

DHYG 3703 - Dental Hygiene 3

Fall 2026 Syllabus, Section 01, CRN 41169,

Credit hours: 3

Instructor

Suzanne Smith

Email: smsmith05@ysu.edu

Public Instructor Information

Instructor Title: Professor

Instructor Professional Qualifications: MEd, Health Education & Promotion, Kent State University, 2006; BSAS, Dental Hygiene, Youngstown State University, 1991; AAS, Dental Hygiene, Youngstown State University, 1988

Instructor Office Location: Cushwa Hall, Room 1356

Instructor Office Phone: 330-941-1766

Course Description

3703. Dental Hygiene 3. Advanced dental hygiene instrumentation and techniques. Patient cases, problem identification, and strategies. Fundamentals of sonic and ultrasonic instrumentation. Prereq.: DHYG 2602. 3 s.h.

TEACHING METHODS/LEARNING EXPERIENCES

- A. Lecture with PowerPoint Presentations
- B. Study guides for each lecture
- C. Online Continuing Education Courses on dentalcare.com and colgateprofessional.com
- D. Evidence-Based Decision-Making Worksheets and PPT Template
- E. Bonebox Dental App and Hands-on instrumentation practice on typodonts
- F. Student PowerPoint Presentations

COURSE OUTLINE

- A. Course Introduction - Syllabus (1 hour)
- B. Advanced Techniques for Root Instrumentation (3 hours)
 - 1. Root instrumentation
 - a. Anatomical features
 - b. Attachment loss
 - 2. Advanced fulcrum techniques
 - a. Intraoral
 - b. Extraoral
 - c. Advantages
 - d. Disadvantages
 - 3. Strokes
 - a. Horizontal
 - b. Vertical



-
- c. Oblique
 - d. Activation (Wrist rock vs. digital activation)
 - C. Powered Instrument Design and Function (3 hours)
 - 1. Powered Instrumentation
 - a. Role
 - b. Technological advances
 - c. Sonic vs. ultrasonic devices
 - d. Instrument tip selection
 - e. Technique
 - f. Maintenance
 - g. Limitations
 - 1. Considerations for periodontal debridement
 - a. Medical and dental contraindications
 - b. Infection control
 - D. Subgingival Calculus Removal (2 hours)
 - 1. Detecting subgingival deposits (the importance of tactile sensitivity)
 - 2. Inserting a curet beneath the gingival margin
 - 3. Theoretical concepts of subgingival instrumentation
 - 4. A systematic stroke/calculus removal pattern
 - 5. Production of a calculus removal stroke and sequence of strokes
 - E. Evidence-Based Decision-Making (18 hours)
 - 1. Evidence-based Dental Hygiene Practice
 - a. Definition
 - b. Purpose
 - c. Need
 - d. Process
 - e. Intervention
 - 2. Evidence-based Research
 - a. Systematic approach
 - b. Publication and research types
 - c. Levels of evidence
 - d. Ethics
 - 3. Internet-Based health information
 - a. Literacy
 - b. Content analysis
 - 4. Plan treatment for patients
 - 5. Evidence-based Dental Hygiene Practice Presentations
 - F. Advanced Probing Techniques (3 hours)
 - 1. Uses of probes

-
- a. Periodontal assessment
 - b. Documenting oral deviations
 - 1. Attachment of teeth
 - a. Health
 - b. Disease
 - 1. Assessment of tooth mobility
 - a. Rationale
 - b. Mobility rating scale
 - 1. Furcations
 - a. Involvement
 - b. Documentation
 - G. Specialized Periodontal Instruments (3 hours)
 - 1. Characteristics of root morphology
 - 2. Curets
 - a. Universal
 - b. Area Specific Curets
 - c. Modified Universal Curets
 - 3. Specialized root instruments
 - a. Langer Curets
 - b. Vision Curvette
 - c. Quetian
 - d. O'Hehir
 - e. Diamond-coated
 - f. Dental endoscope
 - H. Concepts and Techniques for Instrument Sharpening (2 hours)
 - 1. Advanced sharpening techniques
 - 2. Benefits of using instruments with sharp cutting edges
 - 3. Important design characteristics to be maintained
 - a. Sickle scalers
 - b. Universal curets
 - c. Area-specific curets
 - 1. Common sharpening errors
 - 2. Infection control procedures
 - 3. Care of equipment
 - I. Dental Implants (2 hours)

1. Concepts, technology, and terminology
 2. Maintenance of dental implants in the clinical setting
 3. Implant instruments
 4. Dental implant problems, complications, and failures
- J. Air-polishing for Biofilm Management (2 hours)
1. Powders used for air polishing
 2. Supragingival vs. subgingival air polishing
 3. Medical and dental contraindications
 4. Technique for supra- and subgingival air polishing
- K. Communication and Planning for Success/Fictitious Patient Cases (2 hours)
1. Concepts of periodontal instrumentation
 - a. Objectives
 - b. Rationale
 - c. Terminology
 - d. Informed Consent
 1. Appointment planning for calculus removal
 - a. Instrument selection
 - b. Plan for use
 1. Patient cases
 2. Difficulties in instrumentation
 - a. Most common instrumentation problems
 - b. Solutions for the most common instrumentation problems
- L. The Patient Who Uses Tobacco (2 hours)
1. The impact of tobacco use on health
 2. Tobacco cessation strategies
 3. Dental hygiene care for the patient who uses tobacco

Course Readings

Group	Title	Author	ISBN
Required	Wilkin's Clinical Practice of the Dental Hygienist, 14th Ed.	Boyd, L.D. & Mallonee, L.F.	9781284255997
Required	Fundamentals of Periodontal Instrumentation & Advanced Root Instrumentation, 9th Ed.	Gehrig, J., Sroda, R. & Saccuzzo, D.	978-1284019339
Required	Patient Assessment Tutorials: A Step-by-Step Guide for the Dental Hygienist, 4th Ed.	Gehrig, J.	978-1284240924
Required	Evidence-Based Dentistry – Why Do I Need That? (1 CEU; #625)	Dentalcare.com	
Required	Advanced Instrumentation for the General Practice Dental Hygienist. (2 CEU; #569)	Dentalcare.com	

Required	Tobacco 101: A Guide to Working with Nicotine Addicted Patients (3 CEU; #534)	Dentalcare.com
Required	Implant Maintenance for Long Term Success (1 CEU)	Colgateprofessional.com

- To search for the colgateprofessional.com self-study continuing education course, use "Filters" for:
 - Type: On-Demand Webinar
 - Topic: Implantology: Author: V. Thomas Eshraghi

The course readings are subject to change in the event of extenuating circumstances, research developments, current events, and/or to ensure better learning.

Tentative Schedule of Topics and Assignments

Day	Date	Reading(s)	Proposed Topic	Due/To Prepare for Class
Mon	8/24	Syllabus Instrumentation: pp. 75; 112-113; 219-222; 533-541	Course Introduction Instrument Grasp, Finger Rests & Fulcrums, & Movement and Orientation to Tooth Surface (Wrist rock vs. digital activation)	Study Guide
Wed	8/26	Gehrig Module 21, pp. 521-532 & 542-561 Wilkins pp. 648-649	Advanced Techniques for Root Instrumentation (Introduction to horizontal strokes	Study Guide
Mon	8/31	Gehrig, Module 26 Wilkins, pp. 655-660	Powered Instrument Design and Function	Study Guide
Wed	9/2	Gehrig, Module 26 Wilkins, pp. 655-660	Powered Instrument Design and Function	Study Guide
Mon	9/7	No Class		
Wed	9/9	Gehrig, Module 16	Technique Essentials: Subgingival Calculus Removal – compare: a. Gracey 13/14 & Columbia 13/14 b. original posterior Graceys (11/12 & 13/14) to new posterior Graceys (15/16 & 17/18)	Study Guide; Prepare for Quiz 1
Mon	9/14	Wilkins, Ch. 2 Dentalcare.com CE course #625	Quiz 1 – Wk. 1-3 Study Guides Evidence-Based DH Practice: Introduction PICO Practice Question	Study Guide; CE Certificate #625 Due Upload to Blackboard
Wed	9/16	Wilkins, Ch. 2 Distribute Topics/ Case Studies for EBDM Assignment/ Presentations	Evidence-Based DH Practice: Research Design & Levels of Evidence	Study Guide
Mon	9/21	Wilkins, Ch. 2	Evidence-Based Dental Hygiene Practice: Research Design & Levels of Evidence Research Design – Practice Questions	Study Guide; Worksheet #1 Due, PICO Process
Wed	9/23	Wilkins, Ch. 2	Evidence-Based Dental Hygiene Practice: Finding the Evidence/Database Searches	Study Guide Prepare for Midterm Exam
Mon	9/28	All Week 1-5 Readings/Study Guides and dentalcare.com CE course #625	Midterm Exam – Weeks 1-5 Study Guides	Midterm Exam Contact Prof. Smith to schedule remediation if below 77% or to review the midterm exam
Wed	9/30	Wilkins, Ch. 2	Evidence-Based DH Practice: Evaluating Information and the Elements of a Research Report	Study Guide
Mon	10/5	Wilkins, Ch. 2	Evidence-Based DH Practice: Critical Appraisal, Credible Sources & The CRAAP Tool	Study Guide



Wed	10/7	Wilkins, Ch. 2	Evidence-Based DH Practice: Application of the Evidence to Practice & Evaluating Performance (Connecting PICO Questions, Research Types, Levels of Evidence & Outcomes)	Study Guide Worksheet #2 Due - Searching Methods
Mon	10/12	Wilkins, Ch. 2	Practice Activity: Critical Appraisal of Sources for PICO Question	Review APA References & Examples of Research Terminology Prepare for Quiz 2
Wed	10/14	Gehrig, Instrumentation: Module 18	Quiz 2: Wks. 6-8 Advanced Probing Techniques	Study Guide
Mon	10/19	Gehrig, Mod. 18 Dentrix: "compare" feature & charting PD only vs. full perio chart at cont. care or perio maintenance appts.	Advanced Probing Techniques, continued & Review Dentrix Perio Chart	Study Guide Practice CAL and Width of Attached Gingiva Worksheets
Wed	10/21	Gehrig, Instrumentation: Module 20 Dentalcare.com CE course #569	Specialized Periodontal Instruments	Study Guide; CE Certificate #569 Upload to Blackboard; Worksheet #3 Due - CRAAP test for the main source used to answer background questions
Mon	10/26	Gehrig, Instrumentation: Module 20	Specialized Periodontal Instruments, cont'd.	Study Guide
Wed	10/28	Gehrig, Instrumentation Module 20B (online) Wilkins, Ch. 31; Colgateprofessional.com CE Course - Implants	Dental Implants	Study Guide; Implant CE Certificate Upload to Blackboard; Worksheet #4 Due - CRAAP test for Article #1 used to answer PICO question
Mon	11/2	Gehrig, Instrumentation Module 27 Wilkins, pp. 739-741	Air Polishing for Biofilm Management	Study Guide; Prepare for Quiz 3
Wed	11/4	Gehrig, Instrumentation: Modules 23-24 Wilkins, Ch. 38	Quiz 3: Wks. 8-11; Instrument Sharpening Hu-Friedy Sidekick	Study Guide; Worksheet #5 Due - CRAAP test for Article #2 used to answer PICO question
Mon	11/9	Gehrig, Instrumentation: Modules 23-24 Wilkins, Ch. 38	Instrument Sharpening, Other Devices	Study Guide
Wed	11/11	No Class		
Mon	11/16	Gehrig, Instrumentation: Modules 22 Appendix	Calculus Removal: Concepts, Planning, and Patient Care/ Fictitious Patient Cases: Communication & Planning for Success; Problem Identification: Difficulties in Instrumentation	Study Guide; Worksheet #6 Due - CRAAP test for Article #3 used to answer PICO question
Wed	11/18	Gehrig, Assess. Tutorials Module 11; Dentalcare.com CE course #534	Tobacco Cessation, The 5 A's & the 5 R's	Study Guide; CE Certificate #534 Upload to Blackboard; All EBDM Worksheets must be uploaded to Blackboard
Mon	11/23	Weeks 11 – 13 and 3 CE courses (Advanced Instrumentation, Implants, and Tobacco)	Quiz 4: Wks. 11-13 and 3 CE courses Tobacco Cessation using Motivational Interviewing	Study Guide; All CE Certificates must be uploaded to BB
Wed	11/25	No Class		
Mon	11/30	None	EBDM Presentations: Groups 1-4	EBDM PPT Due; Presentation must be uploaded to Blackboard by 10:00 am – All Groups
Wed	12/2	None	EBDM Presentation: Groups 5-8	None
Mon	12/7	Comprehensive of all Week 1-15 Class Readings	Final Examination 10 am -12 pm	Final Exam
Wed	12/9	No Class		

The course schedule, policies, procedures, and assignments in this course are subject to change in the event of extenuating circumstances, by mutual agreement, and/or to ensure better learning.