



COURSE OUTLINE

DIVISION: Workforce Development

COURSE: DLA 1208 Preventative II-Coronal Scaling

Date: Spring 2019

Credit Hours: 2

Prerequisites: Consent of the Program Coordinator

Delivery Method: **Lecture** 1 Contact Hours (1 contact = 1 credit hour)
 Seminar 0 Contact Hours (1 contact = 1 credit hour)
 Lab 2 Contact Hours (2-3 contact = 1 credit hour)
 Clinical 0 Contact Hours (3 contact = 1 credit hour)
 Online
 Blended

Offered: **Fall** **Spring** **Summer**

IAI Equivalent –**Only for Transfer Courses**-go to <http://www.itransfer.org>.

CATALOG DESCRIPTION:

This course will include areas of study in dental anatomy, public health dentistry, medical history, dental emergencies and managing the pediatric patient. It will stress the importance of ergonomics, fulcrums and instrumentation necessary to remove calculus and plaque supragingivally from the coronal portion of the tooth. This course will also include an outcome assessment examination that demonstrates competency. There are four pathways for enrollment in this course. Contact the Program Coordinator to document your pathway.

GENERAL EDUCATION GOALS ADDRESSED

[See last page for Course Competency/Assessment Methods Matrix.]

Upon completion of the course, the student will be able:

[Choose up to three goals that will be formally assessed in this course.]

- To apply analytical and problem solving skills to personal, social, and professional issues and situations.
- To communicate successfully, both orally and in writing, to a variety of audiences.
- To construct a critical awareness of and appreciate diversity.
- To understand and use technology effectively and to understand its impact on the individual and society.
- To develop interpersonal capacity.
- To recognize what it means to act ethically and responsibly as an individual and as a member of society.
- To recognize what it means to develop and maintain a healthy lifestyle in terms of mind, body, and spirit.
- To connect learning to life.

EXPECTED LEARNING OUTCOMES AND RELATED COMPETENCIES:

[Outcomes related to course specific goals. See last page for more information.]

Upon completion of the course, the student will be able to:

1. Demonstrates a comprehensive understanding of dental anatomy.
 - 1.1. Name and identify the four types of teeth and their functions.
 - 1.2. Name and identify the tissues that compose the teeth
 - 1.3. Name and identify the location of the various tooth surfaces, line angles, and point angles.
 - 1.4. Identify and differentiate the arrangement of teeth into dentitions, arches, quadrants and sextants.
 - 1.5. Explain and demonstrate the ability to properly use and code teeth using the Universal Numbering System, Palmer and FDI.
 - 1.6. List and identify how the ideal characteristics of tooth shape and alignment in protecting the periodontium.
 - 1.7. Know the eruption schedule of the teeth and understand patient concerns related for eruption sequence.
 - 1.8. Know and identify the three basic occlusal classifications based on first molars and canines.
 - 1.9. Discuss what causes the shedding of primary teeth and the factors that may lead to the retention of primary teeth.
 - 1.10. Identify the teeth in terms of the number of cusps, roots and usual and unique anatomical landmarks.
2. Demonstrates a working knowledge of Public Health Dentistry.
 - 2.1. Discuss population-based dentistry
 - 2.2. Discuss oral health surveillance
 - 2.3. Discuss policy development in Dental Public Health (DPH).
 - 2.4. Discuss community-based disease prevention and health promotion

- 2.5. Describe the maintenance of the dental safety net
- 2.6. Identify the role that dental public health plays within dentistry.
- 2.7. Identify the role that the private practice dentist plays within the dental public health infrastructure and delivery of care systems.
- 2.8. Identify the core functions and accomplishments of public health and how they align with the ADA Strategic Plan.
3. Demonstrates a comprehensive understanding of the Medical History.
 - 3.1. Discuss record keeping and documentation
 - 3.2. Discuss normal ranges in vital signs.
 - 3.3. Discuss allergies of concern related to anesthetics, latex and antibiotics.
 - 3.4. Discuss patient disclosure of medical concerns
 - 3.5. Describe how allergy and medical alerts are noted
 - 3.6. Describe how to tactfully question abnormalities listed on a medical history
4. Demonstrates a basic understanding and treatment of Dental Emergencies.
 - 4.1. Discuss possible cause and treatments of Fractured teeth
 - 4.2. Discuss possible cause and treatments of Traumatic intrusion
 - 4.3. Discuss possible cause and treatments of Displaced teeth
 - 4.4. Discuss possible cause and treatments of Avulsed teeth
5. Demonstrates a basic understanding of managing a pediatric patient.
 - 5.1. Discuss oral hygiene instruction including brushing and nutrition
 - 5.2. Discuss the ages in which teeth erupt and exfoliate
 - 5.3. Discuss the maturation of a pediatric patient including mental and emotional age.
 - 5.4. Discuss behavior management techniques commonly used in a dental office.
 - 5.5. Discuss the difference between objective and subjective fears.
 - 5.6. Discuss management of patients with special healthcare needs.
6. Demonstrate a basic understanding of calculus and plaque.
 - 6.1. Discuss the tools and concepts for oral hygiene assessment, including the significance of hard and soft deposits.
 - 6.2. Discuss types of oral deposits and explain the oral biofilm formation process.
 - 6.3. Describe the clinical assessment of oral biofilm.
 - 6.4. Explain the skills, motivation and compliance needed to successfully manage oral self-care.
 - 6.5. Compare the available oral hygiene indices, and list the criteria for an effective oral hygiene index.
7. Demonstrates and applies principals in Ergonomics in the dental profession.
 - 7.1. Discuss environmental factors leading to repetitive strain injury (RSI).
 - 7.2. Describe modifications in the work environment that minimize RSI and stress.
 - 7.3. Relate proper grasp and instrument factors to ergonomic principals.
 - 7.4. Relate proper hand stabilization to ergonomic principals.
 - 7.5. Modify client positioning based on ergonomic principals and client needs.
 - 7.6. Demonstrate neutral shoulder, elbow, forearm, and wrist positions.
 - 7.7. Describe common RSIs in terms of symptoms, risks, prevention and treatment.
8. Demonstrates a comprehensive understanding of instrumentation used in Coronal Scaling.
 - 8.1. Discuss basic dental hygiene instrument design.

- 8.2. Classify an instrument and its use based upon variations in instrument shank length, curvature, flexibility, and blade type and blade-to-shank angulation.
- 8.3. Discuss the classification of instruments including assessment instruments, their design and uses.
- 8.4. Customize fulcrum placement for a tooth surface.
- 8.5. Describe treatment instruments and their design and uses
- 8.6. Explain proper instrument blade adaption and angulation.
- 8.7. Define the stroke principals of blade angulation, adaption, and activation.
- 8.8. Describe protective scaling strategies and reinforcement scaling.
- 8.9. Discuss how to prevent and manage instrument tip breakage.

MAPPING LEARNING OUTCOMES TO GENERAL EDUCATION GOALS

[For each of the goals selected above, indicate which outcomes align with the goal.]

Goals	Outcomes
First Goal	
To recognize what it means to act ethically and responsibly as an individual and as a member of society.	4a, 5a, 5b, 5c, 5d, 5e, 5f
Second Goal	
To construct a critical awareness of and appreciate diversity.	2a, 2b, 2c, 2d, 2e, 2f, 2g, 2h

COURSE TOPICS AND CONTENT REQUIREMENTS:

- I. Dental anatomy
 - a. Types of teeth
 - i. Incisors
 - ii. Canines
 - iii. Premolar
 - iv. Molar
 - b. Tissues
 - i. Enamel
 - ii. Dentin
 - iii. Cementum
 - iv. Pulp

- c. Surfaces, line angles, point angles
 - i. Mesial
 - ii. Distal
 - iii. Lingual
 - iv. Facial/buccal
 - v. Occlusal/incisal
- d. Tooth coding
 - i. Universal numbering
 - ii. Palmer
 - iii. FDI
- e. Tooth shape and alignment
 - i. Classifications
 - 1. Bifurcation
 - 2. trifurcation
 - ii. Keystone of the arch
 - 1. Mandibular first molar
- f. Eruption schedule
 - i. Active eruption
 - ii. Passive eruption
 - iii. Age
 - iv. Abnormalities
 - 1. Attrition
 - 2. Abrasion
- g. Occlusal classifications
 - i. Ideal/Normal Occlusion
 - 1. Class I- Neutroocclusion
 - ii. Malocclusion
 - 1. Class II-Distocclusion
 - a. Division I
 - b. Division II
 - 2. Class III- mesiocclusion
 - iii. Occlusal deviations
 - 1. Open bite
 - 2. Over bite
 - 3. Over jet
 - 4. Cross bite
 - 5. Edge to edge
 - 6. Under jet
 - 7. Labiovertion/buccoversion
 - 8. Linguoversion
 - 9. Infraversion
 - 10. Surpraversion
 - 11. Torsoversion

- h. Shedding of primary teeth
 - i. Causes of retention
 - ii. Importance
- i. Anatomical landmarks
 - i. Cusps
 - ii. Roots
 - iii. Ridge
 - iv. Fossa
 - v. Groove
 - vi. Pit
 - vii. Special features
- II. Public Health Dentistry
 - a. Population based dentistry
 - b. Oral health surveillance
 - c. Dental Public Health
 - d. Community Based disease prevention and health promotion
 - e. Dental safety net
 - f. Role of dental public health
 - g. Role of private practice
 - i. Dental public health infrastructure
 - ii. Delivery of care systems
 - h. Core functions of public health
 - i. Alignment with ADA strategic plan
- III. Medical History
 - a. Record keeping and documentation
 - b. Vital signs
 - i. Blood pressure
 - ii. Pulse
 - iii. Respiration
 - iv. Temperature
 - c. Allergies
 - i. Antibiotics
 - ii. Anesthetics
 - iii. Latex
 - d. Disclosure of medical concerns
 - e. Allergy and medical alerts
 - f. Questioning medical history abnormalities
- IV. Dental Emergencies
 - a. Emergency treatment for traumatic injuries
 - i. Fractured teeth
 - ii. Traumatic intrusion
 - iii. Displaced teeth
 - iv. Avulsed teeth

- V. Managing a pediatric patient
 - a. Oral Hygiene Instruction
 - i. Brushing
 - ii. Nutrition
 - b. Eruption and exfoliation
 - c. Mental and emotional age
 - i. Maturity of patient
 - d. Behavior management techniques
 - i. Tell-show-do
 - ii. Voice control
 - iii. Distraction
 - iv. Nonverbal Communication
 - v. Modeling
 - vi. Positive Reinforcement
 - vii. Gentle restraints
 - viii. Mild sedation
 - ix. General anesthesia
 - x. Frankl's Behavior Scale
 - xi. Wright's Classification of Behavior Scale
 - e. Patient fears
 - i. Objective
 - ii. Subjective
 - f. Special needs patients
 - i. Guidelines on Management of Dental Patients with Special Health Care needs from the American Academy of Pediatric Dentistry (AAPD)
 - ii. Orofacial disorders or conditions
 - iii. Systemic health conditions
 - iv. Mental, developmental or physical disability
- VI. Calculus and plaque
 - a. Hygiene assessment
 - i. Hard deposits
 - 1. Calculus
 - a. scaling
 - ii. Soft deposits
 - 1. Plaque
 - a. Extrinsic stains
 - b. Polishing
 - b. Biofilm formation
 - c. Assessment of biofilm
 - d. Oral self-care
 - i. Skills
 - ii. Motivation
 - iii. Compliance
 - e. Oral hygiene index
 - i. Criteria

- VII. Principals in Ergonomics
 - a. Repetitive strain injury
 - i. Environmental factors
 - b. Modifications to reduce RSI
 - c. Grasps
 - i. Classification of motion
 - ii. Fulcrum
 - d. Hand stabilization
 - i. Fulcrum
 - e. Client positioning
 - i. Supine
 - ii. Sub-supine
 - f. Neutral positioning
 - i. Shoulder
 - ii. Elbow
 - iii. Forearm
 - iv. Wrist
 - g. Common RSI Symptoms
 - i. risks
 - ii. prevention
 - iii. treatment
- VIII. Instrumentation used in Coronal Scaling
 - a. Instrument design
 - b. Classification of instruments
 - i. Shank length
 - ii. Curvature
 - iii. Flexibility
 - iv. Blade type
 - v. Blade-to-shank angulation
 - c. Assessment instruments
 - d. Fulcrum
 - e. Treatment instruments
 - f. Adaptation and angulation
 - g. Stroke principals
 - i. Blade Adaptation
 - ii. Blade Angulation
 - iii. Activation
 - h. Protective scaling strategies
 - i. Reinforcement scaling
 - i. tip breakage
 - i. prevention
 - ii. management

INSTRUCTIONAL METHODS:

- Didactic Instruction
- Clinical manikin
- Human subject instruction
- Videos
- Hands-on Demonstration

INSTRUCTIONAL MATERIALS:

Public Act 100-0976 Enacted August 19th, 2018

Text:

Dental Assisting: A Comprehensive Approach, 5th Edition, Phinney and Halstead, 2018

Dental Hygiene: Theory and Practice, 4th Edition, Darby & Walsh, 2015

American Dental Association: Module: Dental Public Health 2015

Dentistry, Dental Practice, and the Community, 7th Edition, 2019

Pediatric Dentistry, 6th Edition, 2018

STUDENT REQUIREMENTS AND METHODS OF EVALUATION:

A= 90-100

B= 80-89

C= 70-79

D= 60-69

F= 0-59

OTHER REFERENCES

Course Competency/Assessment Methods Matrix

(Dept/# Course Name)	Assessment Options																																			
For each competency/outcome place an "X" below the method of assessment to be used.	Assessment of Student Learning	Article Review	Case Studies	Group Projects	Lab Work	Oral Presentations	Pre-Post Tests	Quizzes	Written Exams	Artifact Self Reflection of Growth	Capstone Projects	Comprehensive Written Exit Exam	Course Embedded Questions	Multi-Media Projects	Observation	Writing Samples	Portfolio Evaluation	Real World Projects	Reflective Journals	Applied Application (skills) Test	Oral Exit Interviews	Accreditation Reviews/Reports	Advisory Council Feedback	Employer Surveys	Graduate Surveys	Internship/Practicum /Site Supervisor Evaluation	Licensing Exam	In Class Feedback	Simulation	Interview	Written Report	Assignment				
	Direct/Indirect	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	I	I	I	I	D	D										
Assessment Measures – Are direct or indirect as indicated. List competencies/outcomes below.																																				
1. Demonstrates a comprehensive understanding of dental anatomy.					X	X	X	X	X			X	X		X					X			X	X		X	X	X	X	X					X	
2. Demonstrates a working knowledge of Public Health Dentistry.					X	X	X	X	X			X	X		X					X			X	X		X	X	X	X	X					X	
3. Demonstrates a comprehensive understanding of the Medical History.					X	X	X	X	X			X	X		X					X			X	X		X	X	X	X	X					X	
4. Demonstrates a basic understanding and treatment of Dental Emergencies.					X	X	X	X	X			X	X		X					X			X	X		X	X	X	X	X					X	

5. Demonstrates a basic understanding of managing a pediatric patient.					X	X	X	X	X				X	X	X					X		X	X		X	X	X	X	X				X
6. Demonstrate a basic understanding of calculus and plaque.					X	X	X	X	X				X	X	X					X		X	X		X	X	X	X	X				X
7. Demonstrates and applies principals in Ergonomics in the dental profession.					X	X	X	X	X				X	X	X					X		X	X		X	X	X	X	X				X
8. Demonstrates a comprehensive understanding of instrumentation used in Coronal Scaling.					X	X	X	X	X				X	X	X					X		X	X		X	X	X	X	X				X