COMMON COURSE OUTLINE:  Course discipline/number/title:  DA 1265: Expanded Functions I

A.  CATALOG DESCRIPTION

1.  Credits: 7
2.  Hours/Week: 2 hours lecture, 2 hours lab, 8 hours clinic
3.  Prerequisites (Course discipline/number): DA Program admission; Dental Assistant Diploma or AAS students must have successfully completed all Fall semester courses; Dental Assistant Expanded Functions Certificate Program students must be currently a Certified Dental Assistant (Certified by the Dental Assisting National Board, Inc.) and have completed DA 1225: Dental Infection Control with “C” letter grade or better.
4.  Co-requisites (Course discipline/number): None
5.  MnTC Goals (if any): NA

This course covers the theory and pre-clinical/clinical experiences required by the Minnesota Board of Dentistry in preparation for becoming a Licensed Dental Assistant in Minnesota. After the theory and demonstrations are presented, the students receive practical experience on manikins and patients under the direct supervision of the dental assisting instructors and the clinic dentist. Students will also be required to demonstrate appropriate professional behavior and skill in patient communications, chairside assisting, dental infection control, and dental practice management.

NOTE: The following MN Expanded Functions are taught to laboratory competence only. The student may perform these functions in a clinical setting during their DA 1280 Dental Assisting Internship – Summer Semester.

1.  Fabricate, cement, and adjust temporary restorations
2.  Remove temporary restorations with hand instruments
3.  Recement intact temporary restorations and place temporary fillings
4.  Remove sutures
5.  Place and remove periodontal packs
6.  Pre-select orthodontic bands
7.  Remove and replace ligature ties
8.  Remove excess orthodontic bonding agent with hand instruments
9.  Remove excess orthodontic bonding agent with rotary instruments
10.  Cut archwires, remove loose bands, or remove loose brackets on orthodontic appliances to provide palliative treatment.
11.  Place Cavity Varnishes
12.  Dry Root Canals
13.  Place temporary root canal sealing agents
14.  Placement of some topical medications

The following MN Expanded Functions are taught to clinical competence, and will be presented in DA 1270: Expanded Functions II – Summer Session I.

1.  Administer nitrous oxide-oxygen relative analgesia.
2.  Monitor a patient who has been induced by a dentist into nitrous oxide-oxygen relative analgesia.

The following MN Expanded Functions and will not be taught in the RCTC Dental Assistant Program until the MN Board of Dentistry approves the curriculum and training requirements for these functions.

1.  Remove orthodontic brackets and bands.
2.  Attach pre-fit orthodontic appliances.
3.  Deliver vacuum-formed orthodontic retainers.

B.  DATE LAST REVISED (Month, year): April, 2012

C.  OUTLINE OF MAJOR CONTENT AREAS:

1.  Introduction
   a)  Regulation by the MN Board of Dentistry
   b)  MN Expanded Functions
   c)  Types of Supervision
C. OUTLINE OF MAJOR CONTENT AREAS: Continued...

2. Mechanical Polishing
   a) Definition/Terminology
   b) Law
   c) Purpose/Uses
   d) Types of Stains
   e) Effects of Mechanical Polishing
   f) Armamentarium/Tray Set-Up
   g) Procedural Steps
   h) Patient Safety/Management
   i) Operator Safety
   j) Evaluation

3. Application of Topical Fluoride
   a) Definition/Terminology
   b) Law
   c) Purpose/Uses
   d) Types of Fluoride
   e) Effects of Fluoride
   f) Armamentarium/Tray Set-Up
   g) Technique
   h) Procedural Steps
   i) Patient Safety/Management
   j) Operator Safety
   k) Evaluation

4. Taking Alginate Impressions
   a) Definition/Terminology
   b) Law
   c) Purpose/Uses
   d) Types Alginate
   e) Armamentarium/Tray Set-Up
   f) Technique
   g) Procedural Steps
   h) Bite Registration
   i) Patient Safety/Management
   j) Operator Safety
   k) Evaluation

5. Place and Remove Rubber Dam isolation
   a) Definition/Terminology
   b) Law
   c) Purpose/Uses
   d) Armamentarium/Tray Set-Up
   e) Technique
   f) Procedural Steps
   g) Patient Safety/Management
   h) Operator Safety
   i) Evaluation

6. Place Topical Anesthetics
   a) Definition/Terminology
   b) Law
   c) Purpose/Uses
   d) Chemistry/Action
   e) Forms
   f) Armamentarium/Tray Set-Up
   g) Technique
   h) Procedural Steps
   i) Patient Safety/Management
   j) Operator Safety
   k) Evaluation
C. OUTLINE OF MAJOR CONTENT AREAS: Continued...

7. Place and Remove Matrix Retainers
   a) Definition/Terminology
   b) Law
   c) Purpose/Uses
   d) Armamentarium/Tray Set-Up
   e) Technique
   f) Procedural Steps
   g) Patient Safety/Management
   h) Operator Safety
   i) Evaluation

8. Temporary Restorations
   a) Introduction
      i. Definition/Terminology
      ii. Law
   b) Fabricate, Cement, and Adjust Temporary Crowns/Bridges
      i. Purposes/Uses
      ii. Criteria for Correct Adaption
      iii. Types of Temporary Crowns/Bridges
      iv. Armamentarium/Set-Up
      v. Fabrication Techniques/Procedural Steps
      vi. Cementation and Adjustment Techniques/Procedural Steps
      vii. Patient Safety and Management
      viii. Operator Safety
      ix. Evaluation
   c) Re-cement Intact Temporary Restorations
      i. Purposes/Uses
      ii. Criteria for Cementation
      iii. Armamentarium/Set-Up
      iv. Procedural Steps
      v. Patient Safety and Management
      vi. Operator Safety
      vii. Evaluation
   d) Place Temporary Fillings
      i. Purposes/Uses
      ii. Techniques for Cementation
      iii. Armamentarium/Set-Up
      iv. Procedural Steps
      v. Patient Safety and Management
      vi. Operator Safety
      vii. Evaluation
      viii. Removal Temporary Crowns
      ix. Purposes/Uses
      x. Technique for Removal
      xi. Armamentarium/Set-Up
      xii. Procedural Steps
      xiii. Patient Safety and Management
      xiv. Evaluation

9. Etch Appropriate enamel Surfaces, Apply and Adjust Pit and Fissure Sealants
   a) Define/Terminology
   b) Law
   c) Purpose/Uses
   d) Chemistry, Action and Characteristics
      i. Acid Etch
      ii. Pit and Fissure Sealants
   e) Criteria for Correctly Etched Tooth
   f) Criteria for Properly Placed Pit and Fissure Sealant
   g) Armamentarium/Tray Set-Up
C. OUTLINE OF MAJOR CONTENT AREAS: Continued . . .

10. Remove Excess Cement
   a) Definition/Terminology
   b) Law
   c) Purpose/Uses
   d) Types of Cements
   e) Correct Removal State
   f) Armamentarium/Tray Set-Up
   g) Technique
   h) Procedural Steps
   i) Patient Safety and Management
   j) Operator Safety
   k) Evaluation

11. Place and Remove Periodontal Packs
   a) Definition/Terminology
   b) Law
   c) Purpose/Uses
   d) Types of Periodontal Packs
   e) Armamentarium/Tray Set-Up
   f) Technique
   g) Procedural Steps
   h) Patient Safety and Management
   i) Operator Safety
   j) Evaluation

12. Remove Sutures
   a) Definition/Terminology
   b) Law
   c) Purpose/Uses
   d) Types of Sutures and Their Uses
   e) Armamentarium/Tray Set-Up
   f) Technique
   g) Procedural Steps
   h) Patient Safety and Management
   i) Operator Safety
   j) Evaluation

13. Place Topical Medications and Cavity Varnishes
   a) Definition/Terminology
   b) Law
   c) General Protocol for Placing Topical Medications
   d) Topical Medications
      i. Type
      ii. Purpose/Uses
      iii. Armamentarium
      iv. Placement Technique
      v. Patient Safety and Management
      vi. Operator Safety
      vii. Evaluation

14. Drying Root Canals and Placing Temporary Root Canal Sealer
   a) Definition/Terminology
   b) Law
   c) Purpose/Uses
   d) Armamentarium/Tray Set-Up
   e) Technique
   f) Procedural Steps
C. OUTLINE OF MAJOR CONTENT AREAS: Continued.

15. Place and Remove Orthodontic Separators
   a) Definition/Terminology
   b) Law
   c) Purpose/Uses
   d) Separator Design/Purchase Forms
   e) Armamentarium/Tray Set-Up
   f) Technique
   g) Procedural Steps
   h) Patient Safety and Management
   i) Operator Safety
   j) Evaluation

16. Preselect Orthodontic Bands
   a) Definition/Terminology
   b) Law
   c) Purpose/Uses
   d) Band Design and Numbering
   e) Criteria for Proper Band Fit
   f) Armamentarium/Tray Set-Up
   g) Technique
   h) Procedural Steps
   i) Patient Safety and Management
   j) Operator Safety
   k) Evaluation

17. Place and Remove Elastic Ligatures
    a) Definition/Terminology
    b) Law
    c) Purpose/Uses
    d) Criteria for Proper Placement
    e) Armamentarium/Tray Set-Up
    f) Technique
    g) Procedural Steps
    h) Patient Safety and Management
    i) Operator Safety
    j) Evaluation

18. Placement and Removal Metal Ligature Ties
    a) Definition/Terminology
    b) Law
    c) Purpose/Uses
    d) Criteria for Proper Placement
    e) Armamentarium/Tray Set-Up
    f) Technique
    g) Procedural Steps
    h) Patient Safety and Management
    i) Operator Safety
    j) Evaluation

19. Remove Excess Orthodontic Bonding Agent
    a) Definition/Terminology
    b) Law
    c) Purpose/Uses
    d) Review of Bonding Materials
    e) Armamentarium/Tray Set-Up
    f) Technique
    g) Procedural Steps
C. OUTLINE OF MAJOR CONTENT AREAS: Continued

h) Patient Safety and Management
i) Operator Safety
j) Evaluation

20. Removal of Orthodontic Bonding Agent with Rotary Instruments
   a) Definition/Terminology
   b) Law
   c) Purpose and Objectives
   d) Bonding Agents and Characteristics
   e) Rotary Removal Technique
   f) Procedural Steps
   g) Patient Safety and Management
   h) Evaluation

D. LEARNING OUTCOMES (GENERAL): The student will be able to:
   1. Demonstrate professional dental assistant traits.
   2. Demonstrate ethical behavior.
   3. Demonstrate responsible attendance habits.
   4. Demonstrate principles of teamwork.
   5. Demonstrate principles of dental infection control.
   6. Demonstrate principles of hazard communication.
   7. Complete patient charts and records.
   8. Effectively manage patients during dental procedures.
   9. Exhibit effective patient/team communications.
   10. Maintain patient safety during procedures.
   12. State the legal parameters for all expanded functions.
   13. Describe dental tooth stains and deposits.
   14. Describe abrasive and polishing actions.
   15. Describe mechanical polishing armamentarium.
   16. Describe effective mechanical polishing techniques.
   17. List and describe mechanical polishing procedural steps.
   18. Prepare mechanical polishing tray set-ups and operatories.
   22. Critique mechanical polishing procedure.
   23. Explain the purposes/uses of topical fluorides.
   24. Explain the chemistry and action of topical fluorides.
   25. Describe the types of topical fluorides.
   26. Describe topical fluoride application armamentarium.
   27. Describe topical fluoride application techniques.
   28. List and describe topical fluoride application procedural steps.
   29. Prepare topical fluoride tray set-ups and operatories.
   30. Perform topical fluoride application.
   31. Critique topical fluoride application.
   32. Explain the purpose/use of diagnostic impressions and opposing arch impressions.
   33. Describe the types of alginate impression materials and their properties.
   34. Describe alginate impression armamentarium.
   35. Describe effective alginate tray try-in and adjustment.
   36. Describe effective patient management and safety during impression taking.
   37. List and describe alginate impression procedural steps.
   38. Prepare alginate impression set-ups and operatories.
   39. Take accurate mandibular and maxillary alginate impressions.
   40. Critique mandibular and maxillary alginate impressions.
   41. Explain the purpose of wax bite registrations.
   42. Describe effective bite registration techniques.
   43. Take wax bite registrations.
D. LEARNING OUTCOMES (GENERAL): The student will be able to: Continued...

44. Describe the purpose/uses of rubber dam isolation.
45. Describe rubber dam armamentarium.
46. Describe effective rubber dam placement and removal techniques.
47. List and describe rubber dam placement and removal procedural steps.
48. Prepare rubber dam tray set-ups and operatories.
49. Place and remove rubber dam isolation.
50. Critique rubber dam placement and removal.
51. Explain the purposes/uses of temporary crowns/bridges.
52. Identify types of temporary crowns/bridges.
53. Describe the criteria for a correctly adapted, cemented and adjusted temporary crown/bridge.
54. Describe temporary crown/bridge fabrication/adaptation, cementation, and adjustment techniques.
55. List and describe the procedural steps for fabricating/adapting, cementing and adjusting temporary crowns and bridges.
56. Prepare temporary crown/bridge adaptation, cementation and adjustment set-ups.
57. Correctly fabricate/adapt, cement, and adjust temporary crowns and bridges.
58. Critique crown and bridge adaptations, cementation and adjustment.
59. Describe the technique for re-cementing intact temporary restorations.
60. Re-cement intact temporary restorations.
61. Identify temporary crown removal armamentarium.
62. Describe correct temporary crown removal techniques.
63. Remove temporary crowns.
64. Critique removal of temporary crowns.
65. Explain the purposes/uses of topical anesthetics.
66. Explain the chemistry and action of topical anesthetics.
67. Describe the types of topical anesthetic agents.
68. Describe topical anesthetic placement techniques and procedural steps.
69. Identify topical anesthetic site placement and nerve intervention for dental anesthetic injections.
70. Prepare topical anesthetic tray set-ups and operatories.
71. Place topical anesthetic.
72. Critique topical anesthetic effectiveness.
73. Describe the purposes and uses of matrix retainers and wedges.
74. Identify the types of matrix retainers and state the use of each type.
75. Identify the types of wedges and state the use of each type.
76. Identify the functional parts of each matrix retainer.
77. Describe the correct assembly, placement and removal techniques for each type of matrix retainer.
78. Describe the evaluation criteria for the placement and removal of matrices and wedges.
79. List the armamentarium for the placement and removal of matrices.
80. Describe the patient and operator safety techniques used for placing and removing matrices.
81. Correctly place and remove all types of matrix retainers and wedges.
82. Explain the purposes/uses of enamel etching.
83. Explain the chemistry/action of enamel etching agents.
84. Describe the appearance of a correctly etched enamel surface.
85. Describe enamel etching armamentarium.
86. Describe effective enamel etching techniques.
87. List and describe enamel etching procedural steps.
88. Etch enamel surfaces.
89. Critique enamel etching.
90. Explain the purpose/uses of pit and fissure sealants.
91. Explain the chemistry/action of pit and fissure sealants.
92. Describe the types of pit and fissure sealants.
93. Describe effective pit and fissure sealant application techniques.
94. List and describe pit and fissure sealant application procedural steps.
95. Describe pit and fissure application armamentarium.
96. Prepare pit and fissure sealant tray set-ups and operatories.
97. Apply pit and fissure sealants.
98. Critique pit and fissure sealant application.
D. LEARNING OUTCOMES (GENERAL): The student will be able to: Continued . .

99. Explain the purpose of cement removal.
100. Identify types of cements and their correct removal state.
101. Describe effective cement removal techniques.
102. List and describe cement removal procedural steps.
103. Describe cement removal armamentarium.
104. Prepare cement removal set-ups and operatories.
105. Remove excess cement.
106. Critique cement removal.
107. Explain the purposes/uses of periodontal packs.
108. Describe the types of periodontal packs and their properties.
109. Describe effective periodontal pack placement and removal techniques.
110. List and describe periodontal pack placement/removal procedural steps.
111. Describe periodontal pack placement/removal armamentarium.
112. Prepare periodontal pack set-ups and operatories.
113. Place and remove periodontal packs.
115. Explain dental purposes/uses of sutures.
116. Describe types of sutures and their uses.
117. Describe suture removal techniques.
118. List and describe suture removal procedural steps.
119. Describe suture armamentarium.
120. Remove sutures.
121. Critique suture removal.
122. Explain topical medications purposes/uses.
123. Identify indications/contra-indications of topical medications.
124. Describe possible topical medications possible adverse reactions/side effects.
125. Describe effective topical medication placement.
126. Identify topical medication placement armamentarium.
127. Prepare topical medication tray set-ups.
128. Place topical medications.
129. Critique topical medication placement.
130. Identify root canal drying armamentarium.
131. Describe correct root canal drying techniques.
132. Dry root canals.
133. Critique root canal drying procedures.
134. Identify root canal temporary sealing armamentarium.
135. Describe correct root canal temporary sealer technique.
136. Place temporary root canal sealer.
137. Critique temporary root canal sealing procedure
138. Explain the purpose/use of orthodontic separators.
139. Describe orthodontic separator placement/removal technique.
140. Describe correct orthodontic separator placement.
141. Identify orthodontic separator placement/removal armamentarium.
142. Prepare orthodontic separator tray set-ups.
143. Place and remove orthodontic separators.
144. Critique orthodontic separator placement/removal.
145. Explain the purpose of orthodontic band preselection.
146. Describe orthodontic band design and sizes/numbering.
147. Describe the criteria for a correct orthodontic band fit.
148. Describe orthodontic band pre-selection techniques.
149. Identify orthodontic band pre-selection armamentarium.
150. Pre-select orthodontic bands.
151. Critique orthodontic band pre-selection.
152. Explain the purpose of etching enamel surfaces prior to bracket bonding.
153. Describe the correct technique for etching the enamel surface prior to orthodontic bonding.
154. List the armamentarium and the procedural steps for etching prior to orthodontic bonding.
D. LEARNING OUTCOMES (GENERAL): The student will be able to: Continued. . .  
155. Explain the purpose/use of orthodontic elastic/metal ligatures.  
156. Describe the criteria of correct orthodontic elastic/metal ligation.  
158. Identify orthodontic elastic/metal ligature placement/removal armamentarium.  
159. Prepare orthodontic elastic/metal ligature set-ups.  
160. Place and remove orthodontic elastic/metal ligatures.  
162. Explain the purpose of orthodontic bonding agent removal.  
163. Describe orthodontic bonding agents.  
164. Describe orthodontic bonding agent removal techniques.  
165. Identify orthodontic bonding agent removal armamentarium.  
166. Prepare orthodontic bonding tray set-ups.  
167. Identify and describe the procedural steps for orthodontic bonding agent removal.  
168. Remove excess orthodontic bonding agent.  
169. Critique orthodontic bonding agent removal.  
170. State the objectives of removal of orthodontic bonding agent.  
171. Identify the armamentarium for removal of orthodontic bonding agent with rotary instruments.  
172. Describe the appearance and characteristics of residual bonding orthodontic agents.  
173. Describe the correct technique for removal of excess bonding material with rotary instruments.  
174. Describe patient management and safety during removal of excess bonding material with rotary attachments.  
175. Remove excess bonding material with rotary instruments.  
176. Critique removal of excess bonding material with rotary instruments.  
177. Prepare x-ray tray set-ups and operatories.  
178. Expose, process, and mount dental x-rays.  
179. Evaluate dental x-rays.  
180. Maintain dental x-ray equipment.  
181. Recirculate dental instruments and supplies.  
182. Correctly dispose of hazardous waste.  
183. Maintain dental operatory equipment and supplies.  
184. Perform dental receptionist duties.  
185. Demonstrate effective telephone techniques.  
186. Schedule and confirm patient appointments.  
187. Perform basic dental bookkeeping procedures.

E. LEARNING OUTCOMES (MNTC): NA

F. METHODS FOR EVALUATION OF STUDENT LEARNING:  
1. Written quizzes  
2. Written final exam  
3. Skill evaluations  
4. Attendance points  
5. Affective behavior evaluations

G. RCTC CORE OUTCOME(S) ADDRESSED:  
☐ Communication  ☑ Critical Thinking  ☑ Personal/Professional Accountability  
☐ Civic Responsibility  ☐ Global Awareness/Diversity  ☐ Aesthetic Response

H. SPECIAL INFORMATION (if any):  
1. Malpractice Insurance  
2. RCTC Dental Assistant Program Uniform and Nametag  
3. RCTC Dental Assistant program Approved Safety glasses  
4. Current Certification in American Red Cross CPR/AED for the Professional Rescuer or American Heart Association BLS Healthcare Provider CPR/AED  
5. Approved State and National Background Studies
H. SPECIAL INFORMATION (if any): Continued . . .
6. Approved Heath Assessment
7. Hepatitis B Vaccine
8. Health Insurance
9. Compliance with RCTC Dental Assistant Program Clinic/Lab Policies and Protocols (i.e. Dental Infection Control Protocols, Hazard Communication Protocols, Uniform Protocol, Etiquette, and Attendance policies)