

FORM "A"

YEAR I

OPERATIVE DENTISTRY

OBJECTIVES

2006

**PRECLINIC
OPERATIVE FACULTY**

FACULTY

- 2- Dr. F. Hadavi, Director**
- 3- Dr. Freeman**
- 4- Dr. Lehrer**
- 5- Dr. Tenner**
- 6- Dr. Urbankova**

I. DESCRIPTION:

This course is designed to introduce the first year dental students to Operative Dentistry as a health care science. The student will study the elementary concepts of tooth structure, dental caries, and pathological loss of tooth structure due to dental caries. Basic principles of cavity preparation and restoration for pathologically damaged tooth structure will be presented and applied.

This course is designed to teach the student the basic principles and techniques used to restore tooth structure damaged by caries, fracture or trauma, with direct and indirect restorative materials. It will build on the knowledge and techniques learned from the first year course in dental anatomy.

The course will introduce variations based on the extent of the lesion, the restorative materials selected and functional and/or esthetic requirements.

All dental materials used in operative procedures will be reviewed with emphasis on factors affecting their required, final clinical performance. Procedures will be performed in a simulated environment on a typodont, which represents actual clinical situations.

II. OBJECTIVES

By the end of this course, through a series of lectures, laboratory sessions and examinations the student should:

- 1.** Be able to define operative dentistry, its role in health care sciences and its scope.
- 2.** Be able to use the proper terminology and nomenclature for procedures used in operative dentistry.
- 3.** Know the extent of pathological damage of tooth structure due to caries and classification of carious lesions.
- 4.** Recognize cavity classifications as related to carious lesions.
- 5.** Reasonably know the basic principles in cavity preparations and the instrumentation used.
- 6.** Be able to describe the features of cavity preparation using the proper nomenclature.

7. Be able to demonstrate a reasonable skill in reproducing the demonstrated assigned projects.
8. Demonstrate reasonable and **consistent** manual dexterity skills.
9. Know the basic theoretical aspects of Operative Dentistry.
10. Know the biomechanical and biological principles that determine the restorative procedure(s) to be undertaken.
11. Have a good knowledge of dental materials used, their characteristics, manipulation and limitations.
12. Independently and successfully perform assigned preparations and restorative procedures required.
13. Have developed some judgment on how to select and use an appropriate restorative material to restore function and/or esthetics to damaged tooth structure.
14. Be able to reasonably **evaluate** the work accomplished based on given criteria and standards.

III. COURSE DURATION and OUTLINE

- A- This course extends;
First year: From January - June
Second year: From August - December
- B- The Operative course is divided into four major components:
 - a.
 - 1- Lectures and demonstrations.
 - 2- Preparations on typodont teeth.
 - 3- Preparations on natural teeth.
 - 4- Restoration of prepared cavities.
 - b. Direct restorative procedures using:
 - 1- Silver amalgam alloys
 - 2- Composite resins
 - c. Indirect restorative procedures:
Introduction to advanced restorative procedures utilizing selective methods for restoring teeth with more extensive lesions (inlays, onlays)

- d. Mandatory attendance to practice with Dent Sim® according to the schedule based on the individual free time. You will be consulted for scheduling.

N.B. See **Form B** Schedule for Preparations and Restorations Sequence.

IV. COURSE PROGRESS CONFERENCES

Representative of the class will meet with the course director and representative of faculty often during the academic year.

These conferences will serve as a forum to discuss any problems encountered by students during the progress of the Preclinical Operative Course. Students in general will relate any difficulties to these class representatives (usually the class officers - but not limited to them) who will then report these at the meetings.

Problems encountered by faculty will similarly be discussed at these conferences. These meetings are intended to intercept problems **BEFORE** they assume major proportions.

Although you will be under regular guidance and observation during your progress, it is your **responsibility** to discuss any anticipated problem(s) with the assigned instructor. The course coordinator should also be notified.

Individual discussion of problems:

Students wishing to discuss any phase of the Preclinical course on a personal basis, whether regarding personal progress, personal problems, or course content may feel free to do so at any time.

This type of discussion can take place with any faculty member, at any time, or with the Course Director, at any time. **NO PROBLEM IS TOO SMALL OR TOO PERSONAL.** Communication on a continuing basis is crucial to your success and ours.

V. TEXTBOOKS:

Required:

- 1- Sturdevant Art and Science of Operative Dentistry - by Sturdevant et al, 4th Edition Published: Mosby
- 2- Restorative Dental Materials - Edited by Robert G. Craig, 11th Edition Published: Mosby

Recommended:

1. Operative Dentistry by Baume/Lund/Phillips, 2nd Edition
Published: W. B. Saunders
2. Operative Dentistry "Modern Theory and Practice" by Marzouk,
1st Ed. Published: IEA

REMINDER

There will be specific reading assignments from the required as well as other texts. In your reading, **you will come across different methods of instrumentation used in cavity design and various restorative procedures.** You are encouraged to be aware of variations but for the purpose of this course, **and at this stage of your training you should follow the specific techniques presented, practiced and/or demonstrated during the year by your instructors.**

VI. EVALUATION

"The grades you received are the grades that you earned"

You have the sole responsibility for your overall results in this course. Your grades are the reflection of the time and the effort you invested on this course.

"WE JUST ADD THE SCORES"

This course contains both theoretical (didactic) and applied (laboratory exercises) components. The student is responsible for achieving a passing grade in both components. **Unless both components are passed**, the student will not be eligible to continue to the third year.

Evaluation * Structure	Didactic	Practical
	Quizzes (BONUS) 5% Final 100%	Professional attitude 7% Lab projects 5% Mid-term 33% Final 55%

* The restorative course director reserves the option of changing the number of quizzes, preparation and the percentage of the evaluation structure as may be necessary.

All projects must be completed **BEFORE** an overall evaluation grade be considered in this course. The student will be evaluated on **abilities, knowledge, organization, understanding and professional attitude**, that are conducive to acceptable clinical practice in the future. The passing grade is **70 (P)**.

H, P and F grades are awarded in this course. To receive an “H” the student not only has to receive a high grade but also to satisfy other requirements such as, time management, promptness, organization and demonstrate an acceptable professional conduct. In other word high grade by itself does not automatically guarantee an “H” grade.

A. Written Examinations

Midterms and final written examinations have been scheduled and frequent 15 minutes **unannounced quizzes*** given as you progress. The examinations will be based on lectures, demonstrations and the assigned reading materials. There will be a **FINAL** written examination at the end of each year.

***1** No excuses will be accepted for your absence from class **after** unannounced quizzes have been handed out. Excuse will be granted for absentee with a written document.

***2** Quizzes are **bonus** (extra 5% points added to your final written grade). It is your choice to take it (zero will be assigned if you miss a quiz). 15 minutes quizzes will be given out at the start of the class or lab time. If you are prepared maximum of 10 minutes will be enough to answer questions in each quiz. Quizzes will be collected 15 minutes after hour.

B. Practical Examinations

1. Your Lab projects will be evaluated as you progress through this course. You are expected to show **consistent improvement** and develop **independence** from faculty assistance.

2. There will be one mid-term practical examination as you progress. A major self-competency examination will be scheduled at the end of each year. Two practical examinations will test your **judgment** and **skill** in basic cavity preparation and in restoring with the appropriate restorative materials.

NOTICE:

Make sure that you save your lab project teeth. Store them in a safe place to hand in when and if requested.

The students' lab project record (evaluation forms), **complete** with **authorized Signatures** must be submitted when requested.

Students are encouraged to complete **as much work as possible** during each scheduled laboratory sessions when assistance is readily available from the preclinical faculty.

VII. GUIDELINES:

Your rate of professional advancement at the clinical level will depend on habits developed in your preclinical years.

Develop and maintain good personal and working habits

This course will establish the basis for your professional conduct and skills as you develop through the coming years. It is of extreme importance to adhere to the following guidelines:

A. The laboratory in general, and your working area in particular, should be kept **organized and clean**. It is your responsibility to clean your working area. Clean and return all equipment and materials to their original place. **This should be done prior to the end of the laboratory period.**

B. The numbers of your cavity preparations are selected according to the time allocated for Operative lab. All projects can be and should be **completed during the operative** laboratory time.

The number of assigned cavity preparations is minimum needed to teach you the principle of cavity preparations. However, We strongly recommend to practice further enhancing your dexterity and hand/eye coordination

THIS SHOULD NOT INTERFERE WITH THE TIME AVAILABLE FOR OTHER COURSES.

B1- You are encouraged and expected in preclinic to work with the specific instructor who has been assigned to you for a limited period (refer to your instructor's assignment table). It is imperative that the various steps be critically reviewed, and signed off by an instructor within the laboratory time. Please do not ask for a signature at any other time.

There is no spare time in this course so that all lectures and **laboratory periods MUST be attended**. (7% of your final grade is allocated for professional conduct).

B2- If for some reasons available preclinical time does not allow to complete your assignments, please, notify the instructor responsible and/or the course director.

Please, let us know if you have difficulty or falling behind before it is too late.

B3- Each cavity preparation **MUST BE** evaluated **before you start** the next cavity preparation. Operative instructors are strongly advised **NOT** to sign for more than one cavity preparation at a time.

C. Your daily work in the laboratory is intended as a learning experience. Evaluations are given to help you realize the rate of your progress. Final grades will be based on the scheduled examination and faculty evaluation. **However, laboratory/lecture attendance, personal attitude, time management and organization will also be evaluated and affect your grade** (7% of your final grade is allocated for professional conduct).

D. Organization of instruments and supplies helps you to attain efficiency in operating. **Maintain all your instruments in clean and good working condition all the time** (7% of your final grade is allocated for professional conduct).

E. Do not do for another student what you feel or suspect he/she can't or does not want to do for himself/herself. **Both will be penalized.**

F. Do not remove any equipment(s) or material(s) from the laboratory or from designated areas.

G. Gloves, facemask and safety glasses are mandatory during preclinical lab (please no excuses)(7% of your final grade is allocated for professional conduct).

H. Clean laboratory coats are mandatory. These should be worn to all class periods. As space in the laboratory is limited, please do not bring **extra clothes, books or other items not needed** for the course (7% of your final grade is allocated for professional conduct).

COURSE DIRECTOR

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