



Western Technical College

31508302 Dental Chairside

Course Outcome Summary

Course Information

Description Prepares dental assistant students to chart oral cavity structures, dental pathology, and restorations and to assist a dentist with basic dental procedures including examinations, pain control, amalgam restoration, and cosmetic restoration. Students will also develop the ability to educate patients about preventive dentistry, brushing and flossing techniques, and dental procedures, using lay terminology. Throughout the course, students will apply decoding strategies to the correct use and interpretation of dental terminology.

Career Cluster Health Science

Instructional Level Technical Diploma Courses

Total Credits 5

Total Hours 180

Pre/Corequisites

Prerequisite 10508101 Dental Health Safety

Textbooks

Dental Instruments: A Pocket Guide to Identification - with CD. 2nd Edition. Copyright 2012. Mitchell, Melanie. Publisher: Jones and Bartlett. **ISBN-13**: 978-1-284-26814-0. Required.

Dental Assisting: Comprehensive Approach. 6th Edition. Copyright 2022. Singahl, Vaishali, Susan Kantz, Melissa Damatta, Donna Phinney, and Judy Halstaed. Publisher: Cengage Learning. **ISBN-13**: 978-0-357-45652-1. Required.

508-302 Dental Chairside Course Manual. Western. Publisher: Western. **ISBN-13**: 979-8-822-71678-0. Required.

Learner Supplies

Uniform: Black lab jacket, black pants, tennis shoes. **Vendor:** To be discussed in class. Required.

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

Dental Typodont (D95SDP-200-GUB). Kilgore International, Inc. **ISBN-13:** 878-0-003-18553-0. Required.

Success Abilities

1. Cultivate Passion: Enhance Personal Connections
2. Cultivate Passion: Expand a Growth-Mindset
3. Cultivate Passion: Increase Self-Awareness
4. Live Responsibly: Develop Resilience
5. Live Responsibly: Foster Accountability
6. Refine Professionalism: Act Ethically
7. Refine Professionalism: Improve Critical Thinking
8. Refine Professionalism: Participate Collaboratively
9. Refine Professionalism: Practice Effective Communication

Program Outcomes

1. DA-1 year: Perform a variety of advanced supportive dental procedures
2. DA-1 year: Manage infection and hazard control
3. DA-1 year: Demonstrate professional behaviors, ethics, and appearance

Course Competencies

1. Decode dental terminology.

Assessment Strategies

- 1.1. by classifying dental terminology by prefix, root and suffix

Criteria

You will know you are successful when

- 1.1. you identify the meaning of the prefix.
- 1.2. you identify the meaning of the root.
- 1.3. you identify the meaning of the suffix.
- 1.4. you determine the meaning of the whole word.

Learning Objectives

- 1.a. Identify dental words.
- 1.b. Pronounce dental words.
- 1.c. Analyze the structure of dental words.
- 1.d. Define the meaning of dental words.
- 1.e. Pluralize dental words.

1.f. Use dental words in communication.

2. Operate dental equipment.

Assessment Strategies

- 2.1. by completing an operating dental equipment skill demonstration
- 2.2. by completing a maintenance of dental equipment skill demonstration
- 2.3. in a clinical setting

Criteria

You will know you are successful when

- 2.1. you operate the dental equipment.
- 2.2. you maintain dental equipment.
- 2.3. you employ safety precautions.
- 2.4. you wear personal protective equipment.

Learning Objectives

- 2.a. Use dental terminology related to dental equipment appropriately.
- 2.b. Differentiate among the types of dental chairs, stools, units, and lights.
- 2.c. Differentiate among the types of dental office delivery systems.
- 2.d. Classify dental equipment used in the treatment area.
- 2.e. Acquaint self with maintenance of dental office equipment.
- 2.f. Determine safety procedures in operating dental equipment.
- 2.g. Identify the personal protective equipment required.

3. Transfer dental instruments for various dental procedures.

Assessment Strategies

- 3.1. by completing an instrument transfer skill demonstration using a manikin
- 3.2. in a clinical setting

Criteria

You will know you are successful when

- 3.1. you select the correct armamentarium.
- 3.2. you position yourself and manikin correctly.
- 3.3. you perform all steps in the right order.
- 3.4. you anticipate procedural steps.
- 3.5. you demonstrate approach, delivery, and retrieval of instruments.
- 3.6. you employ safety precautions.
- 3.7. you utilize infection control protocol.
- 3.8. you wear personal protective equipment.

Learning Objectives

- 3.a. Use dental terminology related to transferring of dental instruments appropriately.
- 3.b. Explain the importance of instrument exchange in four- and six-handed dentistry.
- 3.c. Describe various instrument grasps.
- 3.d. Identify the basic types of instrument exchanges.
- 3.e. Explain the step by step procedure for common instrument exchange procedures.
- 3.f. Describe how to maintain a fulcrum.
- 3.g. Identify responsibility of the dentist and dental assistant during the instrument exchange.
- 3.h. Determine safety precautions that should be implemented during instrument exchange.
- 3.i. Identify the personal protective equipment required.
- 3.j. Identify appropriate aseptic techniques during instrument exchange.

4. Maintain clear operating field.

Assessment Strategies

- 4.1. by completing a skill demonstration on a role-play peer
- 4.2. in a clinical setting

Criteria

You will know you are successful when

- 4.1. you select the correct armamentarium.
- 4.2. you position yourself and patient correctly.
- 4.3. you anticipate procedural steps.
- 4.4. you perform all steps in the right order.
- 4.5. you retract the tongue, cheeks, and lips using finger mouth mirror and HVE tip.
- 4.6. you suction fluids and debris using HVE and saliva ejector.
- 4.7. you isolate oral cavity.
- 4.8. you employ safety precautions.
- 4.9. you utilize infection control protocol.
- 4.10. you wear personal protective equipment.

Learning Objectives

- 4.a. Use dental terminology related to maintaining a clear operating field appropriately.
- 4.b. Identify the armamentarium required to maintain a clear operating field.
- 4.c. Differentiate among the types of retraction used in an operative procedure.
- 4.d. Describe the retraction techniques during an operative procedure.
- 4.e. Differentiate between the use of the HVE and saliva ejector.
- 4.f. Describe the routine care of the oral evacuation system.
- 4.g. Describe the use of the air/water syringe in maintaining a clear operating field.
- 4.h. Describe the procedure used in a complete mouth rinse using air/water syringe.
- 4.i. Explain the basic rules for oral evacuator tip placement.
- 4.j. Describe the placement of an evacuator tip for any given operative procedure or surgical site.
- 4.k. Explain how the HVE system aids in reducing aerosols in the dental clinical environment.
- 4.l. Determine safety procedures when maintaining a clear operating field.
- 4.m. Describe moisture isolation techniques using cotton rolls and related aids.
- 4.n. Describe the indication for use of the dental dam.
- 4.o. Explain the importance of dental dam isolation in today's dentistry.
- 4.p. Identify appropriate aseptic techniques in maintaining a clear operating field.
- 4.q. Differentiate among the types of mouth rinses.
- 4.r. Identify the personal protective equipment required.

5. Apply the principles of chairside dentistry.

Assessment Strategies

- 5.1. by completing a skill demonstration of chairside dentistry using a role-play patient or manikin
- 5.2. in a clinical setting

Criteria

You will know you are successful when

- 5.1. you select the correct armamentarium.
- 5.2. you obtain written patient consent.
- 5.3. you position yourself correctly as the assistant.
- 5.4. you position yourself correctly as the operator.
- 5.5. you seat and position according to area of treatment, and dismiss patient or manikin.
- 5.6. you communicate professionally with the patient.
- 5.7. you employ safety precautions.
- 5.8. you utilize infection control protocol.
- 5.9. you wear personal protective equipment.

Learning Objectives

- 5.a. Use dental terminology related to sit-down dentistry appropriately.
- 5.b. Describe the concepts of four and six-handed dentistry.
- 5.c. Describe the benefits of four- and six-handed dentistry.
- 5.d. Identify the zones of activity at chairside.
- 5.e. Identify principles of motion economy.
- 5.f. Identify the classification of motion economy.
- 5.g. Describe the preparation of the treatment room before seating the patient.
- 5.h. Explain the process of seating, positioning, and dismissing a dental patient for treatment in any area of the oral cavity.
- 5.i. Identify special needs of the patient.
- 5.j. Explain the position of the assistant in any area of the oral cavity.

- 5.k. Explain the position of the operator in any area of the oral cavity.
- 5.l. Determine safety procedures to follow during sit-down dentistry.
- 5.m. Identify the personal protective equipment required.
- 5.n. Identify appropriate aseptic techniques during sit-down dentistry.
- 5.o. Select appropriate communication skills throughout the dental procedure.

6. Adapt dental assisting techniques when assisting with dental examinations.

Assessment Strategies

- 6.1. by completing a skill demonstration in which you assist with a dental examination using a manikin or role-play patient
- 6.2. in a clinical setting

Criteria

You will know you are successful when

- 6.1. you select the correct armamentarium.
- 6.2. you position yourself and patient correctly.
- 6.3. you anticipate procedural steps.
- 6.4. you perform all steps in the right order.
- 6.5. you communicate professionally with the patient.
- 6.6. you employ safety precautions.
- 6.7. you utilize infection control protocol
- 6.8. you wear personal protective equipment.
- 6.9. you create patient records showing accurate, up-to-date documentation of treatment and services.

Learning Objectives

- 6.a. Use dental terminology related to dental examinations appropriately.
- 6.b. Identify the armamentarium required for a dental examination.
- 6.c. Classify instruments used for a dental examination according to function.
- 6.d. Describe the data necessary for a complete dental clinical examination.
- 6.e. Describe the importance of a complete medical and dental history.
- 6.f. Differentiate between an extra-oral and intra-oral examination.
- 6.g. Sequence the steps in a dental examination.
- 6.h. Select appropriate communication skills throughout the dental procedure.
- 6.i. Determine safety procedures used during assisting for a dental examination.
- 6.j. Identify the personal protective equipment required.
- 6.k. Identify appropriate aseptic techniques during a dental examination.

7. Record reported examination findings of the oral cavity structures.

Assessment Strategies

- 7.1. by charting the condition of the external and internal structures of the oral cavity
- 7.2. by charting from dictation or by reading
- 7.3. by interpreting the previously charted conditions
- 7.4. in a clinical or classroom setting

Criteria

You will know you are successful when

- 7.1. you select the correct armamentarium.
- 7.2. you accurately record the condition of the external and internal structures of the oral cavity.

Learning Objectives

- 7.a. Use dental terminology related to recording of the oral cavity structures appropriately.
- 7.b. Identify the armamentarium required for charting.
- 7.c. Explain the methods used to record findings of the oral cavity structures.
- 7.d. Describe common abbreviations and symbols used in charting oral cavity structures.

8. Chart dental pathology.

Assessment Strategies

- 8.1. in charting dental pathology by completing a chart
- 8.2. by charting on an anatomical and/or geometric chart
- 8.3. by completing a periodontal chart

- 8.4. by charting from dictation or by reading
- 8.5. by interpreting the previously charted conditions
- 8.6. in a clinical or classroom setting

Criteria

You will know you are successful when

- 8.1. you select the correct armamentarium.
- 8.2. you accurately chart dental pathology.
- 8.3. you chart according to G.V. Black's Classification of Cavities.
- 8.4. you chart periodontal conditions.
- 8.5. you chart Angle's classification of malocclusion and associated factors.

Learning Objectives

- 8.a. Use dental terminology related to charting dental pathology appropriately.
- 8.b. Identify the armamentarium required for charting.
- 8.c. Describe common abbreviations and symbols used in charting dental pathology.
- 8.d. Differentiate between types of geometrical and anatomical charts.
- 8.e. Differentiate among the different tooth numbering systems.
- 8.f. Identify dental pathology.
- 8.g. Describe periodontal charting.
- 8.h. Identify Angle's classification of malocclusion.

9. Chart restorations.

Assessment Strategies

- 9.1. in charting dental restorations by completing a chart
- 9.2. by charting on an anatomical and/or geometric chart
- 9.3. by charting from dictation or by reading
- 9.4. by interpreting the previously charted conditions
- 9.5. in a clinical or classroom setting

Criteria

You will know you are successful when

- 9.1. you select the correct armamentarium.
- 9.2. you chart according to G.V. Black's Classification of Cavities.
- 9.3. you accurately chart restorations.
- 9.4. you accurately chart restorative problems.

Learning Objectives

- 9.a. Use dental terminology related to charting restorations appropriately.
- 9.b. Identify the armamentarium required for charting.
- 9.c. Describe common abbreviations and symbols used in charting dental restorations.
- 9.d. Differentiate between types of geometrical and anatomical charts.
- 9.e. Differentiate among the different tooth numbering systems.
- 9.f. Compare the symbols used to chart various restorations.

10. Manage handpieces and rotary instruments.

Assessment Strategies

- 10.1. by completing a skill demonstration on assembly and maintenance
- 10.2. in a clinical setting, using the equipment provided

Criteria

You will know you are successful when

- 10.1. you select the correct armamentarium.
- 10.2. you select the correct handpiece by name and use.
- 10.3. you assemble handpieces.
- 10.4. you select, insert, and remove appropriate attachment.
- 10.5. you maintain handpieces and attachments.
- 10.6. you perform all steps in the right order.
- 10.7. you employ safety precautions.

- 10.8. you use infection control protocol.
- 10.9. you wear personal protective equipment.

Learning Objectives

- 10.a. Use dental terminology related to dental cutting instruments appropriately.
- 10.b. Identify the parts of a dental hand instrument.
- 10.c. Classify dental hand cutting instruments according to use.
- 10.d. Identify dental hand cutting instruments.
- 10.e. Explain the process of instrument sharpening.
- 10.f. Differentiate among the types of handpieces and their attachments.
- 10.g. Describe the function of rotary devices.
- 10.h. Explain the use of the water coolant system in conjunction with dental handpieces.
- 10.i. Describe the maintenance of handpieces.
- 10.j. Identify dental rotary devices by basic shape, material and number series.
- 10.k. Determine safety procedures used during maintenance of dental cutting instruments.
- 10.l. Identify the personal protective equipment required.
- 10.m. Identify appropriate aseptic techniques during maintenance of dental cutting instruments.

11. Document treatment and procedures that have been performed.

Assessment Strategies

- 11.1. by preparing written dental records that document clinical treatment scenarios
- 11.2. given the forms

Criteria

You will know you are successful when

- 11.1. you accurately reference teeth using given numbering system correctly.
- 11.2. you accurately record dental services rendered.
- 11.3. you use correct terminology and abbreviations.
- 11.4. you ensure documentation is well organized.
- 11.5. you use correct grammar, punctuation, and spelling.
- 11.6. you use correct alterations.

Learning Objectives

- 11.a. Use dental terminology related to documenting on a patient treatment record appropriately.
- 11.b. Identify the components of a patient treatment record.
- 11.c. Explain the procedure for recording services rendered.
- 11.d. Explain the procedure for correcting an error on a patient treatment record.

12. Assist with chairside pain control.

Assessment Strategies

- 12.1. by completing a skill demonstration in which you assist with pain control procedures on a manikin
- 12.2. in a clinical setting

Criteria

You will know you are successful when

- 12.1. you select the correct armamentarium.
- 12.2. you position yourself and manikin correctly.
- 12.3. you anticipate procedural steps.
- 12.4. you perform all steps in the right order.
- 12.5. you assemble and disassemble syringe and/or injection system.
- 12.6. you assist with topical anesthetic.
- 12.7. you transfer syringe.
- 12.8. you communicate professionally with the patient.
- 12.9. you employ safety precautions.
- 12.10. you utilize infection control protocol.
- 12.11. you wear personal protective equipment.
- 12.12. patient's records show accurate, up-to-date documentation of treatment and services.

Learning Objectives

- 12.a. Use dental terminology related to chairside pain control appropriately.

- 12.b. Describe the purpose of anesthesia.
- 12.c. Differentiate between the use of topical and local anesthesia.
- 12.d. Differentiate among the types of anesthesia and their application to dentistry.
- 12.e. Explain the components of local anesthesia and its effect on the body.
- 12.f. Identify the parts of a local anesthetic syringe, needle, and carpule/cartridge.
- 12.g. Describe the procedure for assembling and disassembling an anesthetic syringe.
- 12.h. Identify the types of syringes used in dentistry.
- 12.i. Explain the technique for transferring an anesthetic syringe.
- 12.j. Describe the procedure for assisting with topical anesthetic.
- 12.k. Identify the signs and symptoms of post-anesthetic complications.
- 12.l. Select appropriate communication skills throughout the dental procedure.
- 12.m. Determine safety procedures used with chairside pain control.
- 12.n. Identify the personal protective equipment required.
- 12.o. Identify appropriate aseptic techniques during chairside pain control.

13. Interpret dental procedures to a patient, using lay terminology

Assessment Strategies

- 13.1. in an oral, written, or graphic assessment

Criteria

You will know you are successful when

- 13.1. you accurately explain a specific dental procedure.
- 13.2. you use lay terminology that a patient can understand.
- 13.3. you present information in a style and tone consistent with the audience's level of interest and level of knowledge or understanding.
- 13.4. you answer questions accurately, thoroughly, and with respect.
- 13.5. you ensure patient's records show accurate, up-to-date documentation of service.

Learning Objectives

- 13.a. Describe various dental procedures.
- 13.b. Compare dental and lay terminology.
- 13.c. Recognize and use elements of effective two-way communication to give and receive messages.
- 13.d. Describe ways to help insure the patient understands the procedure.

14. Adapt dental assisting techniques when assisting with a direct restoration.

Assessment Strategies

- 14.1. by completing a skill demonstration in which you assemble and place a matrix system for a given tooth on a manikin
- 14.2. by completing a skill demonstration in which you assist with a direct restoration on a manikin
- 14.3. in a clinical setting

Criteria

You will know you are successful when

- 14.1. you select the correct armamentarium.
- 14.2. you position yourself and manikin correctly.
- 14.3. you anticipate procedural steps.
- 14.4. you perform all steps in the right order.
- 14.5. you prepare matrix system.
- 14.6. you transfer instruments.
- 14.7. you maintain visibility and moisture control.
- 14.8. you mix and transfer materials.
- 14.9. you communicate professionally with the patient.
- 14.10. you provide post operative instructions.
- 14.11. you employ safety precautions.
- 14.12. you utilize infection control protocol.
- 14.13. you wear personal protective equipment.
- 14.14. patient's records show accurate, up-to-date documentation of treatment and services.

Learning Objectives

- 14.a. Use dental terminology related to direct cosmetic restorations appropriately.

- 14.b. Identify the armamentarium and materials used in a direct cosmetic restoration procedure.
- 14.c. Describe the steps of a cavity preparation.
- 14.d. Sequence the steps in a direct cosmetic restoration procedure.
- 14.e. Classify instruments used for a direct cosmetic restoration procedure according to function.
- 14.f. Describe the purpose of matrix and wedges.
- 14.g. Identify the use and maintenance of a curing light.
- 14.h. Select appropriate communication skills throughout the dental procedure.
- 14.i. Determine safety procedures used during assisting for a direct cosmetic restoration.
- 14.j. Identify the personal protective equipment required.
- 14.k. Identify appropriate aseptic techniques during a direct cosmetic restoration procedure.

15. Define preventive dentistry and its importance to the patient.

Assessment Strategies

- 15.1. in an oral, written or graphic assessment

Criteria

You will know you are successful when

- 15.1. you define preventive dentistry in terms a lay person can understand.
- 15.2. you explain the benefits of preventive dentistry.
- 15.3. you describe patient recommendations for disease prevention.
- 15.4. you describe the role of dental professionals in preventive dentistry.

Learning Objectives

- 15.a. Use dental terminology related to preventative dentistry appropriately.
- 15.b. Describe the characteristics of healthy gingiva.
- 15.c. Describe how plaque forms and effects the oral cavity.
- 15.d. Describe the process of tooth decay.
- 15.e. Describe the process of periodontal disease.
- 15.f. Describe the common preventive procedures.
- 15.g. Display knowledge of nutrition as related to oral health.
- 15.h. Describe the role of fluoride in preventive dentistry.
- 15.i. Explain the function of pit and fissure sealants in preventive dentistry.

16. Demonstrate proper tooth brushing and interproximal cleaning techniques.

Assessment Strategies

- 16.1. by demonstrating proper tooth brushing, interproximal cleaning and adjuncts to role-play patient(s) in a skill demonstration

Criteria

You will know you are successful when

- 16.1. you select the correct armamentarium.
- 16.2. you perform plaque assessment.
- 16.3. you use visual aids.
- 16.4. you perform and explain all steps for each technique.
- 16.5. you select, explain, and use the correct adjunct for the scenario.
- 16.6. you use terminology the patient understands.
- 16.7. you communicate professionally with the patient.
- 16.8. you answer questions asked by patients.
- 16.9. you present the content clearly and accurately.
- 16.10. your instruction is well organized.
- 16.11. you employ safety precautions.
- 16.12. you utilize infection control protocol.
- 16.13. you wear personal protective equipment.
- 16.14. patient's records show accurate, up-to-date documentation of patient education.

Learning Objectives

- 16.a. Use dental terminology related to oral hygiene appropriately.
- 16.b. Explain the content, purpose, and use of a lesson plan.
- 16.c. Explain the purpose of plaque score sheet.
- 16.d. Determine and analyze patient's plaque score.

- 16.e. Describe the factors of interpersonal communication.
- 16.f. Describe motivation skills needed in patient education.
- 16.g. Select appropriate oral care adjuncts for patients with various needs.
- 16.h. Determine safety procedures used during patient education.
- 16.i. Identify the personal protective equipment required.
- 16.j. Identify appropriate aseptic techniques during patient education.
- 16.k. Perform proper tooth brushing (on model, patient, or self).
- 16.l. Perform proper flossing techniques (on model, patient, or self).