Course Information Form (CIF)

Course Code: DHG 114
Course Title: Pre-Clinic

Department: Allied Health
PCS Code: 1.2 - Occupational/Technical Instruction
CIP Code: 51.0602
Repeatability: 0
Effective Date: Summer 2026

Credit Hours

Catalog Notation: 3-6-5
Credit Hour Distribution:

Lecture: 3	Lab: 6	Clinical: 0	**Total: 5**

General Course Information

Catalog Description

Introduction to dental hygiene profession with emphasis placed on theory and practice of the fundamental skills including instrumentation, periodontal status and infection control. Instrument skills proficiencies performed on students.

General Course Objectives

To develop as a dental hygienist in clinical skills and knowledge, as well as in exhibition of professionalism in topics of infection control, equipment use, instrumentation, computer patient forms, vital signs, instrument sharpening, prophy appointment skills, patient assessment, and diseases of concern to the oral healthcare worker.

Minimum Placement Levels

English	Reading	Math
Placement out of ENG 099	Placement out of CCS 098	None

Prerequisites

Credit in BIO 121

Admission into the Dental Hygiene program

Methods of Evaluation

Students will complete 5-6 lab tests, 4-5 lab quizzes, 6-7 lab proficiencies, 2-3 lecture exams, 10-11 lecture quizzes, 3-4 discussion posts, and 4-5 lecture assignments.

Instructional Materials and Additional Supplies

Darby and Walsh: Dental Hygiene Theory and Practice, 978-0323877824
Fundamentals of Periodontal Instrumentation and Advanced Root Instrumentation, Enhanced Edition, 978-1284456752
Wilkins' Clinical Practice of the Dental Hygienist, 978-1284255997
Dental hygiene supply kit $2700; Loupes $1300.

Course Content

General Learning Outcomes (GLOs)

- Critical Thinking and Information Literacy: Students will demonstrate the ability to evaluate perspectives, evidence, and implications, and to locate, assess, and use information effectively.
- Reasoning and Inquiry: Students will demonstrate the ability to solve problems using deductive reasoning and logic, quantitative reasoning, or the scientific method.
- Technology: Students will demonstrate the ability to evaluate, select, and appropriately use current and emerging tools.

Course Segments and Student Learning Outcomes

Course Segment	Learning Outcomes	Lecture Hours	Lab Hours	Clinical Hours
Dental Hygiene History, Present, and Future	1. Demonstrate knowledge of the profession's past, present, and the future of dental hygiene. 2. Identify and/or discuss the significance of each of the following: Dr. Rhein, Dr. D. D. Smith, Dr. Alfred C. Fones, and Mrs. Irene Newman. 3. Identify and define key terms and concepts related to the professional dental hygienist. 4. Describe the scope of dental hygiene practice. 5. Explain legal, ethical, and personal factors affecting dental hygiene practice. 6. Contemplate the role and importance of various professional dental hygiene associations (Darby).	2.5	0	0
Exposure Control Guidelines, Standard Precautions, Bloodborne Pathogens Standards, Sterilization and Disinfection, and Hazardous Material Management	1. Apply the concept of standard precautions to the process of dental hygiene care. 2. Describe the infectious disease process and prevention of disease transmission. 3. Describe and identify transmissible diseases that may pose a risk to patients and dental healthcare personnel. 4. Evaluate the oral healthcare needs of each patient with transmissible disease(s). 5. Identify and define key terms and concepts related to exposure control, clinical barriers, and latex sensitivity. 6. Explain the rationale and techniques for exposure control. 7. Identify the criteria for selecting effective barriers. 8. Explain the rationale, mechanics, and guidelines for hand hygiene. 9. Identify and describe the clinical manifestations and management of latex sensitivity. 10. Describe the basic considerations for safe infection control practices. 11. Explain methods for cleaning and sterilizing instruments. 12. Describe procedures to prepare, clean, and disinfect the treatment area. 13. Explain process for managing hypodermic needles and occupational post-exposure management. 14. List types of waste disposal and explain how each type is handled. 15. Discuss basic infection prevention and control concepts (Darby). 16. Explain the similarities and differences between the infection control model and the model of dental hygiene care (Darby). 17. Identify the government agencies that play key roles in regulation of infection control standards (Darby). 18. Discuss the standard of care, including assessment of risk of disease transmission in oral healthcare and planning of appropriate control measures (Darby). 19. Explain in detail the four principles of infection control, including selecting appropriate protective attire for dental hygiene patient care and preparing the dental environment before and after patient care (Darby). 20. Discuss strategies to prevent disease transmission and actions healthcare personnel can take to stay healthy (Darby).	10	0	0

Course Segment	Learning Outcomes	Lecture Hours	Lab Hours	Clinical Hours
Medical History	1. Relate and define key terms and concepts utilized in the creation of patient histories. 2. Explain the significance and purpose of accurate and complete patient medical, dental, and psychosocial histories. 3. Compare and contrast the different methods available for the compilation of patient histories and the advantages and disadvantages of each. 4. Discuss how the components of patient histories relate directly to the application of patient care. 5. Explain the purpose of recording personal, dental, and health histories (Darby). 6. Discuss a health history assessment and collect and document health history data by utilizing patient-centered interviewing techniques (Darby). 7. Describe the legal and ethical issues related to the health history (Darby). 8. Discuss decision making after the health history is obtained, including the interpretation of patient data and the degree of medical risk, understanding the indications and rationale for prophylactic antibiotic premedication and identifying the need for physician consultation and collaboration with other healthcare professionals to establish an individual dental hygiene care plan (Darby).	4	0	0
Extraoral and Intraoral Exam	1. Explain the rationale for a comprehensive extra and intraoral examination. 2. Explain the systematic sequence of the extra and intraoral examination. 3. Identify normal hard and soft tissue anatomy of the head, neck, and oral cavity. 4. Describe and document physical characteristics (size, shape, color, texture, and consistency) and morphologic categories (elevated, flat, and depressed lesions) for notable findings. 5. Identify suspected conditions that require follow-up and referral for medical evaluation. 6. Apply knowledge of clinical assessment to the recognition of typical head and neck anatomic structures, as well as atypical or abnormal findings (Darby). 7. Conduct the extraoral and intraoral clinical assessment using proper methods and sequence (Darby). 8. Describe and document significant findings in the patient's record using precise descriptive terms to form a dental hygiene diagnosis. Also, apply appropriate follow-up and referral practices when atypical or abnormal tissue changes warrant further medical or dental evaluations (Darby). 9. Describe common types of orofacial cancer. Also, understand how orofacial cancer affects the head and neck (Darby). 10. Involve the patient in oral self-examination techniques and recommend their everyday use, as well as consider the dental hygienist's role in cancer detection methods (Darby).	6	0	0
Ultrasonic Scaling	1. Describe and demonstrate fundamental techniques for manual and power instrumentation (Wilkins). 2. Value the role of ultrasonic instrumentation in accomplishing the objectives of periodontal debridement in terms of the advantages and indications (Darby). 3. Relate the mechanisms of action of ultrasonic instruments to effective debridement of the tooth surface (Darby). 4. Compare and contrast magnetostrictive and piezoelectric ultrasonic instruments and scaling techniques (Darby). 5. Apply information about the relationship of key operational and technique variables to the mechanisms of ultrasonic debridement. Produce a level of acoustic power suitable for the treatment objective through proper adjustment of the operational variables. Consider the influence of tip design on clinical performance to guide tip selection based on the treatment objective and the anatomy of the treatment site (Darby). 6. Discuss the acoustic power produced by an ultrasonic scaler (Darby). 7. Execute proper ultrasonic instrumentation technique with any tip design in any area of the dentition (Darby). 8. Discuss assessment and management of using ultrasonic instrumentation for patient care (Darby). 9. Discuss the history and technologic advances of powered instrumentation (Gehrig). 10. Name the major types of powered instrumentation technology (Gehrig). 11. Name the two subtypes of ultrasonic powered instrumentation technology (Gehrig).	3	0	0

Course Segment	Learning Outcomes	Lecture Hours	Lab Hours	Clinical Hours
Ultrasonic Scaling (cont'd)	12. Describe the various modes of action of powered instrumentation devices (Gehrig). 13. Compare and contrast the advantages and limitations of powered instrumentation (Gehrig). 14. Discuss the medical and dental contraindications for powered instrumentation (Gehrig). 15. Define the terms "frequency" and "amplitude" and describe how these factors determine the cleaning efficiency of powered instrumentation (Gehrig). 16. Compare and contrast the design features of standard and slim powered working ends (Gehrig). 17. Discuss criteria for the selection of powered working ends in relation to the instrumentation task to be performed (Gehrig). 18. Demonstrate how to determine powered working-end wear and at what point a working-end should be discarded (Gehrig). 19. Define the term "active working-end area" as it pertains to a powered working-end (Gehrig).			
Dental Charting	1. Identify and define key terms and concepts related to written and computerized dental records and charting. 2. Describe concepts related to ensuring confidentiality and privacy of patient information. 3. Discuss the various components of a patient's permanent, comprehensive dental record. 4. Recognize and explain a systematic method for documenting patient visits. 5. Apply the proper methods of documentation required to fulfill dental hygiene responsibilities (Darby). 6. Discuss the classification of dental caries and restorations (Darby). 7. Integrate tooth assessment and documentation into the dental hygiene process of care (Darby).	3.5	0	0
Dental Stains and Discolorations/Extrinsic Stain Removal	1. Describe the difference between a cleaning agent and a polishing agent. 2. Explain the basis for selection of the grit of polishing paste for each individual patient. 3. Discuss the rationale for avoiding polishing procedures on areas of demineralization. 4. Explain the effect abrasive particle shape, size, and hardness have on the abrasive qualities of a polishing paste. 5. Explain the types of powdered polishing agents available and their use in the removal of tooth stains. 6. Explain patient conditions that contraindicate the use of air-powder polishing. 7. Discuss rubber cup tooth polishing technique and armamentarium selection for various patient conditions, and perform the procedure on a patient (Darby). 8. Describe patient education and motivation in relation to extrinsic stain removal procedures (Darby). 9. Value the legal and ethical principles that apply to tooth polishing (Darby).	3.5	0	0
Vital Signs	1. List and explain the vital signs and why proper assessment is key to identifying the patient's health status. 2. Demonstrate and explain the correct procedures for assessing the vital signs: temperature, respiration, radial pulse, and blood pressure. 3. Recognize and explain factors that may affect temperature, respiration, pulse, and blood pressure. 4. Describe and evaluate equipment used for assessing temperature and blood pressure. 5. Recognize normal vital signs across varied age groups. 6. Discuss vital signs and the importance of minimizing risk of a medical emergency via vital signs assessment (Darby). 7. Discuss the significance of body temperature, assess and record body temperature, and make decisions based on observed body temperature (Darby). 8. Discuss the significance of pulse rate, assess and record pulse rate, and make decisions based on observed pulse rate (Darby). 9. Discuss the significance of respiration rate, assess and record respiration rate, and make decisions based on observed respiration rate (Darby). 10. Discuss the significance of blood pressure, assess and record blood pressure, and make decisions based on observed blood pressure (Darby).	3.5	1	0

Course Segment	Learning Outcomes	Lecture Hours	Lab Hours	Clinical Hours
Hepatitis Virus and HIV	1. Describe and identify transmissible diseases that may pose a risk to patients and dental healthcare personnel. 2. Discuss the history of human immunodeficiency virus (HIV) in relation to the current status of HIV and AIDS (Darby). 3. Describe how HIV is transmitted, HIV latency and immune status, and medication therapy for patients with HIV (Darby). 4. Elucidate why people with weakened immune systems may be more vulnerable to an opportunistic infection (OI) and describe the epidemiology of HIV infection and AIDS. 5. Explain the concept of the HIV continuum (Darby). 6. Describe the dental hygiene process of care in patients with HIV, including systemic health and oral health considerations (Darby). 7. Discuss the risk of HIV infection among healthcare workers and mechanisms to prevent transmission in the dental office (Darby).	3	0	0
The Medically Compromised Patient	1. Describe the ASA categories. 2. Understand the section Medically Compromised Patient found in Parkland's Clinic Handbook. 3. Define infective endocarditis. 4. Understand the American Heart Association Recommendations that require antibiotic premedication prior to dental and dental hygiene treatment: a. Artificial/prosthetic heart valves; b. Previous endocarditis; c. Certain specific serious congenital heart conditions: unrepaired cyanotic congenital heart disease including shunts and conduits, completely repaired congenital heart disease with prosthetic material or device, and repaired congenital heart disease with residual defects at the site; and d. Cardiac transplantation recipients with cardiac valvular disease. 5. Understand and be able to communicate the standard prophylactic regimen. 6. Understand the standard prophylactic regimen when the patient is allergic to amoxicillin/ampicillin/penicillin.	3	0	0
Other Transmissible Diseases of Concern to the DHCW	1. Review the origin, infection potential, and cross-contamination of micro-organisms of the oral cavity. 2. Review the infectious process, i.e., the essential features for disease transmission, factors that influence the development of infection, and the factors that alter normal defenses. 3. Describe airborne infections such as aerosols, spatter, origin, contents and concentration. 4. Review prevention of transmission. 5. Describe the pathogens that are transmissible by the oral cavity including the disease or condition, route or mode of transmission, incubation period, communicable period, and vaccine. 1) Herpes Simplex Virus: Type 1 (HSV-1), Type 2 (HSV-2), Primary (acute herpetic gingivastomatitis), Herpetic Whitlow, Ocular Herpes; 2) Varicella-zoster virus (VSV): Chicken pox, Herpes zoster (shingles); 3) Epstein-Barr virus (EBV): Infectious mononucleosis; 4) Cytomegalovirus (CMV): Neonatal cytomegalovirus infection, Cytomegaloviral disease; 5) Mycobacterium tuberculosis; 6) Corynebacterium diphtheria; 7) Treponema pallidum: Syphilis, Congenital syphilis; 8) Neisseria gonorrhoeae: Gonorrhea, Gonococcal pharyngitis; 9) Bordetella pertussis: Whooping cough, Pertussis; 10) Mumps Virus (paramyxovirus): Infectious parotitis (mumps); 11) Poliovirus types 1, 2, 3; 12) Influenza viruses A, B, C; 13) Measles virus (Morbilli-virus): Rubeola (measles); 14) Rubella virus (Togavirus): Rubella (German measles); 15) Streptococci (beta-hemolytic): Streptococcal (sore throat), Scarlet fever; 16) Streptococcus pyogenes: Impetigo, Erysipelas; 17) Candida albicans (Candidiasis); 18) Streptococcus pneumonia: Pneumonia, Pneumococcal pneumonia; 19) Coronavirus (specifically Covid-19/SARS-CoV-2).	3	0	0

Course Segment	Learning Outcomes	Lecture Hours	Lab Hours	Clinical Hours
Lab Session #1: Equipment and Positioning	1. Discuss the equipment and areas included in a patient treatment area in a dental/dental hygiene office or clinic. 2. Compare and contrast the dental hygiene care environment in a dental office, college or university, and correctional facility to include the components of the dental hygiene treatment area. 3. Apply knowledge of the dental hygiene care environment unique to a correctional facility and an institutionalized setting and delivery of patient care services in that setting. 4. Explain the adjustments that a dental hygiene care provider must consider when delivering services in a school-based oral health prevention program, mobile dental facility, or outreach setting using teledentistry. Also, describe the influence of patient setting on the dental hygiene care environment. 5. Describe the rules of etiquette in relationship to patient reception and care. 6. Describe the components of ergonomic practice and relationship to career longevity. 7. Identify the range of working positions for a right or left-handed clinician. 8. Describe the elements of a neutral working position. 9. Explain the musculoskeletal disorders and their causes and symptoms most often associated with the clinical practice of dental hygiene. 10. Explain the ergonomic risk factors of clinical dental hygiene practice. 11. Define the term ergonomics and discuss how ergonomic principles are helpful in the practice of dental hygiene. 12. Define the term musculoskeletal disorder (MSD) and discuss the significance of MSDs in the practice of dental hygiene. 13. Name four ergonomic hazards for dental hygienists. 14. Develop an understanding and appreciation for ergonomic guidelines to minimize the exposure of dental hygienists to musculoskeletal stress. 15. Identify musculoskeletal disorders commonly experienced by dental health professionals, their causes, and prevention. 16. Discuss and demonstrate the elements of neutral seated posture for the clinician. 17. Demonstrate correct patient position relative to the clinician and positioning of dental equipment so that it enhances neutral clinician posture. 18. State the reason why it is important that the top of the patient's head is even with top edge of the chair headrest. Demonstrate how to correctly position a short individual and a child in the dental chairs so that the patient is comfortable and the clinician has good vision and access to the oral cavity. 19. In the preclinical or clinical, self-evaluate to identify the use of incorrect ergonomic principles and demonstrate how to correct the problem. 20. Demonstrate and maintain neutral seated posture for each of the mandibular and maxillary treatment areas. 21. Demonstrate correct patient position relative to the clinician. 22. Demonstrate, from memory, the clock positions for each of the mandibular and maxillary treatment areas. 23. Demonstrate standing clinician position for the mandibular treatment areas. 24. Recognize incorrect position and describe or demonstrate how to correct the problem.	0	4.5	0

Lab Session #2: Skill Development	1. Apply ergonomic principles in dental hygiene practice, considering environmental, equipment, positioning, performance, and person-level factors. 2. Demonstrate strengthening and chairside stretching exercises. Also, discuss the importance of a regular exercise regimen. 3. Compare and contrast common repetitive strain injuries in terms of signs, symptoms, and risk factors. Also, practice chairside measures for prevention of RSIs and other musculoskeletal disorders that a dental hygienist should take before, during, and after patient care appointments. 4. Demonstrate exercises recommended for reducing the risk of injury. 5. Identify the three main parts of a periodontal instrument. 6. Differentiate between various types of removal instruments based on their design. 7. State the indications and contraindications for the use of various removal instruments. 8. Describe and demonstrate fundamental techniques for manual and power instrumentation. 9. Practice exercises designed to develop hand dexterity and prevent trauma. 10. Given a variety of periodontal instruments, identify the parts of each instrument. 11. Identify the fingers of the hand as thumb, index, middle, ring, and little fingers. 12. Understand the relationship among correct finger position in the modified pen grasp, the prevention of musculoskeletal problems, and the control of a periodontal instrument during instrumentation. 13. Demonstrate the modified pen grasp using precise finger placement on the handle of the periodontal instrument. 14. Describe the function each finger serves in the modified pen grasp. 15. Define joint hypermobility and describe how hyperextended joints in the modified pen grasp can affect periodontal instrumentation. 16. Recognize incorrect finger position in the modified pen grasp and describe how to correct the problem. 17. Select the correct glove size for own hands and explain how the glove size selected meets the criteria for proper glove fit. 18. Understand the relationship between proper glove fit and the prevention of musculoskeletal problems in the hands. 19. Adapt exercises for improved hand strength. 20. Name and describe three common types of dental mirrors. 21. Demonstrate the use of a mirror for indirect vision, retraction, indirect illumination, and transillumination. 22. Maintain neutral seated posture while using the recommended clock position for each of the mandibular and maxillary treatment areas. 23. While seated in the correct clock position with the patient's head correctly positioned, demonstrate optimum INDIRECT vision in each sextant of the mouth while maintaining neutral positioning. 24. Position equipment so that it enhances neutral positioning. 25. Maintain neutral seated position while using the recommended clock position for each of the mandibular and maxillary anterior treatment areas. 26. While seated in the correct clock position for the treatment area, access the maxillary posterior teeth with optimum vision while maintaining neutral positioning. 27. Demonstrate correct mirror use, grasp, and finger rest in each of the anterior sextants while maintaining neutral positioning of wrist and finger joints. 28. Demonstrate finger rests using precise finger placement on the handle of a periodontal instrument. 29. Recognize incorrect mirror use, grasp or finger rest and describe how to correct the problem. 30. Understand the relationship between proper stabilization of the dominant hand during instrumentation and the prevention of musculoskeletal problems in the clinician's hands and injury to the patient. 31. Understand the relationship between the large motor skills, such as positioning, and small motor skills, such as finger rests. Recognize the importance of initiating these skills in a step by step manner. 32. Position equipment so that it enhances the neutral positioning. 33. While seated in the correct clock position for the treatment area, access the anterior teeth with optimum vision while maintaining neutral positioning. 34. Demonstrate finger rests using precise finger placement on the handle of a periodontal instrument.	0	4.5	0

Course Segment	Learning Outcomes	Lecture Hours	Lab Hours	Clinical Hours
Lab Session #2: Skill Development (cont'd)	35. Recognize incorrect mirror use, grasp, or finger rest and describe how to correct the problem. 36. Understand the relationship between proper stabilization of the dominant hand during instrumentation and the prevention of musculoskeletal problems in the clinician's hands and injury to the patient. 37. Understand the relationship between the large motor skills, such as positioning, and small motor skills, such as finger rests. Recognize the importance of initiating these skills in a step by step manner. 38. Demonstrate exercises that lessen muscle imbalances through chairside stretching throughout the workday. 39. Identify each working end of a periodontal instrument by its design name and number. 40. Recognize the design features of instrument handles and shanks and discuss how these design features relate to the instrument's use. 41. Describe the advantages and limitations of the various design features available for instrument handles and shanks. 42. Given a variety of periodontal instruments, demonstrate the ability to select instruments with handle design characteristics that will reduce the pinch force required to grasp the instrument. 43. Given a variety of periodontal instruments, sort the instruments into those with simple shank design and those with complex shank design. 44. Given a variety of sickle scalers and curets, identify the face, back, lateral surfaces, cutting edges, and toe or tip on each working end. 45. Given a variety of periodontal instruments, determine the intended use of each instrument by evaluating its design features and classification. 46. Given any instrument, identify where and how it may be used on the dentition (i.e., assessment or calculus removal, anterior/posterior teeth, supragingival or subgingival use). 47. Name and define four stages of psychomotor development described in this module. 48. Name and apply five strategies that assist in acquiring psychomotor skills. 49. Define motion activation as it relates to periodontal instrumentation. 50. Name two types of motion activation commonly used in periodontal instrumentation. 51. Define and explain the uses of wrist rocking motion during periodontal instrumentation. 52. Using a pencil, demonstrate the correct technique for wrist rocking motion activation. 53. When demonstrating a wrist rocking motion, use correct instrumentation technique. 54. Define and explain the uses of digital motion activation during periodontal instrumentation. 55. Using a pencil, demonstrate the correct technique for digital motion activation. 56. When demonstrating digital motion activation, use correct instrumentation technique. 57. Define and explain the use of the handle roll during periodontal instrumentation. 58. Using a pencil, demonstrate the handle roll using correct technique. 59. Explain how the teeth are positioned in the dental arches. 60. Using a mirror handle and typodont, correctly orient the working end of a probe to the various tooth surfaces of the dentition.			

Course Segment	Learning Outcomes	Lecture Hours	Lab Hours	Clinical Hours
Lab Session #3: Asepsis	1. Identify and define key terms and concepts related to exposure control, clinical barriers, and latex sensitivity (Chapter 6, Wilkins). 2. Explain the rationale and techniques for exposure control (Chapter 6, Wilkins). 3. Identify the criteria for selecting effective barriers (Chapter 6, Wilkins). 4. Explain the rationale, mechanics, and guidelines for hand hygiene (Chapter 6, Wilkins). 5. Identify and describe the clinical manifestations and management of latex sensitivity (Chapter 6, Wilkins). 6. Describe the basic considerations for safe infection control practices (Chapter 7, Wilkins). 7. Explain methods for cleaning and sterilizing instruments (Chapter 7, Wilkins). 8. Describe procedures to prepare, clean, and disinfect the treatment area (Chapter 7, Wilkins). 9. Explain process for managing hypodermic needles and occupational post-exposure management (Chapter 7, Wilkins). 10. List types of waste disposal and explain how each type is handled (Chapter 7, Wilkins). 11. Discuss basic infection prevention and control concepts (Chapter 10, Darby). 12. Explain the similarities and differences between the infection control model and the model of dental hygiene care (Chapter 10, Darby). 13. Identify the government agencies that play key roles in regulation of infection control standards (Chapter 10, Darby). 14. Discuss the standard of care, including assessment of risk of disease transmission in oral healthcare and planning of appropriate control measures (Chapter 10, Darby). 15. Explain in detail the four principles of infection control, including selecting appropriate protective attire for dental hygiene patient care and preparing the dental environment before and after patient care (Chapter 10, Darby). 16. Discuss strategies to prevent disease transmission and actions healthcare personnel can take to stay healthy (Chapter 10, Darby). 17. Describe and demonstrate the procedure for disinfection of the dental chair unit, supplies consistent with OSHA, CDC, Parkland's Exposure Control Guideline, Standard Operating Procedures, and Parkland College Policies and Procedures. 18. Describe and demonstrate the procedure for acquiring and setting up bracket tray sterile supplies consistent with instructor's directions. 19. Demonstrate and describe the preparation of instruments for sterilization consistent with the Parkland College Policies and Procedures of the Dental Hygiene Program and SOPs.	0	16	0
Lab session #4 and #5: Basic Skill Development	1. Describe and demonstrate the sequence of clinical procedures that occurs when DHG 114 meets in clinic, consistent with the handout. 2. Describe and demonstrate the responsibilities of the Clinical Assistant Group. 3. Describe and demonstrate laboratory attire consistent with infection control protocols. 4. Describe and demonstrate professional behavior consistent with Policies and Procedures Manual and Clinic Handbook.	0	9	0
Lab Session #6, #7, #8, #9: Explorers	1. Given a variety of explorer designs, identify the design characteristics of each explorer and describe the advantages and limitations of the various explorer designs. 2. Describe how the clinician can use visual clues to select the correct working end of a double ended explorer. 3. Demonstrate correct adaptation of the explorer tip. 4. Demonstrate an assessment stroke with an explorer while maintaining correct position, correct finger rests and precise finger placement in the grasp. 5. Demonstrate detection of supragingival calculus deposits using compressed air. 6. Name and describe several common types of calculus deposit formations. 7. Explain why the forceful application of an explorer tip into a carious pit or fissure could be potentially harmful.	0	12	0

Lab Session #10: Adaptation and Instrumentation	1. Discuss the functional components of hand-activated instruments used in dental hygiene care. 2. Differentiate treatment and assessment dental hygiene hand-activated instruments. 3. Select design considerations for assessment and treatment instruments based on the periodontal health status and needs of a patient. 4. Relate the basic stroke principles of hand-activated instrumentation including angulation, adaptation, and activation to the requirements for effective instrumentation. 5. Discuss treatment instrument selection and criteria considerations in determining the appropriate instrument design and blade size, and customize details regarding their sequencing and use for periodontitis-affected teeth. 6. Elucidate the benefits and ethical principles associated with maintaining sharp hand-activated instruments. Also, discuss proper clinician/patient positioning, body mechanics, field of vision, hand grasp, and lateral pressure. 7. Summarize the key elements of comprehensive post-treatment patient education. 8. Define the term adaptation as it relates to periodontal instrumentation. 9. Identify the leading (toe), middle, and heel thirds of the working end of a sickle scaler and a curet. 10. Using a typodont and a sickle, describe and demonstrate correct adaptation of the working end to the midline and line angle of a mandibular anterior tooth. 11. Explain problems associated with incorrect adaptation during periodontal instrumentation. 12. Demonstrate how to maintain adaptation to curved tooth surfaces while using a correct modified pen grasp and wrist motion activation. 13. Given a universal curet and a typodont, explain how to use visual clues to select the correct working end for use on the distal surface of a mandibular premolar tooth. 14. Use precise finger placement on the handle of a periodontal instrument while demonstrating adaptation and selection of the correct working end of a treatment area. 15. Using a sickle scaler and a periodontal typodont, demonstrate the three basic stroke directions: vertical, oblique, and horizontal. 16. Compare and contrast the functions and characteristics of three types of instrumentation strokes: assessment, calculus removal, and root debridement. 17. Demonstrate how to stabilize the hand and instrument to perform an instrumentation stroke by using an appropriate intraoral fulcrum and the ring finger as a "support beam" for the hand. 18. Demonstrate the elements of an assessment stroke in a step by step manner. 19. Use precise finger placement on the handle of a periodontal instrument while demonstrating assessment strokes. 20. Define the term angulation as it relates to the use of a sickle scaler for supragingival periodontal instrumentation. 21. Explain the problems associated with using an angulation greater than 90 degrees for calculus removal. 22. Explain the problems associated with using an angulation less than 45 degrees for calculus removal. 23. Describe the correct approach for removing a large supragingival calculus deposit and differentiate this technique from a different approach that leads to burnishing of the deposit. 24. List from memory the sequence of steps used for supragingival calculus removal. 25. Explain the importance of learning to rely on the sense of touch for successful performance of subgingival instrumentation. 26. Define the terms insertion and "Get Ready Zone" as they apply to periodontal instrumentation. 27. On a typodont, demonstrate the steps used for insertion beneath the gingival margin. 28. Define and state the objectives of periodontal instrumentation. Explain why complete removal of all subgingival biofilm and calculus deposits is so important to successful periodontal instrumentation. 29. Explain why "tissue response" rather than "root smoothness" is the standard for successful subgingival instrumentation. 30. Discuss the importance of the re-evaluation appointment in the treatment of patients with subgingival calculus deposits.	0	4.5	0

Course Segment	Learning Outcomes	Lecture Hours	Lab Hours	Clinical Hours
Lab Session #10: Adaptation and Instrumentation (cont'd)	31. Define the term nonresponsive disease sites and name signs that indicate that nonresponsive sites are present at a re-evaluation appointment. 32. Describe the types of healing that may result following successful instrumentation of root surfaces. 33. Explain the importance of instrumenting the root surface in the series of narrow stripes. 34. Define and explain the significance of multidirectional strokes in subgingival stroke removal. 35. On a typodont, correctly demonstrate insertion, the Get Ready Zone, calculus removal technique (close, open, activate), short, biting strokes, use of zones, and use of multidirectional strokes for subgingival instrumentation while maintaining precise finger placement in the grasp and correct fulcruming technique. 36. Discuss the ways in which a clinician's choice of words can facilitate or hinder communication with patients regarding dental hygiene care. Give several examples of word choices that help or hinder the patient's understanding of the procedure of periodontal instrumentation.			
Lab Session #11, #12: Sickle Scalers	1. Given a variety of sickle scaler instruments, identify the design characteristics. 2. List the uses and limitations of sickle scalers. 3. List characteristics of a calculus removal stroke. 4. List from memory the sequence of steps used for calculus removal. 5. Given a posterior sickle scaler, demonstrate how to use visual clues to identify the correct working end. 6. Demonstrate correct adaptation and angulation of a sickle scaler. 7. Explain why the lower shank of a sickle scaler should be tilted slightly toward the tooth surface being instrumented to obtain correct angulation. 8. Demonstrate correct use of a sickle scaler in the anterior sextants while maintaining correct position, correct finger rests, and precise finger placement in the grasp. 9. Demonstrate the three skills used to maintain adaptation to the proximal surfaces. 10. Demonstrate correct use of a sickle scaler in the posterior sextants while maintaining correct position, correct finger rests, and precise finger placement in the grasp.	0	9	0
Lab Session #13, #14, #15: Curets	1. Given a variety of universal curets, identify the design characteristics of each instrument. 2. Discuss the advantages and limitations of the design characteristics of universal curets. 3. Name the uses of universal curets. 4. Describe how the clinician can use visual clues to select the correct working end of a universal curet on anterior and posterior teeth. 5. Given a variety of universal curets to choose from and a task, select the best instrument for the specified task. 6. Explain why the lower shank of a universal curet should be tilted slightly toward the tooth surface being instrumented to obtain correct angulation. 7. Using a universal curet, demonstrate correct adaptation and use of calculus removal strokes on anterior and posterior teeth while maintaining correct position, finger rest, and precise finger placement in the grasp. 8. Using a universal curet, demonstrate horizontal calculus removal strokes. 9. Given a variety of area specific curets, identify the design characteristics of each instrument. 10. Discuss the advantages and limitations of the design characteristics of area specific curets. 11. Name the uses of area specific curets. 12. Explain why a set of area specific curets is needed to instrument the entire dentition. 13. Describe how the clinician can use visual clues to select the correct working end of an area specific curet on anterior and posterior teeth. 14. Using area specific curets, demonstrate correct adaptation and use of calculus removal strokes on the anterior and posterior teeth while maintaining correct position, correct finger rests, and precise finger placement in the grasp. 15. Using area specific curets, demonstrate horizontal calculus removal strokes. 16. Given a sickle scaler, universal curet, or area-specific curet, identify its function and where it should be used on the dentition.	0	9	0

Course Segment	Learning Outcomes	Lecture Hours	Lab Hours	Clinical Hours
Lab Session #16, #17, #18: Periodontal Probing Techniques	1. Identify the millimeter markings on several calibrated periodontal probes, including some probe designs that are not in the school instrument kit. 2. Identify factors that can affect the accuracy of periodontal probing. 3. Discuss the characteristics of effective probing technique in terms of adaptation and angulation of the tip, amount of pressure needed, instrumentation stroke, and number and location of probe readings for each tooth. 4. Using a periodontal probe, demonstrate the correct adaptation on facial, lingual, and proximal surfaces and beneath the contact area of two adjacent teeth (col area). 5. While using correct positioning, mirror, grasp, and finger rests, demonstrate a walking stroke in all sextants of the dentition. 6. Determine a probing depth accurately to within 1 mm of an instructor's reading. 7. Differentiate between a normal sulcus and a periodontal pocket and describe the position of the probe in each. 8. Define and discuss the terms informed consent, capacity for consent, written consent, and informed refusal as these terms apply to periodontal instrumentation. 9. Discuss the uses of calibrated and furcation probes in performing a periodontal assessment. 10. Describe the rationale for assessing tooth mobility. 11. Demonstrate the technique for assessing tooth mobility and use a mobility rating scale to classify the extent of mobility. 12. Describe the rationale and technique for determining the level of the gingival margin. 13. Describe the consequences of loss of attachment to the tooth. 14. Given the probing depth measurements and gingival margin levels for a tooth, compute the clinical attachment loss. 15. Describe the rationale for furcation detection. 16. Demonstrate correct technique for use of a furcation probe on a periodontal typodont and classify furcation involvement according to severity. 17. Use advanced probing techniques to accurately assess a student partner's periodontium. 18. Use periodontal measurements to differentiate a healthy periodontium from periodontitis and record these findings on a periodontal chart. 19. Describe the components of a comprehensive periodontal examination (Wilkins Chapter 20). 20. List the instruments used for a periodontal examination (Wilkins Chapter 20). 21. Explain the technique for use of the periodontal probe and explorers (Wilkins Chapter 20). 22. Explain how procedure for the comprehensive examination will be described to the patient (Wilkins Chapter 20).	0	9	0
Lab Session #19: Powered Instruments and Ultrasonics	1. Discuss the history and technologic advances of powered instrumentation. 2. Name the major types of powered instrumentation technology. 3. Name the two subtypes of ultrasonic powered instrumentation technology. 4. Describe the various modes of action of powered instrumentation devices. 5. Compare and contrast the advantages and limitations of powered instrumentation. 6. Discuss the benefits to the patient when powered instrumentation is integrated into the treatment plan. 7. Discuss medical and dental contraindications for powered instrumentation. 8. Define the terms frequency and amplitude and describe how these factors determine the cleaning efficiency of powered instrumentation. 9. Compare and contrast the design features of standard and slim perio powered working ends. 10. Discuss criteria for the selection of powered working ends in relation to the instrumentation task to be performed. 11. Demonstrate how to determine powered working end wear and at what point a working end should be discarded. 12. Define the term active working end area as it pertains to a powered working end. In a clinic setting, demonstrate correct adaptation of the active portion of a powered instrument working end.	0	3	0

Course Segment	Learning Outcomes	Lecture Hours	Lab Hours	Clinical Hours
Lab Session #19: Powered Instruments and Ultrasonics (cont'd)	13. In a clinic setting, demonstrate correct stroke pressure for use with a powered working end. 14. In a clinic setting, demonstrate correct working end adaptation in a transverse orientation and vertical orientation. 15. Given a set of paired, curved working ends, correctly identify the right and left working end. 16. Demonstrate an efficient sequence for use of curved working ends. 17. Describe an effective strategy for removing tenacious calculus deposits during powered instrumentation. 18. Demonstrate how to access and enter a furcation area of a multirooted tooth. 19. Identify pre-treatment considerations before the initiation of powered instrumentation. 20. Set up a powered instrumentation device for use. 21. Demonstrate correct technique for use of a powered instrumentation device, including treatment room, clinician and patient preparation, armamentarium set up and infection control, adjustment of water flow, grasp, working end adaptation, stroke, and fluid control. 22. Value the role of ultrasonic instrumentation in accomplishing the objectives of periodontal debridement in terms of the advantages and indications. 23. Relate the mechanisms of action of ultrasonic instruments to effective debridement of the tooth surface. 24. Compare and contrast magnetostrictive and piezoelectric ultrasonic instruments and scaling techniques. 25. Apply information about the relationship of key operational and technique variables to other mechanisms of ultrasonic debridement. 26. Produce a level of acoustic power suitable for the treatment objective through proper adjustment of the operational variables. 27. Consider the influence of tip design on clinical performance to guide tip selection based on the treatment objective and the anatomy of the treatment site. 28. Discuss the acoustic power produced by an ultrasonic scaler. 29. Execute proper ultrasonic instrumentation technique with any tip design in any area of the dentitions. 30. Discuss assessment and management of using ultrasonic instrumentation for patient care.			
Lab Session #22 and #23: Dental Charting, Medical History, Oral Examination, Computer	1. Demonstrate knowledge and skills in using the computer to document patient treatment. 2. Document treatment and services rendered. 3. Complete Parkland College Medical History, Dental History, and Oral Exam electronic forms. 4. Take and record a partner's blood pressure and educate accordingly. 5. Examine the oral cavity and related structures of a partner using the prescribed sequence. 6. Record all findings on the Parkland College Oral Examination electronic form. 7. Question the patient about their dental history and correctly record all responses. 8. Position patient and self to obtain maximum visibility and accessibility to the field of operation and equipment and supplies. 9. Use sterile instruments and aseptic techniques. 10. Use fulcrums, mouth mirror, dental light, and compressed air to see or reach each structure utilizing direct or indirect illumination. a) Use a systematic order of inspection. b) Select the appropriate instrument for examination of each structure. c) Use the periodontal probe correctly to identify sulcus depth within one millimeter on each tooth. d) Utilize the explorer correctly to identify defects in tooth structure, deviations in tooth contour, and dental deposits. e) Utilize handle of instrument correctly to ascertain degree of mobility. f) Palpate lymph nodes and oral mucosa correctly to identify non-normal consistency. g) Observe the location of the patient's gingival margin. h) Record the position of the gingival margin if there are any areas of recession. i) Observe and record areas of missing teeth. j) Observe and record areas of open contact. k) Chart malpositions of individual teeth. l) Detect and record the location of overhanging margins on restorations in Clinical Notes. 11. Observe and record on Dentrix using codes all deviations from normal appearance of the teeth and gingiva.	0	6	0

Course Segment	Learning Outcomes	Lecture Hours	Lab Hours	Clinical Hours
Lab Session #22 and #23: Dental Charting, Medical History, Oral Examination, Computer (cont'd)	12. Identify and record all areas of biofilm. 13. Identify and inform the patient of any oral conditions which may be a factor in biofilm retention. 14. Utilize this information as a guide to determine which type of control program would be most beneficial for this particular patient. 15. Utilize this information to provide recommendations and suggestions regarding home care instructions which would be most appropriate for the special oral health needs of each patient. 16. Utilize this information to plan the patient's treatment. 17. Demonstrate dental biofilm removal procedure (traditional or selective biofilm removal). 18. Remove all biofilm. Use rubber cup, brush, floss, toothbrush, etc. 19. Explain the rationale for a topical and varnish fluoride application. 20. Explain the procedure for varnish fluoride application in terms a patient will understand. 21. Identify the armamentarium used when applying topical and varnish fluorides. 22. Explain and demonstrate the prescribed procedures for applying varnish fluorides. 23. Describe the precautions for use of varnish fluorides. 24. Describe and demonstrate care and cleaning of the handpiece, shields, and unit suctions. 25. Discuss rubber-cup tooth polishing technique and armamentarium selection for various patient conditions, and perform the procedure on a patient (Darby, Chapter 32). 26. Describe patient education and motivation in relation to extrinsic stain removal procedures (Darby, Chapter 32). 27. Value the legal and ethical principles that apply to tooth polishing services (Darby, Chapter 32). 28. Describe the difference between a cleaning agent and a polishing agent (Wilkins, Chapter 42). 29. Explain the basis for selection of the grit of polishing paste for each individual patient (Wilkins, Chapter 42). 30. Discuss the rationale for avoiding polishing procedures on areas of demineralization (Wilkins, Chapter 42). 31. Explain the effect abrasive particle shape, size, and hardness have on the abrasive qualities of a polishing paste (Wilkins, Chapter 42). 32. Explain the types of powdered polishing agents available and their use in the removal of tooth stains (Wilkins, Chapter 42). 33. Explain patient conditions that contraindicate the use of air-powder polishing (Wilkins, Chapter 42).			
Lab Session #26: Instrument Sharpening	1. Describe the benefits of using sharp instruments. 2. Describe the consequences of using dull instruments. 3. Demonstrate proper technique for sharpening procedures for a variety of periodontal instruments. 4. Explain how to preserve optimal instrument design when sharpening. 5. List the benefits of using instruments with sharp cutting edges for periodontal instrumentation. 6. Define and differentiate the terms "sharp cutting edge" and "dull cutting edge". 7. Given a variety of periodontal instruments, distinguish between those with sharp cutting edges and those with dull cutting edges. 8. Demonstrate two methods for determining if a cutting edge is sharp. 9. Describe important design characteristics to be maintained when sickle scalers, universal curets, and area specific curets are sharpened. 10. Differentiate the following sharpening stones according to grain, recommended use, and preferred lubricant: composition synthetic stone, India stone, Arkansas stone, and ceramic stone. 11. Demonstrate the correct care of a sharpening stone. 12. Describe common sharpening errors. 13. Value the practice of sharpening at the first sign of dullness.	0	2.5	0

Course Segment	Learning Outcomes	Lecture Hours	Lab Hours	Clinical Hours
Lab Session #26: Instrument Sharpening (cont'd)	14. Compare and contrast the moving stone and the moving instrument techniques for instrument sharpening. 15. Describe and demonstrate the proper relationship of the instrument's working end to the sharpening stone. 16. Demonstrate the correct grasp for both the instrument and the sharpening stone when using the moving stone technique. 17. Demonstrate the correct finger rest and grasp when using the moving instrument technique. 18. Describe and demonstrate the sharpening procedure for sickle scalers, universal curets, and area specific curets using the moving stone and moving instrument techniques. 19. Sharpen a dull sickle scaler, universal curet, and area specific curet to produce a sharp, fine cutting edge while preserving all the original design characteristics of the working ends. 20. Demonstrate the procedure for using a plastic sharpening stick to determine if the entire length of a cutting edge is sharp.			

Total Contact Hours

Lecture Hours	Lab Hours	Clinical Hours
45	90	0