Course Information

<table>
<thead>
<tr>
<th>Description</th>
<th>Prepares Dental Assistant students to produce alginate impressions and fabricate diagnostic models, oral appliances, temporary restorations, and custom trays. Students also polish oral appliances.</th>
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</thead>
<tbody>
<tr>
<td>Career Cluster</td>
<td>Health Science</td>
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<tr>
<td>Instructional Level</td>
<td>Technical Diploma Courses</td>
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<tr>
<td>Total Credits</td>
<td>4</td>
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<tr>
<td>Total Hours</td>
<td>144</td>
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Learner Supplies

Safety Glasses. **Vendor:** Campus Shop. Required.

Lab Coat. **Vendor:** To be discussed in class. Required.

Utility Gloves. **Vendor:** To be discussed in class. Required.

Success Abilities

1. Apply mathematical concepts.

2. Demonstrate ability to think critically.

3. Demonstrate ability to value self and work ethically with others in a diverse population.

4. Make decisions that incorporate the importance of sustainability.

5. Transfer social and natural science theories into practical applications.

6. Use effective communication skills.

7. Use technology effectively.

Course Competencies

1. **Produce detailed alginate impressions of a quality for case presentation models**

   Assessment Strategies
   1.1. by loading, seating, and removing the impression tray, to obtain a detailed alginate impression, on a patient in a clinic setting
   1.2. by preparing and taking a bite registration on a patient in a clinic setting
Criteria

You will know you are successful when

1.1. you select the correct equipment and supplies needed to produce an alginate impression
1.2. you prepare a bite registration
1.3. you take maxillary and mandibular alginate impressions
1.4. you perform all steps in the right order
1.5. you position yourself correctly
1.6. you wear personal protective equipment
1.7. you follow safety procedures
1.8. you verbalize an explanation of the process as you perform it
1.9. you disinfect bite registration and alginate impressions
1.10. you store and label the bite registration and alginate impressions correctly
1.11. you ensure the alginate impressions and bite registration meet published specifications
1.12. you ensure patient's records show accurate, up-to-date documentation of treatment and services

Learning Objectives

1.a. Use dental terminology related to alginate impressions appropriately
1.b. Review the armamentarium and materials used in producing alginate impressions
1.c. Discuss the aspects of patient preparation for an alginate impression
1.d. Sequence the steps in producing an alginate impression
1.e. Identify the criteria needed for a detailed alginate impression
1.f. Evaluate impression using stated criteria
1.g. Describe the disinfection technique for alginate impressions
1.h. Explain the various materials and techniques for taking a bite registration
1.i. Identify the waxes used when producing alginate impressions
1.j. Identify the personal protective equipment required
1.k. Select appropriate communication skills throughout the dental procedure
1.l. Identify appropriate aseptic techniques used when producing alginate impressions
1.m. Determine safety procedures to follow during producing an alginate impression

2. Produce finished and polished diagnostic models of a quality for case presentation

Assessment Strategies

2.1. by fabricating a set of diagnostic models poured from an impression of a peer/patient in the clinic
2.2. by trimming the fabricated diagnostic models
2.3. by using a bite registration in trimming models
2.4. by finishing and polishing the trimmed diagnostic models
2.5. when models are of a quality for case presentation

Criteria

You will know you are successful when

2.1. you select the correct equipment and supplies needed to trim, finish and polish study models
2.2. you perform all steps in the right order
2.3. you wear personal protective equipment
2.4. you follow safety procedures
2.5. you ensure models meet the criteria for evaluating trimmed, finished and polished case presentation models
2.6. you ensure patient's records show accurate, up-to-date documentation of treatment and services

Learning Objectives

2.a. Use dental terminology related to models appropriately
2.b. Review the armamentarium and materials used in fabricating models
2.c. Identify the criteria needed for an acceptable model
2.d. Sequence the steps in fabricating models
2.e. Evaluate fabricated models using stated criteria
2.f. Describe the disinfection technique for models
2.g. Identify the personal protective equipment required
2.h. Determine safety procedures to follow when fabricating models

3. Fabricate custom impression trays

Assessment Strategies

3.1. by fabricating custom impression trays on models in the laboratory

Criteria
You will know you are successful when

3.1. you select the correct equipment and supplies needed to fabricate custom impression trays
3.2. you perform all steps in the right order
3.3. you wear personal protective equipment
3.4. you follow safety procedures
3.5. you ensure the custom impression trays meet the criteria for evaluation
3.6. you ensure patient's records show accurate, up-to-date documentation of treatment and services

Learning Objectives
3.a. Use dental terminology related to custom impression trays appropriately
3.b. Describe the characteristics and properties of polymers
3.c. Identify the armamentarium and materials used in fabricating custom impression trays
3.d. Explain the purpose of a custom impression tray
3.e. Compare the use of a custom impression tray with a stock tray
3.f. Identify the waxes used when fabricating custom impression trays
3.g. Explain the purpose of the spacer and occlusal stops in a custom impression tray
3.h. Identify the criteria needed for an acceptable custom impression tray
3.i. Sequence the steps in fabricating various custom impression trays
3.j. Evaluate fabricated custom impression trays using stated criteria
3.k. Describe the disinfection technique for custom impression trays
3.l. Identify the personal protective equipment required
3.m. Determine safety procedures to follow when fabricating custom impression trays

4. Polish oral appliances

Assessment Strategies
4.1. by polishing any acrylic-based appliance using a dental lathe in the laboratory

Criteria

You will know you are successful when

4.1. you select the correct equipment and supplies needed to polish oral appliances
4.2. you perform all steps in the right order
4.3. you wear personal protective equipment
4.4. you follow safety procedures
4.5. you ensure the polished oral appliance meets the criteria for evaluation
4.6. you ensure patient's records show accurate, up-to-date documentation of treatment and services

Learning Objectives
4.a. Use dental terminology related to polishing oral appliances appropriately
4.b. Identify the armamentarium and materials used in polishing oral appliances
4.c. Differentiate among the various polishing agents
4.d. Identify the criteria needed for an acceptable polished oral appliance
4.e. Sequence the steps in polishing oral appliances
4.f. Evaluate polished oral appliance using stated criteria
4.g. Describe the disinfection technique when polishing oral appliances
4.h. Identify the personal protective equipment required
4.i. Determine safety procedures to follow when polishing oral appliances

5. Prepare preformed provisional tooth coverage

Assessment Strategies
5.1. by preparing a preformed provisional crown in a laboratory setting, using the models provided

Criteria

You will know you are successful when

5.1. you select the correct equipment and supplies needed to prepare preformed provisional tooth coverage
5.2. you perform all steps in the right order
5.3. you wear personal protective equipment
5.4. you follow safety procedures
5.5. you ensure the provisional coverage meets the criteria for evaluating preformed provisional tooth coverage
5.6. you ensure patient's records show accurate, up-to-date documentation of treatment and services

Learning Objectives
5.a. Use dental terminology related to preformed provisional tooth coverage appropriately
5.b. Describe the characteristics and properties of polymers
5.c. Compare the various types of materials used for preformed provisional tooth coverage
5.d. Identify the armamentarium and materials used in preparing preformed provisional tooth coverage
5.e. Identify the criteria needed for a preformed provisional tooth coverage
5.f. Sequence the steps in preparing preformed provisional tooth coverage
5.g. Evaluate prepared preformed provisional tooth coverage using stated criteria
5.h. Describe the disinfection technique for preformed provisional tooth coverage
5.i. Identify the personal protective equipment required
5.j. Determine safety procedures to follow when preparing preformed provisional tooth coverage

6. Prepare custom provisional tooth coverage

Assessment Strategies
6.1. by preparing a custom temporary crown or bridge, in a laboratory setting, using the models provided

Criteria

You will know you are successful when
6.1. you select the correct equipment and supplies needed to prepare custom provisional tooth coverage
6.2. you perform all steps in the right order
6.3. you wear personal protective equipment
6.4. you follow safety procedures
6.5. you ensure the provisional coverage meets the criteria for evaluating custom provisional tooth coverage
6.6. you ensure patient's records show accurate, up-to-date documentation of treatment and services

Learning Objectives
6.a. Use dental terminology related to custom provisional tooth coverage appropriately
6.b. Describe the characteristics and properties of polymers
6.c. Compare the various types of materials used for custom provisional tooth coverage
6.d. Identify the armamentarium and materials used in preparing custom provisional tooth coverage
6.e. Identify the criteria needed for a custom provisional tooth coverage
6.f. Sequence the steps in preparing custom provisional tooth coverage
6.g. Evaluate prepared custom provisional tooth coverage using stated criteria
6.h. Describe the disinfection technique for custom provisional tooth coverage
6.i. Identify the personal protective equipment required
6.j. Determine safety procedures to follow when preparing custom provisional tooth coverage

7. Explain the indications, procedure, and benefits of indirect restoration to a patient

Assessment Strategies
7.1. in an oral, written or graphic assessment

Criteria

Your performance will be successful when:
7.1. explanation describes the indications for at least three indirect restorations (choose from crowns, inlays, bridges, dentures, partials, or porcelain)
7.2. explanation describes the difference between temporary restoration and permanent restoration
7.3. explanation describes the benefits of at least three types of indirect restorations (choose from crowns, inlays, bridges, dentures, partials, or porcelain)
7.4. explanation describes how the impression is used to create a cast and how the cast is used to create a restoration
7.5. explanation describes the fabrication procedure and timeline for at least three types of indirect restorations (choose from crowns, inlays, bridges, dentures, partials, or porcelain)

8. Articulate models

Assessment Strategies
8.1. by preparing maxillary and mandibular models for articulation, in a laboratory setting, using the models provided
8.2. by articulating prepared models
8.3. by using a bite registration for articulating models

Criteria

You will know you are successful when
8.1. you select the correct equipment and supplies needed to articulate models
8.2. you perform all steps in the right order
8.3. you wear personal protective equipment
8.4. you follow safety procedures
8.5. you ensure the articulated models meet the criteria for evaluation

9. **Produce bite registration**

**Assessment Strategies**
9.1. by producing a bite registration, in a clinic setting, on a peer/patient

**Criteria**
*You will know you are successful when*
9.1. you select the correct equipment and supplies needed to produce a bite registration
9.2. you perform all steps in the right order
9.3. you wear personal protective equipment
9.4. you follow safety procedures
9.5. you ensure the bite registration meet the criteria for evaluation
9.6. you verbalize an explanation of the process as you perform it
9.7. you disinfect bite registration
9.8. you ensure patient's records show accurate, up-to-date documentation of treatment and services

10. **Prepare laboratory case for shipment**

**Assessment Strategies**
10.1. by completing laboratory prescription for laboratory case, according to provided scenario
10.2. by collecting models, impression and bite registration for laboratory case
10.3. by packaging laboratory case
10.4. by preparing laboratory case for shipment

**Criteria**
*You will know you are successful when*
10.1. you select the correct items needed to prepare a laboratory case for shipment, according to provided scenario
10.2. you perform all steps in the right order
10.3. you wear personal protective equipment
10.4. you follow safety procedures
10.5. you ensure the laboratory case meets the criteria for evaluation
10.6. you properly notify the laboratory of case pick-up/mailing