

# CAMOSUN COLLEGE School of Health & Human Services Dental Programs

## DHYG 370 Clinical Theory 3 Semester 1–Fall 2018

#### COURSE OUTLINE

The Approved Course Description

available on the web

http://camosun.ca/learn/school/health-human-

services/student-

is

info/archives/index.html?p=DHYG+%28Dental+Hygiene%29

# 1. Instructor Information

(a) InstructorLeta Zaleski(b) Office hoursAs posted or by arrangement via email.(c) LocationDental Building Room 003(d) Phone250-370-3453(e) E-mailzaleskil@camosun.bc.ca(f) WebsiteD2L will be used for select PowerPoint postings TBA

### 2. Course Description

This course builds on DHYG 280 with a focus on the integration of clinical theory, professional practice and dental science into complex care planning for clients of a variety of ages and those with diverse dental and medical conditions. This course prepares learners for increased responsibility in managing assessment, planning, diagnosis, implementation and evaluation of dental hygiene client care.

Pre-requisites: DHYG 221, DHYG 222, DHYG 231, DHYG 280, DHYG 281, BIOL 260

Co-requisites: DHYG 321

Course Particulars:

Credits: 4.0

Class Hours: 4 x 14 weeks.

Course is not available by distance.

Prior learning is not available for this course.

A weekly schedule of class will be distributed separately.

# 3. Required Materials

#### **Texts**

Darby, M. & Walsh, M. (2015). *Dental hygiene theory and practice*. 4<sup>rd</sup> Ed. St Louis Missouri: Saunders.

Clinic Manual. Camosun College Dental Hygiene Program; 2018-2019.

### **Reference Materials**

Gladwin, M. & Bagby, M. (2017). *Clinical aspects of dental materials theory, practice and cases.* 5th Ed. Philadelphia: Lippincott Williams & Wilkins.

Little, J.W., Falace, D.A., Miller, C.S., and Rhodus, N.L. (2018). *Dental management of the medically compromised patient.* 9th<sup>th</sup> Ed. St-Louis, Missouri: Mosby Elsevier.

Articles TBA

### Other

Kilgore Teeth Study Model (from 2<sup>nd</sup> year kit).

# 4. Intended Learning Outcomes

Learning Outcomes for DHYG 370 Clinical Theory 3	Program (Global) Outcomes (FYI)	
Upon successful completion of this course a student will be able to:	<ul> <li>A. Function as a professional dental hygienist.</li> <li>B. Communicate and collaborate effectively with individuals, family, community and interdisciplinary teams.</li> </ul>	
<ol> <li>Explain the possible oral implications of diverse dental conditions for dental hygiene services.</li> <li>Analyze the elements of comprehensive dental hygiene care for clients with diverse dental and medical conditions.</li> <li>Explain communication and collaboration issues associated with the process of care for clients of a variety of ages and diverse backgrounds.</li> <li>Analyze dental hygiene educational, preventive and therapeutic services in relationship to the available evidence.</li> <li>Examine advocacy approaches that support access to dental and dental hygiene care for individual clients.</li> </ol>	<ul> <li>interdisciplinary teams.</li> <li>C. Demonstrate critical thinking and use evidence based decision-making to provide optimal dental hygiene services to individuals, families and community.</li> <li>D. Advocate to improve oral health and access to oral health services for individuals, families and community.</li> <li>E. Coordinate and contribute to the effective management of the practice environment to ensure quality care and services.</li> <li>F. Function as a competent clinician using the dental hygiene process of care.</li> <li>G. Educate individuals, families and community about oral health including its relationship to general health.</li> <li>H. Apply health promotion principles to improve the health of individuals, families</li> </ul>	
	and community.	

### 5. Attendance

Students are expected to attend all classes and engage sufficiently in order to safely apply the content and concepts covered in class to the clinical environment. Prereading/preparation and attendance when guest speakers and/or peers are presenting in class is essential. Attendance will be monitored for each class with marks deducted for all **unexcused** absences: 1% for one missed class; 3% for two missed classes and 5% for three or more missed classes. Missing three (10%) or more classes increases the risk for students to be unsuccessful in meeting the learning outcomes for this course.

#### 6. Course Elements and DHYG 370 Session Outcomes

#### **Introduction and Orientation to the Course**

Upon completion of this session, students will:

Discuss updated clinical protocols and evaluation for DHYG 370 and DHYG 371.

# **Assessments Review and Screening Process**

Upon completion of this session, you need to be able to:

- 1. Problem solve challenges associated with acquiring accurate health history information
- 2. Record significant deviations from normal using terminology that meet medicolegal and ethical requirements and complies with CDHBC documentation guidelines.
- 3. Recall the use of RxTx or Medscape to analyze pharmaceutical information for relevance in client care.
- 4. Discuss the screening process used at Camosun College

# Review of Care Planning, CAL, AAP Diagnosis, Prognosis, Evaluation and Documentation

- 1. Recall the Camosun College Dental Programs' protocols for care planning and evaluation, re-evaluation, documentation and chart auditing
- 2. Determine relevant assessment data needed in care planning of clients
- 3. Construct appropriate dental hygiene diagnostic statements using the Human Needs Model and periodontal classifications using the 2017 American Academy of Periodontology (AAP) classification scheme.
- Employ the Human Needs theory and social determinants of health in creation of care plans for preventive care and periodontal maintenance clients with diverse medical and/or dental considerations
- 5. Analyze realistic expectations of tissue response for gingivitis and periodontitis
- 6. Audit documentation ensuring practice standards for documentation and comprehensive quality care are completed

## **Power Scaling**

Upon completion of this session, you need to be able to:

- 1. Recall mechanized instrumentation techniques used in nonsurgical periodontal therapy, periodontal maintenance therapy and prevention.
- 2. Recall similarities and differences between magnetostrictive, piezoelectric, and sonic instrumentation.
- 3. Recall indications and contraindications for mechanized instrumentation
- 4. Recall strategies for appropriate insert or tip selection based on client needs and delivery unit.
- 5. Discuss advanced magnetostrictive tip selection for non-surgical periodontal therapy.

### Air Polishing

Upon completion of this session, you need to be able to:

- 1. Describe set up and maintenance of supra and subgingival air polishing equipment
- 2. Describe techniques for supra and subgingival air polishing using various types of agents, tips and delivery systems
- 3. Discuss indications and contraindications with supra and subgingival air polishing
- 4. Problem solve challenges arising with air polishing

### Pit and Fissure Sealants

Upon completion of this session, you need to be able to:

- 1. Describe sealants and their role in a comprehensive oral health care program
- 2. Discuss research findings regarding sealant retention and caries reduction
- 3. Describe sealant materials and kits
- 4. Explain the steps of sealant application, following the manufacturer's directions
- 5. Explain information to discuss with the client and parent/guardian regarding sealants including the need for follow up visits

### **Providing Dental Hygiene Care for Children and Youths**

- 1. Apply the Infant's Act to dental hygiene practice
- 2. Determine the process of care for children and youth clients.
- Determine modifications required to process of care such as knee to knee examinations and behaviour management strategies when providing care to child and youth clients
- 4. Analyze assessment of the oral conditions in a child's mouth of any age
- 5. Plan care for a child and youth client.
- 6. Assess nutrition of child and youth clients and incorporate this into care.
- 7. Generate approaches to involve parents in self-care with children in the office and home environments.
- 8. Identify signs and symptoms of child abuse and the dental hygienist's role in advocacy for the protection of children.

- 9. Prepare to provide care to children and youth aged 1-18 years of age.
- 10. Identify and examine interventions to reduce caries risk (CAMBRA)
- 11. Document findings according to CDHBC guidelines for documentation.
- 12. Discuss communications strategies applicable to various ages

#### **Manual and Advanced Instrumentation**

Upon completion of this session, you need to be able to:

- 1. Recall fundamentals of manual instrumentation
- 2. Explain characteristics of and uses for accessory instruments needed for complex periodontal debridement
- 3. Explain debridement around appliances and implants
- 4. Problem solve challenges that can occur during debridement

### **Impression and Study Models**

Upon completion of this session you need to be able to:

- 1. Explain the rationale for taking impressions and creating study models
- 2. Explain the composition, properties and manipulation of alginate and dental stone.
- 3. Describe possible tissue responses to alginate.
- 4. Explain rationale that influences tray selection.
- 5. Describe the preparation of impression trays prior to taking impressions.
- 6. Explain the purpose and procedure of inter-occlusal records (wax bites).
- 7. Explain conditions that modify or contraindicate obtaining impressions, including precautions.
- 8. Describe approaches for obtaining impressions and inter-occlusal records.
- 9. Explain the preparation of impressions and inter-occlusal records for pouring in the laboratory
- 10. Explain the procedure for pouring impressions
- 11. Explain chart entry for impressions including appropriate symbols, abbreviations and terminology to meet medico-legal requirements.
- 12. Develop criteria for acceptable impressions and study models based on intended purpose
- 13. Describe uses of study models during dental and dental hygiene care.

### **Case Studies**

- 1. Develop appropriate strategies for providing comprehensive care for clients with diverse medication and dental considerations such as stroke, dental anxiety, sensitivity, high caries risk, varying restorations and appliances
- 2. Discuss approaches to debridement for clients with higher levels of difficulty and complexity

## **Ergonomics**

Upon completion of this session, you need to be able to:

- Discuss ergonomic positioning for reinforced periodontal positioning including standing position
- 2. Discuss advanced fulcruming during debridement.
- 3. Recall strategies to support long term clinician health during the provision of hygiene care

## **Amalgam and Composite Restorations and Margination**

Upon completion of this session, you need to be able to:

- Discuss the characteristics of various direct and indirect dental restorative materials
- 2. Explain the composition, preparation, placement, and finishing of restorative materials
- 3. Recognize how dental materials and techniques used to restore the teeth and surrounding oral structures, affect the delivery of dental hygiene care.
- 4. Describe the interaction between specific dental materials and the surrounding oral tissues.
- 5. Compare and contrast the use, benefits, drawbacks and safety of amalgam, composite, porcelain, and gold restorative materials
- 6. Explore research pertaining to safety concerns of dental materials
- 7. Discuss the purpose of margination along with the techniques and armamentarium involved with the margination of amalgam and composite materials

#### Sleep Apnea

Upon completion of this session, you need to be able to:

- 1. Recognize the signs and symptoms of Obstructive Sleep Apnea.
- 2. Describe the risk factors and consequences associated with OSA.
- 3. Describe the dental hygienist's role in screening and protocol for referral for OSA
- 4. Describe the options to treat OSA including oral appliance therapy.

#### Pulp vitality

- 1. Recall sources of tooth sensitivity.
- 2. Analyze assessment approaches to gain data related to areas of tooth sensitivity.
- 3. Compare and contrast approaches used to determine the health of the pulp (including but not limited to ice, percussion, heat, radiographs, electric vitality testing).
- 4. Discuss causes, diagnosis and treatment of reversible and irreversible pulpitis.

#### **Oral Cancer Risk Assessment**

Upon completion of this session, you need to be able to:

- 1. Discuss common risk factors for oral cancer and health promotion strategies to decrease risk for diverse groups.
- 2. Recall the use and significance of fluorescent visualization (Velscope™)
- 3. Discuss the use of Toluidine Blue in assessing tissue changes in the oral cavity.
- 4. Discuss BC Cancer protocols for lesion monitoring and referral

## **Dental Specialties**

Upon completion of this session, you need to be able to:

- 1. Review the various dental specialties.
- 2. Discuss the armamentarium used and the process of care provided with the varying types of dental specialities.
- 3. Discuss referrals as they relate to dental specialities.

#### **Dentures and Denture Care and Maintenance**

Upon completion of this session, you need to be able to:

- 1. Recall the criteria for denture assessment.
- 2. Describe the components of a denture and labelling process.
- 3. Discuss providing client education prior to placement of immediate and conventional
- 4. Discuss the dental hygienist's role in cleaning and maintenance of dentures.

## **Whitening Process**

Upon completion of this session, you need to be able to:

- 1. Explain the chemical process of whitening
- 2. Analyze options available for whitening internal and external staining
- 3. Describe relative contraindications and safety of whitening
- 4. Describe the fabrication and benefits of whitening trays
- 5. Discuss the process of care in providing a client with a whitening system

# Temporary Restorations, Dental Dam, Instrument Transfer, and Interim Stabilization Therapy

- 1. Explain the composition, mixing, placement, and finishing of IRM restorations
- 2. Discuss the benefits of dental dam use in dentistry
- 3. Discuss the materials and instruments used in rubber dam placement
- 4. Discuss the procedure of placing a rubber dam
- 5. Discuss the benefits of successful instrument transfer
- 6. Explain the purpose of interim stabilization therapy and the technique involved.

# **Implants**

Upon completion of this session, you need to be able to:

- 1. Describe techniques for debridement of dental implants
- 2. Describe self-care protocols for dental implants
- 3. Explain rationale for continuing care intervals for clients with dental implants

## **Sports Guards**

Upon completion of this session you need to be able to:

- 1. Explain the role of mouth guards in promoting oral health.
- 2. Determine the appropriate mouthguard for various classifications for static occlusion.
- 3. Analyze trends in sports-related injuries including the relationships of dental trauma to concussions
- 4. Describe the fabrication steps and types of sports guards

## **Professionally Applied Subgingival Irrigation**

Upon completion of this session, you need to be able to:

- 1. Discuss indications for use of subgingival irrigation in the prevention and treatment of inflammatory periodontal disease
- 2. Distinguish between the various modes of delivery available for the clinician's application of chemotherapeutics in professional settings.
- 3. Compare various agents used for subgingival irrigation.

# Utilize information about nutritional standards and guidelines including Canada's Food Guide in nutritional analysis and client counselling.

- 1. Describe the role of the dental hygienist in nutrition counselling as part of comprehensive dental hygiene care.
- 2. Identify nutritional requirements for optimum health using the recommendations and guidelines for healthy eating, from Canada's Food Guide (CFG).
- 3. Describe the process of involving a client in the completion of a food record from client selection criteria, written details of diet and patterns and non-directive nutrition counselling techniques.
- 4. Analyze personal and other food choices and make recommendations for alternative food choices and eating patterns, which promote both general and oral/dental health.
- 5. Develop comprehensive written communication that would best inform clients on the relationship between good nutrition and general health as well as oral health as indicated in a dietary analysis.
- 6. Discuss food factors such as; culture, budget, preparation and patterns that affect nutritional choices for individuals of any age and cultural diversity.
- 7. Counsel a client on nutritional management based on analysis of a client food record as related to the guidelines for healthy eating and the CFG and associate dietary habits to oral and general health.

- 8. Incorporate a variety of communication strategies such as non-directive techniques (as presented in DHYG 264 & DHYG 390).
- Utilize information gained on the relationship between simple carbohydrates and dental caries from DHYG 219 when providing nutritional recommendations when counseling.

## 7. Basis of Student Assessment (Weighting)

## **Assignments**

5%
5%
20%
20%

#### **Exams**

A) Midterm: 25% B) Final: 25%

## 8. Grading Systems <a href="http://www.camosun.bc.ca/policies/policies.php">http://www.camosun.bc.ca/policies/policies.php</a>

The following two grading systems are used at Camosun College: Standard Grading System (GPA)

Percentage	Grade	Description	Grade Point Equivalency
90-100	A+		9
85-89	Α		8
80-84	A-		7
77-79	B+		6
73-76	В		5
70-72	B-	PASSING GRADE	4
65-69	C+	Minimum level has not been achieved.	3
60-64	С		2
50-59	D		1
0-49	F		0

# 9. Recommended Materials or Services to Assist Students to Succeed Throughout the Course

#### LEARNING SUPPORT AND SERVICES FOR STUDENTS

There are a variety of services available for students to assist them throughout their learning. This information is available in the College Calendar, Student Services or the College web site at <a href="http://www.camosun.bc.ca">http://www.camosun.bc.ca</a>

If you require additional support services due to a disability, please contact the Centre for Accessible Learning: camosun.ca/services/accessible-learning/

#### STUDENT CONDUCT POLICY

There is a Student Conduct Policy. It is the student's responsibility to become familiar with the content of this policy. The policy is available in each School Administration Office, Registration, and on the College web site in the Policy Section. Additional information regarding the dental hygiene program is in the student handbook.

http://camosun.ca/about/policies/education-academic/e-2-student-services-and-support/e-2.5.pdf