

<p style="text-align: center;"><b>Practice Environment I</b></p> <p style="text-align: center;"><b>DH 102</b></p> <p><b>Date revised and approved: April 2022</b></p>			
<b>Academic Level</b>	<b>Course Type</b>	<b>Total Classroom Hours</b>	<b>Educators</b>
01	Theory	<b>66</b>	Shari Morrow smorrow@cadh.ca
<b>Course Pre-requisites</b>		<b>Course Co-requisites</b>	
None		DH 101, DH 104, DH 105, DH 108, DH 109, DH 110	

### *Course Description*

This course introduces the students to the principles and techniques of assessment, instrumentation, appropriate ergonomics, ensuring a safe working environment, and managing medical emergencies. Students will also gain an understanding of the interventions for the individual client.

**Students, it is your responsibility to retain course outlines for possible future use to support applications for transfer of credit to other educational institutions or to substantiate specific educational learning outcomes for professional recognition.**

## Learning Resources

### *Required Texts and Documents*

Bowen, DM and Pieren, JA. Darby and Walsh Dental Hygiene Theory and Practice, 5th ed. St. Louis, MO: W.B. Saunders Co.; 2020

Nield-Gehrig JS. Fundamentals of Periodontal Instrumentation & Advanced Root Instrumentation, 8<sup>th</sup> ed. Philadelphia, PA: Lippincott Williams and Wilkins; 2017.

### *Recommended Texts:*

Daniel, S.J., Harfst, S.A., Wilder, R.S., Mosby's Dental Hygiene Concepts, Cases & Competencies, 2<sup>nd</sup> ed. St. Louis, Missouri: Elsevier Inc; 2008.  
Nield-Gehrig JS., Willmann, DE. Foundations of Periodontics for the Dental Hygienist, 4<sup>th</sup> ed. Philadelphia, PA: Lippincott Williams and Wilkins; 2015.

## Teaching/Learning Methods and Activities

During this course you are likely to experience lectures, discussions, role playing, case scenarios, written and oral assignments and tests. You will be expected to download copy and/or print selected documents for this course as provided by your instructor.

### Staff/student ratio: 1/42

## Class Attendance and Participation Expectations

The acquisition of dental hygiene theory is important for sound dental hygiene practice. Therefore, **attendance is mandatory** and students are expected to participate in a mature and respectful manner during all classroom activities. There are no unexcused absences. Students unable to attend should immediately (at least one hour prior to the start of the session) notify CADH at **905-278-2794**. This number provides a 24-hour message system. A **medical certificate** is required for absences and must be provided to the Director of Admissions and faculty member upon your return to school.

Students that miss more than ten percent of any course must meet with the course instructor to review their progress in the course. A student that exceeds the maximum number of allowed absences will **fail** the course and must repeat that course, regardless of the quality of the work they have demonstrated in the course.

## Missed Course Activities

Students are expected to complete all classroom activities (tests, labs, presentations, assignments, exams, etc.) at the scheduled time. A score of zero will be given for any missed work unless there are exceptional situations. The faculty member responsible for the course will decide whether the student merits the opportunity to make up the missed activity. Please refer to the student handbook under “Policy Regarding Missed Course Activities” to review the details of this policy.

## Accessing Course Materials through the Learning Management System

CADH utilizes a Learning Management System (LMS) to provide students with course materials. A course will be set up for each subject that the student is expected to take in the program. Details on how to access the LMS and the course will be provided to you by your faculty members.

As a student, you will be expected to be enrolled in the course. Your faculty may enrol you in the course, in which case, you will receive an email indicating this. Otherwise, if advised by the faculty member, you will be expected to self-enrol in the course and instructions for this will be provided by your instructor.

Faculty members will post course announcements, course materials and any supplemental materials on the LMS for you to access and review. It is your responsibility to check the course site on a daily basis for any updates to the course material. In addition, the faculty member may email you from the site, require you to complete online components such as blogs, discussions, and assignments, as well as post grades using this site.

## Evaluation

Evaluations will include multiple choice, fill-in the blank, and short answer questions as well as critical thinking problem-solving questions such as case scenarios. Students will also be expected to engage in role playing activities demonstrating the management of various client related scenarios.

Grading System				Marks Assignment	
A+	90 – 100	C+	67 – 69		% to final grade
A	85 – 89	C	63 – 66	Test 1	30
A-	80 – 84	C-	60 – 62	Test 2	30
B+	77 – 79	F	59 and below	Role playing exercises	10
B	73 – 76			Final examination	30
B-	70 – 72			<b>Total</b>	<b>100</b>

## Course Content

### Course Learning Outcomes and Embedded Knowledge and Skills

Upon completion of this course the student will be able to:		
Course learning requirements		Embedded knowledge and skills
1. Explain the requirement for a safe and healthy work environment.	1.1. Explore the role of government in managing workplace health and safety	<ul style="list-style-type: none"> <li>Describe the need for the Workplace Hazardous Materials Information System (WHMIS)/Global Harmonized System (GHS)</li> <li>Describe the role of the <i>Hazardous Products Act (HPA)</i> and <i>Controlled Products Regulations (CPR)</i> in WHMIS</li> <li>Recognize the governmental levels responsible for enforcement of WHMIS/GHS</li> </ul>
	1.2. Explain the role of stakeholders in health and safety	<ul style="list-style-type: none"> <li>Differentiate between the responsibilities of the supplier, employer, and employee in the use of hazardous materials</li> <li>Identify the roles and responsibilities of the supplier, employer, and employee for the Safety Data Sheets (SDS)</li> </ul>
	1.3. Explain how a healthy and safe dental environment can be maintained	<ul style="list-style-type: none"> <li>Identify controlled substances that are used in a dental setting</li> <li>Recognize and explain consumer product warning label symbols</li> <li>Explain safe procedures for safe use, handling, disposal, and storage of controlled products during normal use and for emergencies</li> <li>Describe common accidents/injuries that occur in the dental environment</li> </ul>
	1.4. Examine the importance of maintaining asepsis in the clinical area	<ul style="list-style-type: none"> <li>Recall knowledge from Microbiology</li> <li>Discuss the appropriate infection control protocol in the clinical setting</li> </ul>

Upon completion of this course the student will be able to:		
Course learning requirements		Embedded knowledge and skills
2. Examine the environment in a dental setting	2.1 Describe the different departments and personnel required	<ul style="list-style-type: none"> <li>▪ Explain the roles and responsibilities of each department and the associated personnel</li> <li>▪ Explain collaboration of personnel in a dental environment</li> </ul>
	2.2 Describe the function of the equipment used in the dental treatment area	<ul style="list-style-type: none"> <li>▪ Describe the function of the following:               <ul style="list-style-type: none"> <li>– dental chair</li> <li>– dental unit</li> <li>– operating light</li> <li>– air/water syringe</li> <li>– oral evacuation systems</li> <li>– slow speed hand piece</li> <li>– bracket table</li> </ul> </li> </ul>
3. Apply the fundamental skills required for appropriate instrumentation.	3.1 Explain the mathematical principles and anatomic descriptors required for basic instrumentation	<ul style="list-style-type: none"> <li>▪ Identify and draw a 90 degree and 45-degree angle</li> <li>▪ Draw parallel and perpendicular lines</li> <li>▪ Draw vertical, horizontal, and oblique lines</li> <li>▪ Illustrate the midline, cross section, and long axis of a tooth</li> <li>▪ Identify the four different line angles of a tooth:               <ul style="list-style-type: none"> <li>– Mesiofacial</li> <li>– Distofacial</li> <li>– Mesiolingual</li> <li>– Distolingual</li> </ul> </li> <li>▪ Identify and differentiate between quadrants and sextants in the oral cavity</li> <li>▪ Differentiate between the "apical" and "coronal" portions of a tooth</li> </ul>
	3.2 Examine effective client/operator positioning used to deliver dental hygiene care	<ul style="list-style-type: none"> <li>▪ Discuss ergonomic principles and how they relate to safe dental hygiene practice</li> <li>▪ Discuss various repetitive strain injuries that can result with improper ergonomics</li> </ul>

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Course learning requirements		Embedded knowledge and skills
3. Apply the fundamental skills required for appropriate instrumentation.	3.2 Examine effective client/operator positioning used to deliver dental hygiene care	<ul style="list-style-type: none"> <li>▪ Discuss ways to prevent repetitive strain injuries for the practicing dental hygienist</li> <li>▪ Describe basic client positions:               <ul style="list-style-type: none"> <li>– Upright</li> <li>– Reclined</li> <li>– Supine</li> </ul> </li> <li>▪ Explain neutral position used by the dental hygienist</li> <li>▪ Explain the relationship between neutral position and the prevention of musculoskeletal problems</li> <li>▪ Explain the correct clinician and client position when working on the maxillary and mandibular arches</li> <li>▪ Discuss modifications to client positioning, including precautions</li> <li>▪ Discuss ways of positioning clients of various physical types in the dental chair</li> </ul>
	3.3 Discuss strategies that help enhance an effective client/operator position	<ul style="list-style-type: none"> <li>▪ Discuss the benefits of using operator magnification devices during provision of care</li> <li>▪ Explain how magnification devices enhance operator comfort</li> </ul>
	3.4 Explain the use of the modified pen grasp	<ul style="list-style-type: none"> <li>▪ Describe modified pen grasp</li> <li>▪ Describe the function of each finger in the modified pen grasp</li> <li>▪ Discuss the importance of "tactile" sensitivity</li> <li>▪ Discuss and perform exercises that can be used to improve hand strength</li> </ul>
	3.5 Explain mirror use and fulcrum positioning	<ul style="list-style-type: none"> <li>▪ Identify and describe the characteristics and uses of dental mirrors</li> <li>▪ Identify neutral wrist positions used during instrumentation</li> <li>▪ Identify and differentiate between intraoral and extraoral fulcrum positions</li> <li>▪ Identify and differentiate between the advantages and disadvantages of intraoral and extraoral fulcrums</li> </ul>

Upon completion of this course the student will be able to:		
Course learning requirements		Embedded knowledge and skills
4. Examine instrument design and classification	4.1 Classify instruments based on their function	<ul style="list-style-type: none"> <li>Recognize assessment instruments</li> <li>Recognize treatment instruments</li> <li>Differentiate between assessment and treatment instruments</li> <li>Compare and contrast use of sickle scalers, area specific curets, and universal curets</li> </ul>
	4.2 Examine features of instrument design	<ul style="list-style-type: none"> <li>Discuss the standard parts of an instrument:               <ul style="list-style-type: none"> <li>Handle</li> <li>Shank</li> <li>Working end</li> </ul> </li> <li>Differentiate between paired and unpaired instruments</li> <li>Recognize design features of instrument shanks:               <ul style="list-style-type: none"> <li>Simple versus complex</li> <li>Flexible versus rigid</li> </ul> </li> <li>Examine design characteristics of the working-end of an instrument:               <ul style="list-style-type: none"> <li>Face</li> <li>Back</li> <li>Lateral surfaces</li> <li>Cutting edges</li> </ul> </li> <li>Differentiate between a "tip" and a "toe"</li> <li>Explain and differentiate between the terms "functional" and "lower shank"</li> <li>Compare and contrast the design features of sickle scalers, area specific curets, and universal curets</li> </ul>
5. Assess the elements of an effective instrumentation stroke	5.1 Explain the relationship of adaptation and angulation as it relates to an effective instrumentation stroke	<ul style="list-style-type: none"> <li>Locate and discuss the role of the leading third, middle third and heel third of an instrument</li> <li>Discuss proper insertion technique</li> <li>Explain the importance of an appropriate fulcrum for effective instrumentation</li> <li>Explain how the working end is accurately adapted to the tooth</li> </ul>

Upon completion of this course the student will be able to:		
Course learning requirements		Embedded knowledge and skills
5. Assess the elements of an instrumentation stroke	5.2 Explain the relationship of adaptation and angulation as it relates to an effective instrumentation stroke	<ul style="list-style-type: none"> <li>▪ Discuss the proper angulation required between the face of the instrument and the tooth surface for successful instrumentation</li> </ul>
	5.3 Discuss the motor skills required for successful adaptation and activation of an instrument stroke	<ul style="list-style-type: none"> <li>▪ Define the following terms: <ul style="list-style-type: none"> <li>– Motion</li> <li>– Wrist motion</li> <li>– Digital motion</li> <li>– Activation</li> </ul> </li> <li>▪ Explain how the hand pivot and handle roll help to maintain correct working-end adaptation to the tooth surface</li> </ul>
	5.4 Explain the elements of an effective instrumentation stroke	<ul style="list-style-type: none"> <li>▪ Explain the term lateral pressure</li> <li>▪ Compare and contrast the different types of instrumentation strokes: <ul style="list-style-type: none"> <li>– Placement stroke</li> <li>– Assessment or Exploratory Stroke</li> <li>– Debridement or Scaling Stroke</li> </ul> </li> <li>▪ Differentiate between "vertical", "horizontal", and "oblique" strokes</li> </ul>
6. Assess the use of non-powered hand instruments in oral debridement	6.1 Examine the design and implementation of the periodontal probe	<ul style="list-style-type: none"> <li>▪ Discuss design characteristics and function of the probe</li> <li>▪ Identify the millimetre markings on the periodontal probe</li> <li>▪ Describe effective probing techniques in terms of: <ul style="list-style-type: none"> <li>– Sequence</li> <li>– Grasp</li> <li>– Fulcrum</li> <li>– Adaptation</li> <li>– Angulation</li> <li>– Activation</li> </ul> </li> </ul>



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Course learning requirements		Embedded knowledge and skills
6. Assess the use of non-powered hand instruments in oral debridement	6.1 Examine the design and implementation of the periodontal probe	<ul style="list-style-type: none"> <li>Identify the number and location of probe readings for each tooth</li> <li>Explain the term junctional epithelium</li> <li>Differentiate between a normal sulcus and a periodontal pocket</li> <li>Explain the term mobility and differentiate between M1, M2 and M3</li> <li>Explain furcation involvement</li> </ul>
	6.2 Examine the design and implementation of the explorer	<ul style="list-style-type: none"> <li>Discuss design characteristics of explorers</li> <li>Identify various types of explorers and the function of each</li> <li>Describe how to detect dental calculus and caries</li> <li>Explain how to properly identify the correct working end</li> <li>Explain the correct technique when using the explorer</li> </ul>
	6.3 Examine the design and implementation of the sickle scalers	<ul style="list-style-type: none"> <li>Describe design characteristics and function of sickle scalers</li> <li>Explain the correct technique when using sickle scalers</li> <li>Differentiate between "anterior" and "posterior" sickle scalers</li> <li>Explain the face and lower shank relationship in establishing the correct angulation</li> <li>Describe how the clinician can use visual cues to select the correct working end</li> <li>Examine effective instrumentation technique for sickle scalers</li> </ul>
	6.4 Examine the design and implementation of the area specific curets	<ul style="list-style-type: none"> <li>Explain the term "area-specific"</li> <li>Describe design characteristics and function of area-specific curets</li> <li>Discuss the relationship of the face to the lower shank</li> <li>Examine effective instrumentation technique for area specific curets</li> </ul>
	6.5 Examine the design and implementation of the universal scalers	<ul style="list-style-type: none"> <li>Describe design characteristics and function of universal curets</li> <li>Discuss the advantages and limitations of universal curets</li> </ul>

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<b>Course learning requirements</b>		<b>Embedded knowledge and skills</b>
6. Assess the use of non-powered hand instruments in oral debridement	6.6 Examine the design and implementation of the universal scalers	<ul style="list-style-type: none"> <li>▪ Differentiate between "inner" and "outer" cutting edges</li> <li>▪ Describe how the clinician can use visual cues to select the correct working end</li> <li>▪ Examine effective instrumentation technique for universal scalers</li> </ul>
7. Explain the principles of instrument sharpening	7.1 Explain the rationale for maintaining and using sharp instruments	<ul style="list-style-type: none"> <li>▪ Discuss the goal of instruments sharpening</li> <li>▪ Explain the advantages of sharp instruments</li> <li>▪ Differentiate between a sharp cutting edge and a dull cutting edge</li> <li>▪ Describe how to detect a dull cutting edge</li> <li>▪ Describe the proper equipment needed to effectively sharpen instruments, including sharpening guides</li> <li>▪ Compare and contrast sharpening methods for sickles and curets</li> <li>▪ Discuss common sharpening errors</li> <li>▪ Explain potential hazards of using an instrument that has not maintained its architectural integrity</li> </ul>
	7.2 Explain the process of sharpening a curet and a sickle scaler	<ul style="list-style-type: none"> <li>▪ Explain the importance of the position of the instrument face to the countertop</li> <li>▪ Explain the importance of maintaining the correct angle of the sharpening stone</li> <li>▪ Describe how to establish the correct stone angulation</li> <li>▪ Explain the sharpening procedure for curets and sickle scalers</li> <li>▪ Explain the proper use of the PDT sharpening system</li> </ul>
8. Examine the disease processes of the oral cavity	8.1 Identify and describe the deposits that can be found in the oral cavity	<ul style="list-style-type: none"> <li>▪ Define dental plaque biofilm</li> <li>▪ Describe the process of plaque biofilm formation, accumulation, and maturation</li> </ul>

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8. Examine the disease processes of the oral cavity	8.1 Identify and describe the deposits that can be found in the oral cavity	<ul style="list-style-type: none"> <li>▪ Discuss "material alba" and "food debris" and their impact on periodontal health</li> <li>▪ Compare and contrast soft and hard deposits</li> <li>▪ Identify and differentiate between:               <ul style="list-style-type: none"> <li>– intrinsic and extrinsic stain</li> <li>– exogenous and endogenous stain</li> </ul> </li> <li>▪ Discuss the different types of extrinsic and intrinsic stains</li> <li>▪ Define the term 'therapeutic' and explain why stain removal is a cosmetic procedure rather than a therapeutic procedure</li> <li>▪ Discuss methods of stain removal</li> </ul>
	8.2 Examine the role of plaque biofilm in the disease process and discuss strategies used for assessing oral disease	<ul style="list-style-type: none"> <li>▪ Explain the role of oral biofilm in the development of gingival inflammation and periodontal disease progression</li> <li>▪ Discuss the use of disclosing agents to assess the amount of plaque on a tooth surface</li> <li>▪ Discuss various disclosing techniques</li> <li>▪ Explain the procedure for obtaining a "plaque free index"</li> <li>▪ Discuss how oral hygiene assessment is used for client education, monitoring, and motivation</li> </ul>
	8.3 Explain the dental hygienist's role in integrating the Dental Caries Management by Risk Assessment (CAMBRA) using a team approach	<ul style="list-style-type: none"> <li>▪ Define the disease of dental caries</li> <li>▪ Explain the importance of integrating CAMBRA into the oral healthcare environment</li> <li>▪ Explain what is meant by "caries risk assessment"</li> <li>▪ Explain the process of demineralisation and remineralisation that occurs in the oral cavity</li> <li>▪ Explain the beneficial actions of saliva</li> <li>▪ Discuss tests that can be done to test saliva flow rate and caries bacteria</li> <li>▪ Explain the dental caries balance and list pathologic protective factors</li> <li>▪ Identify the key disease indicators and risk factors that determine whether the client is at low, moderate, high, or extreme high risk</li> </ul>

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<b>Course learning requirements</b>		<b>Embedded knowledge and skills</b>
8. Examine the disease processes of the oral cavity	8.4 Explain the dental hygienist's role in integrating the Dental Caries Management by Risk Assessment (CAMBRA) using a team approach	<ul style="list-style-type: none"> <li>▪ Explain based on level of dental caries risk when the following are indicated:               <ul style="list-style-type: none"> <li>– Professionally applied and self-applied topical fluoride</li> <li>– Anti-microbial therapy</li> <li>– Buffering products</li> <li>– Calcium and phosphate products</li> </ul> </li> </ul>
9. Assess interventions related to the management of oral health	9.1 Compare and contrast manual and power toothbrushes	<ul style="list-style-type: none"> <li>▪ Describe characteristics of acceptable manual and powered toothbrush designs</li> <li>▪ Differentiate between the various manual and power toothbrushes</li> <li>▪ Provide rationale for the selection and use of a toothbrush based on client specific needs</li> </ul>
	9.2 Compare and contrast the methods for manual tooth brushing	<ul style="list-style-type: none"> <li>▪ Differentiate between tooth brushing methods including indications, limitations, and impact on oral tissues</li> <li>▪ Describe tooth brushing methods: Bass, Stillmans, Charters, Roll Stroke, Fones, and Modified Bass, Stillmans and Charters</li> <li>▪ Provide rationale for the selection of a tooth brushing method specific to the client's needs</li> </ul>
	9.3 Describe the proper care of dentures by the client and healthcare provider	<ul style="list-style-type: none"> <li>▪ Educate clients wearing fixed and removable dentures in the importance of oral hygiene measures, and regular professional care</li> <li>▪ Explain daily oral and denture hygiene care for individuals with removable dentures</li> <li>▪ Discuss professional care for clients with fixed and removable dentures</li> </ul>

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<b>Course learning requirements</b>		<b>Embedded knowledge and skills</b>
9. Assess interventions related to the management of oral health	9.4 Explain the role of toothpastes and mouth rinses and their role in oral plaque control	<ul style="list-style-type: none"> <li>▪ List the ingredients in toothpastes and describe their function</li> <li>▪ Discuss the various formulations of toothpastes: caries prevention, desensitizing, gingivitis, tartar control, stain removal, and whitening</li> <li>▪ Discuss the use of mouth rinses in oral self-care</li> <li>▪ Differentiate between "therapeutic" and "cosmetic"</li> <li>▪ Discuss the formulations, mechanisms of action, indications, and contra-indications for use of plaque inhibiting mouth rinses</li> <li>▪ Provide rationale for selection of tooth paste and mouth rinse</li> <li>▪ Explain, based on the level of dental caries risk, when fluoride therapy is required</li> </ul>
	9.5 Identify and explain the appropriate indications and use for interdental plaque control devices	<ul style="list-style-type: none"> <li>▪ Describe indications for interdental plaque control devices</li> <li>▪ Describe the appropriate use of interdental aids:               <ul style="list-style-type: none"> <li>– dental floss</li> <li>– rubber tip stimulator</li> <li>– end-tuft brush</li> <li>– tongue cleaner</li> <li>– proxabrush</li> <li>– sulcabrush</li> <li>– stimudents</li> </ul> </li> <li>▪ Provide rationale for selection of interdental aids based on the specific needs of the client</li> </ul>
	9.6 Design oral self-care plans to deliver to clients	<ul style="list-style-type: none"> <li>▪ Design environments conducive to learning</li> <li>▪ Assess and integrate the client's learning style as part of the planning process</li> <li>▪ Identify realistic and relevant options that integrate the client's preferences, interests, and needs</li> <li>▪ Integrate teaching and learning principles when planning self-care strategies</li> </ul>

Upon completion of this course the student will be able to:		
Course learning requirements		Embedded knowledge and skills
9. Assess interventions related to the management of oral health	9.7 Explain the rationale and techniques used when performing coronal polish	<ul style="list-style-type: none"> <li>▪ Define “coronal polish”</li> <li>▪ Explain the indications and contraindications for coronal polishing</li> <li>▪ Explain how and why each component of the armamentarium for coronal polish is used</li> <li>▪ Explain the grasp, fulcrum, adaptation, and activation of the hand piece during a coronal polish</li> <li>▪ Explain the action of abrasives used in polishing teeth and the factors which affect the rate of abrasion</li> <li>▪ Describe abrasives used in polishing teeth and the indications for the use of each</li> </ul>
	9.8 Explain the rationale and techniques used and systemic implications of fluoride	<ul style="list-style-type: none"> <li>▪ Recall risk factors that determine whether the client is at low, moderate, high or extreme risk for disease</li> <li>▪ Explain, based on the level of dental caries risk, when professionally applied or self-applied topical fluorides are indicated</li> <li>▪ Differentiate between systemic and topical fluoride</li> <li>▪ Explain the indications and contra indications for use of topically applied fluoride</li> <li>▪ List and explain the use of each component in the armamentarium required to apply fluoride to teeth</li> <li>▪ Explain the procedures to apply fluoride using: trays, paint-on and rinse techniques</li> <li>▪ Differentiate between acute and chronic fluoride toxicity</li> <li>▪ Identify and differentiate between "certainly lethal dose" and "safely" tolerated dose" of fluoride</li> </ul>

<b>Upon completion of this course the student will be able to:</b>		
<b>Course learning requirements</b>		<b>Embedded knowledge and skills</b>
10. Examine intra-oral and extra-oral assessment techniques used by dental hygienists	10.1 Explain how an extra-oral examination is conducted	<ul style="list-style-type: none"> <li>▪ Identify normal head and neck anatomy structures and deviations from normal</li> <li>▪ Explain the purpose of assessing a client's general appearance including the head and neck</li> <li>▪ Explain the use of observation and palpation to note the overall appearance of the client, irregularities in the face, eyes, skin, lips, nodes, and temporomandibular joint</li> <li>▪ Explain the proper method and sequence in performing an extra-oral examination</li> <li>▪ Document findings appropriately in the clinical chart</li> </ul>
	10.2 Explain how an intra-oral examination is conducted	<ul style="list-style-type: none"> <li>▪ Explain the use of observation and palpation to note the condition of the mucosa, tongue, floor of the mouth, hard and soft palate, throat, and saliva</li> <li>▪ Explain the purpose of assessing intra-oral soft tissues</li> <li>▪ Explain the proper method and sequence in performing an intra-oral examination</li> <li>▪ Document findings appropriately in the clinical chart</li> </ul>
11. Compare the characteristics of the gingiva and alveolar bone during health and disease	11.1 Recognize the clinical features of healthy gingiva	<ul style="list-style-type: none"> <li>▪ Identify the appearance of healthy gingiva as related to:               <ul style="list-style-type: none"> <li>– Tissue colour, size, and shape</li> <li>– Tissue consistency and texture</li> <li>– Position of gingival margin</li> <li>– Absence of bleeding</li> </ul> </li> </ul>
	11.2 Recognize the clinical features, distribution, severity, and location of gingival inflammation	<ul style="list-style-type: none"> <li>▪ Understand the causes of tissue change</li> <li>▪ Recognize clinical features of healthy and inflamed tissue</li> <li>▪ Explain the difference between acute and chronic inflammation</li> <li>▪ Differentiate between bulbous, blunted, and cratered papillae</li> <li>▪ Discuss each of the following components of a gingival statement:               <ul style="list-style-type: none"> <li>– Distribution (generalized, localized)</li> <li>– Severity (mild, moderate, severe)</li> <li>– Acute, chronic</li> <li>– Location (papillary, marginal, diffuse)</li> </ul> </li> </ul>

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	11.3 Recognize the clinical features of healthy bone	<ul style="list-style-type: none"> <li>Identify the appearance of healthy bone as related to:               <ul style="list-style-type: none"> <li>Bone height</li> <li>Junctional epithelium</li> </ul> </li> </ul>
	11.4 Recognize clinical features of periodontitis	<ul style="list-style-type: none"> <li>Explain the three basic states of the periodontium (health, gingivitis, periodontitis)</li> <li>Introduction to the AAP Classification of Periodontal Diseases and Conditions, 1999</li> <li>Formulate a client specific periodontal statement using the appropriate sequence as it pertains to Type I (Gingival Diseases) and Type II (Chronic Periodontitis) AAP Classification of Periodontal Diseases and Conditions, 1999.</li> </ul>
12. Prepare to manage emergencies in the dental environment	12.1 Examine methods used to reduce the risk of medical emergencies in the dental setting	<ul style="list-style-type: none"> <li>Explain the importance of obtaining a pre-treatment health history from each client</li> <li>Explain the rationale for obtaining vital signs for dental hygiene care</li> <li>Describe temperature, pulse, respiration, and blood pressure, including normal ranges and factors which may cause variances</li> <li>Explain how stress and anxiety can lead to medical emergencies</li> <li>Recognize findings that have implications for the care plan and may require a medical consultation</li> </ul>
	12.2 Identify the equipment and describe techniques required to obtain vital signs	<ul style="list-style-type: none"> <li>Describe procedures for obtaining pulse, respiration, and blood pressure</li> <li>Describe how to record pulse, respiration, and blood pressure including appropriate symbols, abbreviations, and terminology to meet medico legal requirements</li> <li>Discuss infection control and equipment maintenance pertinent to obtaining vital signs</li> <li>Discuss types and sizes of blood pressure cuffs, including indications for each</li> </ul>



Upon completion of this course the student will be able to:		
Course learning requirements		Embedded knowledge and skills
12. Prepare to manage emergencies in the dental environment	12.3 Outline the protocols in place to manage medical emergencies at CADH	<ul style="list-style-type: none"> <li>▪ Explain CADH protocol on the management of medical emergencies</li> <li>▪ Locate 'Record of Medical Emergency Response' form</li> <li>▪ Explain how to appropriately document a medical emergency incident on the 'Record of Medical Emergency Response' form and in the client's chart</li> </ul>
	12.4 Demonstrate how to respond to medical emergency situations appropriately	<ul style="list-style-type: none"> <li>▪ Recognize individuals at high risk for a medical emergency</li> <li>▪ Identify signs and symptoms of specific medical emergencies and describe the necessary emergency care</li> </ul>
	12.5 Respond to medical emergency situations appropriately	<ul style="list-style-type: none"> <li>▪ Identify the drugs necessary in the basic emergency Drug kit</li> <li>▪ For each drug, discuss the route of administration, action the drug performs and the indication for use</li> <li>▪ Describe the medico legal implications of medical emergencies</li> <li>▪ Participate in role playing exercises related to the management of medical emergencies</li> </ul>
	12.6 Discuss equipment that may be required for medical emergencies	<ul style="list-style-type: none"> <li>▪ Explain the importance of:               <ul style="list-style-type: none"> <li>– portable oxygen tank</li> <li>– emergency kit and drug box</li> <li>– fire extinguisher</li> <li>– eye wash material</li> </ul> </li> </ul>

## Class Schedule

Week	Hours	Topics	Resources
1	4	Review course outline  Introduction to the course 2.1 Departments and personnel 2.2 Function of the equipment 1.1 Role of the government in managing workplace health and safety 1.2 Role of stakeholders in health and safety 1.3 How to maintain a healthy and safe dental environment 1.4 Importance of maintaining asepsis in the clinical area	<i>Darby and Walsh: Ch 9 Supplemental information</i>
2-3	6  2	12.1 Methods used to reduce the risk of medical emergencies in the dental setting 12.2 Equipment and techniques required to obtain vital signs 12.3 CADH protocols to manage medical emergencies 12.4 How to respond to medical emergencies 12.5 Respond to medical emergencies 12.6 Equipment required for medical emergencies  9.7 Stains and coronal polish 8.1 Deposits that can be found in the oral cavity	<i>Darby and Walsh: Ch 11, 48, 49, 62</i>  <i>Darby and Walsh: Ch 18, 19, 32</i>
4	4	8.2 Role of plaque biofilm in the disease process 8.3 Dental Hygienist's role in integrating the Dental Caries Management by Risk Assessment (CAMBRA) 9.8 Explain the rationale for topical fluoride	<i>Darby and Walsh: Ch 18, 19, 45-47</i>
5	4	9.1 Manual and power toothbrushes <b>Test #1: 30% of grade (Topics up to &amp; including fluoride)</b>	<i>Darby and Walsh: Ch 24</i>

Week	Hours	Topics	Resources
6-8	8	9.2 Methods for manual tooth brushing 9.3 Denture care 9.4 Role of toothpastes and mouth rinses in oral plaque control 9.5 Interdental plaque control devices	<i>Darby and Walsh: Ch 19, 24-27</i>
8-9	7.5	10.1 Extra-oral examinations 10.2 Intra-oral examinations  11.1 Clinical features of healthy gingiva 11.2 Clinical features, distribution, severity, and location of gingival inflammation 11.3 Clinical features of a healthy periodontium 11.4 Clinical features of periodontitis	<i>Darby and Walsh: Ch 16</i> <i>Darby and Walsh: Ch 28</i> <i>FPI: module 23,24</i> <i>Supplemental information</i>  <i>Darby and Walsh: Ch 16, 20</i> <i>Daniel and Harfst: Ch 14</i> <i>Periodontics for the Dental Hygienist: Ch 4-6</i>
9-11	10.5	3.1 Mathematical principles and anatomic descriptors 3.2 Client/operator positions 3.3 Strategies that help enhance an effective client/operator position 3.4 Modified pen grasp 3.5 Mirror use and fulcrum positioning  4.1 Classification of instruments 4.2 Instrument design 5.1 Adaptation and angulation 5.2 Motor skills required for successful adaptation and activation 5.3 Elements of an effective instrumentation stroke	<i>Darby and Walsh: Ch 12, 30</i> <i>Darby and Walsh: 24-27, 45</i> <i>FPI: modules 1- 7</i> <i>FPI Appendices</i>  <i>Darby and Walsh: Ch 28</i> <i>Daniel and Harfst: Ch 9</i> <i>FPI: modules 8 -12</i>
12	4	6.1 Design and implementation of the periodontal probe	<i>Darby and Walsh: Ch 28</i> <i>FPI: modules 8 -12</i>

Week	Hours	Topics	Resources
13	4	6.2 Design and implementation of the explorer	<i>Darby and Walsh: Ch 28</i> <i>FPI: modules 8 -12</i>
14	4	6.3 Design and implementation of the sickle scalers 6.4 Design and implementation of the universal curets 6.5 Design and implementation of the area specific curets 6.6 Compare and contrast various instruments  <b>Role playing exercises (10%)</b>	<i>Darby and Walsh: Ch 28</i> <i>FPI: modules 8-12, 15, 17, 19</i>
15	4	7.1 Rationale for maintaining and using sharp instruments 7.2 Sharpening sickle scalers and curets <b>Test #2 (30%) of grade</b>	<i>Darby and Walsh: Ch 28</i> <i>FPI: module 23,24</i> <i>Supplemental information</i>
16	2	Final Exam Review	
17	2.5	<b>Final examination: all course content 30%</b>	



Student Names: \_\_\_\_\_

Date: \_\_\_\_\_

**PRACTICE ENVIRONMENT I: SCRIPT RUBRIC**

Category	4 Excellent	3 Good	2 Needs Improvement	1 Unacceptable	Score
<b>Written Component</b>					
<i>Script</i>	All actors and roles are clearly identified and detailed dialogue evident	The actors and roles are not clearly identified but detailed dialogue is evident	The actors and roles are clearly identified but detailed dialogue is not evident	Actors and roles are not clearly identified and no detailed dialogue is evident	/4
<i>Spelling and Grammar</i>	No spelling or grammatical errors in the submission	No grammatical errors but there are spelling errors in the submission	Grammatical errors evident but no spelling errors in the submission	Spelling and grammatical errors in the submission	/4
<i>References</i>	LITERATURE CITED page formatted accurately Citation(s) is/are accurately formatted using CADH's Vancouver referencing style (No errors).	Good use of CADH Vancouver style, although some elements were missing or incorrect, (1-2 errors).	Fair use of CADH Vancouver style, although some elements were missing or incorrect, (3-4 errors).	Minimal or no attempt to follow CADH Vancouver referencing rules; numerous elements missing or incorrect, (4+ errors).	/4
<b>Content</b>					
<i>Management of the issue or conflict</i>	Clearly identifiable and well developed	Identifiable but not well developed	Identifiable with difficulty and not well developed	Not identified and has not been developed	/8
<i>Incorporation of professionalism</i>	Professional demeanour of the dental hygiene professional is clearly incorporated and evident	Professional demeanour of the dental hygiene professional is incorporated but needs further development	Professional demeanour of the dental hygiene professional is incorporated but not development	Professional demeanour of the dental hygiene professional is neither incorporated nor developed	/4
<b>Final Group Score</b>					<b>/24</b>
<b>Value to final grade</b>					<b>10%</b>
<b>Comments:</b>					