COURSE TITLE & NUMBER: Remedial Expanded Functions/ X-ray: DAS 2654
CREDITS: 1 (Lec 1/ Lab 0)
PREREQUISITES: Failure of MN Licensure exam twice

CATALOG DESCRIPTION:
This course is designed for the student who has failed the MN Board of Dentistry’s Licensure exam two times. This course will be demonstrated on an individual basis and delivered online. Upon successful completion, the instructor will send the required documentation to the Board of Dentistry needed for the student to re-apply for the MN Licensure Exam.

OUTLINE OF MAJOR CONTENT AREAS:
1. Expanded duties portion
   A. Preliminary charting
      1. Purpose
      2. Types
         a. Anatomic
         b. Geometric
         c. Electronic
   B. Mechanical polish
      1. Purpose and uses
      2. Identification of deposits and stains
      3. Armamentarium
      4. Procedure
      5. Safety considerations
   C. Alginate impressions for casts and bite registration
      1. Purposes and uses
      2. Armamentarium
      3. Procedures
      4. Safety considerations
   D. Topical medications and cavity varnishes (not fluoride)
      1. Types
         a. Topical anesthetics
         b. Varnishes
         c. Disinfectants and germicides
         d. Miscellaneous
            i. desensitizing agents
            ii. hydrogenating agents
            iii. bleaching (in office and home)
      2. Armamentarium
      3. Procedure
4. Safety considerations

E. Place & Remove Matrix bands
1. Purpose and use
2. Types
   a. Anterior
   b. Posterior
3. Procedure
   a. Placement
   b. Removal

F. Topical medication (fluoride)
1. Types
   a. Sodium
   b. Stannous
   c. Acidulated phosphate
   d. Other
2. Armamentarium
3. Procedure
   a. Paint-on
   b. Trays
   c. Rinse
   d. Other
4. Safety considerations

G. Placement and removal of rubber dam
1. Purpose and use
2. Armamentarium
3. Procedure
   a. Placement
   b. Removal
4. Safety considerations

H. Excess cement removal
1. Purpose
2. Armamentarium
3. Procedure
4. Safety considerations

I. Preselecting orthodontic bands/place and remove elastic separators/place and remove ligature ties
1. Purpose
2. Armamentarium
   a. Orthodontic molar bands
   b. Elastic separators
   c. Ligature ties
      i. Elastic
      ii. Wire
3. Procedure
4. Safety considerations

J. Place and remove periodontal dressings
1. **Purpose**

2. **Types**
   a. Zinc-Oxide eugenol
   b. Non-eugenol
   c. Light cured
   d. Gelatin based

3. **Armamentarium**

4. **Procedure**
   a. Placement
   b. Removal
      1. Sutures present
      2. Without sutures

5. **Safety considerations**

K. **Suture removal**
   1. **Purpose**
   2. **Armamentarium**
   3. **Procedure**
   4. **Safety considerations**

L. **Administer/monitor nitrous oxide analgesia**
   1. **Purpose**
   2. **Physiology of gases**
   3. **Indications/contraindications**
      a. **Patient**
      b. **Personnel**
   4. **Armamentarium**
   5. **Procedure**
   6. **Safety considerations**

M. **Dry root canals with paper points/place cotton pellets and temporary restorative materials into endodontic access openings**
   1. **Purpose**
   2. **Armamentarium**
   3. **Procedure**
      a. Dry canal
      b. Removal technique
   4. **Safety Considerations**

N. **Remove excess bonding material from orthodontic appliances with hand instruments/rotary instruments**
   1. **Purpose and uses**
   2. **Armamentarium**
      a. **Hand instruments**
      b. **Rotary instruments**
   3. **Procedure**
   4. **Safety considerations**

O. **Etching appropriate enamel surfaces**
   1. **Purpose**
      a. **Orthodontics**
b. Sealants
2. Armamentarium
3. Procedure
4. Safety considerations

P. Gingival Retraction
1. Purpose and use
2. Armamentarium
3. Procedure

Q. Apply and adjust pit and fissure sealants
1. Purpose
   a. Etchant
   b. Sealant
2. Armamentarium
3. Procedure
4. Safety considerations

R. Make preliminary adaptation of temporary crowns/bridges
1. Purpose and use
   a. Crowns
      1. Aluminum
      2. Acrylic
   b. Bridges – acrylic
2. Armamentarium
3. Procedure
4. Safety considerations

2. Radiology portion
   A. Principles of radiation safety
      1. Biological effects of radiation
      2. Safety protection devices
         a. Patient
         b. Operator
      3. Quality assurance
   B. Interpretation (Evaluation)
      1. Radiographic anatomy
      2. Image evaluation
      3. Image mounting
      4. Full-mouth survey
      5. Bitewing radiographs
      6. Periapical radiographs
   C. Darkroom techniques
      1. Processing equipment
      2. Processing procedures
      3. Errors and corrections
   D. Terminology and general knowledge
      1. Equipment
      2. Film types/sizes
      3. Film holding devices
4. Geometry of image formation
5. Radiographic production and control dosimetry
E. Positioning and general techniques
   1. Geometry of image formation
   2. Patient management and comfort
   3. Exposure technique
      a. paralleling
      b. bisecting
      c. cone and film placement
      d. errors and corrections
F. Infection control

COURSE GOALS/OBJECTIVES/OUTCOMES:
1. Students will identify oral prophylaxis and coronal polish armamentarium, polishing agents, and technique.
2. Students will define and describe alginate impressions.
3. Students will identify topical medications and use.
4. Students will identify and describe types of fluoride and application.
5. Students will identify rubber dam armamentarium, use, and technique.
6. Students will identify orthodontic specialty, treatments, and armamentarium.
7. Students will identify periodontic specialty, treatment, instruments, and charting.
8. Students will describe and identify nitrous oxide analgesia, equipment, and inducing.
9. Students will describe endodontic procedure.
10. Students will identify pit and fissure sealants and procedure.
11. Students will identify temporary crown and bridge and placement.
12. Students will identify the principles of radiation, effects, characteristics, quality assurance, interpretation, types, errors, and infection control procedures.

MNTC GOALS AND COMPETENCIES MET:
N/A

HCC COMPETENCIES MET:
Working Productively & Cooperatively
CommunicatingClearly & Effectively
Thinking Creatively & Critically.

STUDENT CONTRIBUTIONS:
Attendance is crucial in this class. The student is expected to attend all lectures, hand in outside assignments when due and pass all practice exams.

STUDENT ASSESSMENT SHALL TAKE PLACE USING INSTRUMENTS SELECTED/DEVELOPED BY THE COURSE INSTRUCTOR.
SPECIAL INFORMATION:
The student must submit a copy of areas of deficiency sent from Prometric testing agency.

Curriculum Committee Approval Date:

AASC APPROVAL DATE: May 9, 2018
REVIEW DATE: May 2023