completed: _____

Received by: DR. ASIM AL ANSARI Dean/Department Head

Signature:  Date: _____