

# New Jersey Dental School

## **Selective-Elective Program**

COURSE#: REST9912  
[ ] SELECTIVE  
[X] ELECTIVE  
TRIMESTER: Fall, Winter, Spring

DEPARTMENT: Restorative Dentistry  
COURSE TITLE: Cast and Direct Gold

### **MAIN PURPOSE OF THIS COURSE:**

To introduce the participation to cast and direct gold clinical and laboratory procedures that have been used successfully for many years. To motivate the participant to a high level of clinical and laboratory excellence that will transmit to all of the participant's dentistry.

### **COURSE CONTENT:**

Please see attached outline schedule.

### **OBJECTIVES OF COURSE:**

1. By taking this course the participant will be comfortable placing the rubber dam for all operative applications.
2. The participations will understand the principles of preparation, impressions, seating and finishing for various types of cast gold restorations.
3. All participants will perform Class 2, Full cast crown, a distal hollowgrind, and an OL cast gold restoration on patients.
4. All participants will understand the importance of accurate laboratory work and be able to evaluate it. The participants will also be able to pour and trim their own dies and if interested learn the entire laboratory process for cast gold.
5. All participants will understand and practice the principles of direct gold, and place gold foils on a typodonts and a patient.

### **EVALUATION OF STUDENTS:**

Dr. Small or experiences study club members will critique all students' work during the critique sessions following the clinical sessions. All students will be required to observe the preparations and finished castings of all the other participants.

## **PROGRAM DESCRIPTION**

Number of students:	8
Day/Time:	Friday, 9:00-1:30
Number of weeks of Program	15
Number of hours of Program	
Laboratory and Preclinical	15
Clinical	30
TOTAL:	45

COURSE DIRECTOR: Dr. Bruce W. Small & R.V. Tucker New Jersey Cast Gold Study Club #32 Members

## **Cast and Direct Gold Study Club Code of Conduct**

### **Attendance and Preparedness**

Study club participants must attend and operate at every session. Members should be present at all lectures on time and be prepared to start clinical procedures in a timely fashion (late starts will not be permitted beyond 30 minutes). All members will attend the entire study club session. Leaving early is not permissible.

### **Armamentaria**

A complete list of necessary supplies is included in this syllabus. Members are responsible for maintaining their instruments (hand, rotary, etc.) in excellent condition, fully sharpened, and well organized. Performing precision cast and direct gold restorations is very challenging when well prepared, and impossible when poorly prepared.

### **Technique**

All members will strictly adhere to the established techniques and guidelines outlined in the lectures, videotapes and syllabus. Meticulous rubber dam placement with a Woodbury frame and napkin is necessary to produce restorations of the highest quality. Preparation, impression taking, temporization, try-in, cementation, finishing and polishing must be followed in a stepwise fashion as detailed in the syllabus.

### **Photography**

Members are responsible for obtaining photographs of their cases at the appropriate steps as detailed in the syllabus. Rubber dams will be made to look neat and presentable and debris will be removed from preparation or restoration. Operators will inform patients of the need for photographs and prepare them for this important step. Members will have mouth mirrors (large bridge size) available for photographs.

### **Start Checks**

Operators will have the patients chart open to the treatment planning page with care slip ready and radiographs mounted on view-box. The patient will be introduced to the mentor, and the relevant medical conditions will be disclosed. The mentor will be handed a perfectly clean, front surface mirror and sharp #5 explorer and allowed to examine the patient. The operator will closely observe and listen to the mentor during the exam. The mentor will approve the final decision on what tooth to treat.

### **Finished Procedures**

When the procedure is completed, the operator will meticulously clean the entire operatory, replace the patient's bib, and inform the mentor of the restoration status. The mentor will be handed a perfectly clean, front surface mirror and sharp #5 explorer and allowed to examine the patient. After the mentor has finished, the explorer will be put away, and the fellow members will be allowed to observe the results. **EACH MEMBER IS REQUIRED TO OBSERVE THE FINAL PROCEDURE ON EVERY OTHER MEMBER.**

### **Critique Session**

At the end of every clinical session, a critique session will occur in a designated room. Attendance at this critique session is mandatory. Clinical slides will be presented along with question and answer sessions. Every attempt will be made by operators to finish clinical procedures by 5:30 pm in order to finish the critique session by 6:00 pm.

**Cast and Direct Gold Selective  
Operations similar to Tucker Study Club  
Dr. Bruce W. Small, Mentor  
And other members of R.V. Tucker New Jersey cast gold study #32  
15 sessions-5 preclinical/6cast gold/4 direct gold  
can be modified to fit UMDN schedule**

**Preclinical Phase**

**Session I**

Lecture: Study Club Overview, Review of Cast and Direct Gold Techniques; Class I and Class II gold Inlay Preparation Instrument Use and Sharpening

Lab:

1. Place rubber dam on typodonts in manikin
2. Prepare #3 occlusal inlay (ivorine tooth)
3. Prepare #4 mesioocclusal inlay (ivorine tooth)
4. Sharpen Chisels (42s, 43s, 44s, 45s)

**Session II**

Lecture: Clinical Impressions and Temporization Techniques; Pouring up Impressions.

Lab:

1. Place rubber dam on typodonts in manikin
2. Prepare natural tooth (mounted in typodonts) for inlay
3. Take impression of natural tooth preparation
4. Temporize preparation
5. Sharpen Tucker/Tru-bal instruments (232, 233)
6. Pour up impressions in die stone

**Session III**

Lecture: Laboratory Techniques for Casting Gold Inlays

Lab:

1. Trim dies
2. Wax and invest
3. Cast
4. Divest and polish casting

**Session IV**

Lecture: Cementation and finishing Techniques for Cast Gold Inlays

Lab:

1. Try in castings
2. Remove block-out
3. Cement with Zinc Phosphate
4. Finish with discs
5. Polish with micro-abrasives
6. Photo-document finished casting

**Session V**

Lecture: Gold Foil Restorations

Lab:

1. Place rubber dam on typodonts in manikin
2. Prepare #7 lingual pit or any Natural tooth for buccal pit gold foil
3. Place gold foil in Pit
4. Cement, finish and polish casting on natural tooth

## **CLINICAL CAST GOLD**

### **Session I**

Class II Inlay Review (Video tape)

Clinic:

1. Photograph pre-operative condition without rubber dam
2. Prepare tooth for casting
3. Take final impression of casting
4. Photograph final preparation with dam on

Critiques to follow clinic (digital slides)

### **Session II**

Lecture: Cast gold crowns

Clinic:

1. Photograph pre-operative condition without rubber dam
2. Prepare tooth for casting
3. Take final impression casting
4. Photograph final preparation with dam on

Critiques to follow clinic (digital slides)

### **Session III**

Lecture at NOON: 7/8 Crown

Clinic:

1. Photograph pre-operative condition without rubber dam
2. Prepare tooth for casting
3. Take final impression of casting
4. Photograph final preparation with dam on

Critiques to follow clinic (digital slides)

### **Session IV**

Lecture: Distal Cuspid Hollow-grind Inlay

Clinic:

1. Cement, finish and polish casting
2. Photograph final casting with dam on

Critiques to follow clinic (digital slides)

### **Session V**

Lecture: Occluso-lingual Inlay: Maxillary Molar

Clinic:

1. Photograph pre-operative condition without rubber dam
2. Prepare tooth for casting
3. Take final impression of casting
4. Photograph final preparation with dam on

Critiques to follow clinic (digital slides)

### **Session VI**

Lecture: Final Thoughts suggestions for future

Clinic:

1. Cement, finish and polish casting
2. Photograph final casting with dam on

Critiques to follow clinic (digital slides)

## **CLINICAL GOLD FOIL**

### **Session I**

Lecture: Direct Filling Gold Review-Video Tape

Clinic:

1. Photograph pre-operative condition without rubber dam
2. Prepare tooth for foil
3. Photograph final preparation with dam on
4. Restore with gold foil
5. Photograph final restoration with dam on

Critiques to follow clinic (digital slides)

### **Session II**

Lecture: None

Clinic:

1. Photograph pre-operative condition without rubber dam
2. Prepare tooth for foil
3. Photograph final preparation with dam on
4. Restore with gold foil
5. Photograph final restoration with dam on

Critiques to follow clinic (digital slides)

### **Session III**

Lecture: None

Clinic:

1. Photograph pre-operative condition without rubber dam
2. Prepare tooth for foil
3. Photograph final preparation with dam on
4. Restore with gold foil
5. Photograph final restoration with dam on

Critiques to follow clinic (digital slides)

### **Session IV**

Lecture: None

Clinic:

1. Photograph pre-operative condition without rubber dam
2. Prepare tooth for foil
3. Photograph final preparation with dam on
4. Restore with gold foil
5. Photograph final restoration with dam on

Critiques to follow clinic (digital slides)

## **Year End Celebration**

## **SESSIION DATES**

To Be Announced.