



**CAMOSUN COLLEGE**  
*School of Health & Human Services*  
**Dental Programs**

**Dental Hygiene 220**  
**Dental Anatomy**  
**Fall 2017**

**COURSE OUTLINE**

---

The Approved Course Description is available on the web @

<http://camosun.ca/learn/school/health-human-services/student-info/archives/index.html?p=DHYG+%28Dental+Hygiene%29>

---

**1. Instructor Information**

|                         |   |
|-------------------------|---|
| <b>(a) Instructor</b>   | Bev Jackson                                     |
| <b>(b) Office hours</b> | Posted on door                                  |
| <b>(c) Location</b>     | Dental Building - 004                           |
| <b>(d) Phone</b>        | (250) 370-3507 <b>Alternative:</b> 250 915-5636 |
| <b>(e) E-mail</b>       | jacksonb@camosun.bc.ca                          |
| <b>(f) Website</b>      | D2L   |

**2. Course Description**

a. Calendar Description

*Crown and root anatomy, morphology and occlusion will be studied in detail. Students will identify features of crown and root morphology that relate to the identification and differentiation of teeth in addition to occlusal relationships and how these may affect the provision of dental hygiene care.*

b. Pre /Co-requisites: DHYG 270, DHYG 271, Biol 160

c. Course Particulars

i) Credits: 2.0

ii) Components: Class Hours: 2 hours per week (combination of lecture and lab)

A weekly schedule of topics (lecture and lab information) and exam times will be provided in the first week of class. Students are expected to be prepared for class by completing assigned readings and exercises.

### 3. Required Materials

- (a) **Required Text:** Fehrenbach, M.J., Popowics. *Illustrated dental embryology, histology, and anatomy*. 4<sup>th</sup> Ed. Missouri: Elsevier Saunders. (Also used for DHYG 219)
- (b) **Other equipment / materials required:** Kilgore International Inc. Dental Study Model – Permanent Teeth with Anatomical Roots. Models are purchased as part of the DHYG instrument kit.

### 4. Intended Learning Outcomes

| <b><i>Learning Outcomes for DHYG 220<br/>Dental Anatomy and Morphology</i></b>   | <b><i>Program Outcomes (FYI)</i></b>   |
|--|--|
| <p>Upon successful completion of this course a student will be able to:</p> <ol style="list-style-type: none"> <li>1. use dental and anatomical terms to describe dental anatomy and intraoral positions of teeth in order to provide accurate documentation.</li> <li>2. describe tooth morphology that relates to the identification and differentiation of teeth and have a good understanding of morphology in relation to clinical application.</li> <li>3. describe normal eruption sequence and general patterns for primary and permanent teeth as a foundation for clinical dental hygiene.</li> <li>4. describe occlusal classifications and variations from normal in order to have a good understanding of function as it applies to client care.</li> </ol> <p>(B,C,E,F are main Program Outcomes; knowledge and application)</p> | <ol style="list-style-type: none"> <li>A. Function as a professional dental hygienist.</li> <li>B. Communicate and collaborate effectively with individuals, family, community and 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 improving 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 and community.</li> </ol> |

### 5. Course Elements

*By the end of this course you will know and be able to do the following:*

1. **Use dental and anatomical terms to describe dental anatomy and intraoral positions of teeth in order to provide accurate documentation.**
  - *Apply terms pertaining to primary and permanent dentitions in all communication (written and verbal).*
  - *Describe features of all types of human teeth in the permanent and primary dentitions using accurate terminology.*

- *Discuss the arrangement of teeth identifying positions of arches, quadrants and sextants.*
- *Using anatomical terms describe tooth surfaces, horizontal and vertical divisions of teeth, line angles and point angles.*
- *Describe the International, Universal and Palmer tooth numbering systems.*
- *Describe morphology of tooth crowns as they relate to alignment, proximal contacts and embrasure spaces.*
- *Describe the effect on gingival health of pronounced or inadequate curvatures of teeth and widened or narrow embrasures.*

**2. Describe tooth morphology that relates to the identification and differentiation of permanent and primary teeth.**

- *Discuss basic development of primary and secondary grooves relative to morphology (lobes).*
- *Discuss general and key characteristics of each type of tooth crown and root (incisors, canines, premolars, and molars).*
- *Differentiate the anatomical differences between primary and permanent teeth.*
- *Describe specific anatomical features of each deciduous tooth crown.*
- *Explain the importance of deciduous teeth.*
- *Describe common variations or abnormal features of each tooth crown and root.*
- *Describe anatomical features of deciduous roots and compare with permanent counterparts.*
- *Identify permanent teeth in a laboratory or clinical setting using appropriate anatomical terminology.*
- *Discuss features of tooth crown and/or root morphology that may affect the provision of dental hygiene care.*
- *Discuss crown to root proportions in relation to the prognosis of periodontal disease*
- *Discuss the implications of normal and abnormal root anatomy for effective root instrumentation*

**3. Describe normal eruption sequence and general patterns for primary and permanent teeth as a foundation for clinical dental hygiene.**

- *Identify eruption patterns of permanent teeth and primary teeth.*

**4. Describe occlusal classifications and variations from normal in order to have a good understanding of function as it applies to client care.**

- *Define centric (static) relation, centric (static) occlusion, ideal occlusion, functional occlusion, open bite, overbite and overjet.*
- *Describe anatomical, dental and oro-facial characteristics of Angle's Class I, II (Divisions 1 and 2) and III occlusion and malocclusion.*
- *Describe normal ranges of overbite and overjet.*
- *Describe common abnormalities that may be found within each classification (e.g. crossbites, premature contact).*
- *Describe normal occlusal relationships during guided movement of the mandible.*
- *Explain factors associated with the development of malocclusions.*
- *Define primary and secondary occlusal trauma including clinical and histological signs and symptoms.*
- *Explain common etiologic factors that may contribute to occlusal trauma.*

## 6. Basis of Student Assessment (weighting)

1. Quiz #1 – 15%
2. Midterm Exam – 35%
3. Assignment – 10%
4. Final Exam - 40%

*Please note that the minimum grade for successful completion of DHYG 220 is B- or 70%.*

## 7. Grading System

Standard Grading System (GPA)

Competency Based Grading System

### A. GRADING SYSTEMS <http://camosun.ca/search/?q=grading+policy>

This course applies the standard grading system used at Camosun College:

#### 1. Standard Grading System (GPA)

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

## 8. 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 <http://www.camosun.bc.ca>. Also, refer to the “Resources for learning section of the DHYG student handbook.

### 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 at <http://camosun.ca/about/policies/education-academic/e-2-student-services-and-support/e-2.5.pdf>. Additional information regarding the dental hygiene program is in the student handbook. <http://www.camosun.bc.ca/policies/policies.html>