



CAMOSUN COLLEGE
School of Health & Human Services
Dental Programs

DHYG 162 – Clinical Theory and Practice 3
(Spring 2010)

COURSE OUTLINE

The Approved Course Description is available on the web @

<http://www.camosun.bc.ca/calendar/current/web/dhyg.html#DHYG162>

Ω Please note: This outline will not be kept indefinitely. It is recommended students keep this outline for their records.

1. Instructor Information

| | |
|-------------------------|---|
| (a) Instructor | Bev Jackson and Melissa Schaefer |
| (b) Office hours | By appointment |
| (c) Location | Dental Building – D004 / D003 |
| (d) Phone | 370-3507 / 370-3193 Alternative: 478-4130 |
| (e) E-mail | jacksonb@camosun.bc.ca schaefer@camosun.bc.ca |
| (f) Website | |

2. Intended Learning Outcomes

The following learning outcomes are consistent throughout all 6 clinical courses in the dental hygiene program, unless otherwise stated. Performance Indicators are specific to each term and will be reflective of the expectations required of each student at the end of every term. Please read them thoroughly. Assessment of skills/knowledge will be based on evaluations from the theory and the clinical component of the course.

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

1. Demonstrate professional behavior.
2. Use clear and accurate written, oral, and visual communication with peers, clients, staff and faculty.
3. Demonstrate responsibility and accountability for own actions.
4. Work effectively as a member of the dental team to provide oral health care.
5. Prepare environment ensuring safe and efficient delivery of care.
6. Perform assessments that ensure optimal delivery of dental hygiene therapy.
7. Develop dental hygiene diagnosis and care plans which contribute to optimal oral and general health.
8. Implement the dental hygiene process of care that contributes to the client's oral and general health.

9. Demonstrate critical thinking skills and apply the problem-solving process in the provision of dental hygiene care.
10. Apply basic knowledge, values and skills related to self-evaluation to the practice of dental hygiene.
11. Evaluate the dental hygiene process of care to ensure safety, comfort, and understanding.
12. Manage clinical environment to ensure optimal delivery of care.
13. Integrate basic behavioural, biological, dental sciences and professional courses with clinical knowledge, skills and values into the practice of dental hygiene.

3. Required Materials

- Texts (no additional texts/materials this term). We will continue to use the following required materials from the DHYG 160 & 161 courses.
 - Dental Hygiene Theory and Practice (3rd Edition), Darby and Walsh
 - Fundamentals of Periodontal Instrumentation (4th Edition), Jill S. Nield-Gehrig
 - Dental Hygiene Clinic Manual (2009 Edition); purchased at the bookstore (09/09)
- 2 complete sets of instruments
- NEW -1 laboratory kit for impressions and study models (share with a peer)

4. Course Content and Schedule

(Can include: Class hours, Lab hours, Out of Class Requirements and/or Dates for quizzes, exams, lecture, labs, seminars, practicums, etc.)

| | |
|---------------|----------|
| Class hours: | 4 hours |
| Lab Hours: | 11 hours |
| Out of Class: | 6 hours |
| Exams: | TBA |
| Assignments: | TBA |

PERFORMANCE INDICATORS: For references to DH 160 and DH 161 performance indicators, consult previous course outlines.

Learning Outcome #1

Demonstrate professional behaviour

- Demonstrate knowledge and skills learned in DH 160 and DH 161.

Learning Outcome # 2

Uses clear and accurate written and oral communication with peers, clients, staff and faculty.

Dental Records

- Demonstrate knowledge, skills, and attitude learned in DH 160 & DH 161.

Learning Outcome # 3

Demonstrate responsibility and accountability for own actions.

- Demonstrate knowledge, skills and attitude learned in DH 160 & DH 161.

Learning Outcome # 4

Work effectively as a member of the dental team to provide oral health care.

- Demonstrate knowledge, skills and attitude learned in DH 160 & DH 161

Learning outcome # 5

Prepare environment ensuring safe and efficient delivery of care.

Accident/Injury Prevention

- Demonstrate knowledge, skills and attitude learned in DH 160 & DH 161.

Operation and Maintenance of Equipment

- Demonstrate knowledge, skills and attitude learned in DH 160 & DH 161.

Infection Control

- Demonstrate knowledge, skills and attitude learned in DH 160 & DH 161.

Positioning and Comfort

- Demonstrate knowledge, skills and attitude learned in DH 160 & DH 161.

Armamentarium Assembly

- Demonstrate knowledge, skills, and attitude learned in DH 160 and DH 161

Instrumentation Principles

- Demonstrate knowledge, skills and attitude learned in DH 160 and DH 161.

Instrument Sharpening

- Demonstrate knowledge, skills and attitude learned in DH 160 & DH 161.

Learning Outcome # 6

Perform assessments that ensure optimal delivery of care.

In addition to the performance indicators included in each subject heading, the student must also be able to successfully demonstrate the following performance indicators consistently in all of the assessments.

- Verbalize an understanding of the rationale for each assessment.
- Develop efficient sequence and technique to ensure an accurate and thorough assessment, exhibiting skills/knowledge of foundational principles of each procedure.
- Follow principles of infection control.
- Identify associated structures and anatomical landmarks.
- Use appropriate resources to facilitate maximum efficiency and accuracy.
- Document findings and all associated data accurately, legibly and logically.
- Problem-solve basic difficulties encountered during the assessment phase.
- Integrate theoretical knowledge to practice.

Health History

- Demonstrate knowledge, skills and attitude learned in DH 160 & DH 161.

General Appearance and Head and Neck Assessment

- Demonstrate knowledge, skills and attitude learned in DH 160 & DH 161.

Intra-oral Soft Tissue Assessment

- Demonstrate knowledge, skills and attitude learned in DH 160 & DH 161.

Periodontal Assessment

- Discuss the host-bacterial relationship and the Non Specific and Specific Plaque Hypotheses.
- Describe acquired surface coatings of the teeth.
- Describe stages of the morphogenesis of plaque biofilm.
- Explain the mechanisms responsible for increasing the thickness of plaque biofilm.
- Differentiate between the morphology of long-standing plaque biofilm and newly formed plaque biofilm.
- Describe the morphology and oral ecology of plaque biofilm located in various healthy and diseased sites.
- List the sources of nutrition for the bacteria in plaque and how these sources influence the colonization of plaque biofilm.
- Relate the process of plaque biofilm mineralization to locations where calculus is frequently found.
- Review attachment mechanisms of calculus.
- Relate types of attachment mechanisms to the ease of calculus removal.
- Discuss the effects of specific inhibitors used in rinses and dentrifices on plaque biofilm bacteria; i.e., fluoride, baking soda, chlorhexidine and soluble pyrophosphates.
- Describe the effectiveness of plaque and calculus inhibitors according to research.
- Explain differences in calculus formation for various types of clients.
- Describe the relationship of calculus to periodontal pathologies.

- Describe the type of microorganisms most often associated with calculus formation.
- Explain the information that needs to be relayed to clients regarding calculus, calculus removal and periodontal health.

Dental Assessment

- Demonstrate knowledge, skills and attitude learned in DH 160 & DH 161.

Occlusal Assessment

- Demonstrate knowledge, skills and attitude learned in DH 160 & DH 161.

Vital Signs

- Demonstrate knowledge, skills and attitude learned in DH 160 & DH 161.

Emergency Care

- Demonstrate knowledge, skills and attitude learned in DH 160 & DH 161 including;
 - Review management of common medical emergencies.
 - Recognize signs and symptoms of impending emergencies, with minimal guidance.
 - Practice management protocol for common medical emergencies.

Dental Radiographs

- See course objectives from Radiology 1, DH 130.
- Recall knowledge about dental radiographs including self-evaluation criteria.
- Discuss the use of dental radiographs including planning the number and types of radiographs needed and recording exposures.
- Discuss the procedures for obtaining periapicals using the paralleling periapical technique and bitewings.
- Problem-solve difficulties with dental radiographs, including planning the number and types of radiographs needed, taking bitewings, taking periapicals using the paralleling technique and recording exposures.
- Expose bitewings and periapicals using the paralleling technique, and following infection control guidelines.
- Record exposures to meet medicolegal requirements.

Radiographic Processing/Mounting and Interpretation

- Recall knowledge of processing/mounting and interpretation – see course objectives from Radiology 1, DH 130
- Discuss processing manually and automatically, sorting and mounting radiographs and identify artifacts and normal anatomic landmarks on bitewings and periapicals.
- Discuss the use of dental radiographs during the planning and implementation phases of dental hygiene care.
- Discuss characteristics of radiographs that make them diagnostically acceptable and unacceptable.
- Describe artifacts related to automatic and manual processing.
- Problem-solve difficulties in processing manually and automatically, sorting and mounting radiographs and identifying of artifacts and normal anatomic landmarks on bitewings and periapicals.

Impressions

- Discuss the composition, properties and manipulation of alginate.
- Describe possible tissue responses to alginate.
- Discuss impression trays and factors that influence tray selection.
- Describe the preparation of impression trays prior to taking impressions.
- Explain the purpose of interocclusal records (wax bites).
- Discuss the manipulation of baseplate wax.
- Explain conditions that modify or contraindicate obtaining impressions, including precautions.
- Describe a method for obtaining impressions and interocclusal records.
- Explain ways of helping a client control gagging.
- Explain information to discuss with the client regarding impressions.
- Discuss the preparation of impressions and interocclusal records for pouring in the laboratory
- Explain chart entry for impressions including appropriate symbols, abbreviations and terminology to meet medicolegal requirements.
- Understand self-evaluation criteria for impressions.

Study Models

- Explain the relationship between alginate and study casts.
- Discuss the composition, properties and manipulation of gypsum.
- Describe types of study models and their uses in dentistry.
- Describe a procedure for pouring impressions.
- Describe steps for trimming and finishing maxillary and mandibular study models including safety measures.
- Discuss problem-solving during model trimming.
- Describe how study models are labeled and stored.
- Discuss using study models during dental hygiene care.
- Trim a study model, following skill set criteria.
- Understand self-evaluation criteria for study models.

Learning Outcome # 7

Develop dental hygiene diagnosis and care plans which contribute to optimal oral and general health.

Dental Hygiene Diagnosis and Health Care Planning (with minimal guidance)

- Demonstrate skills/knowledge and attitude learned in DH 161.
- Based on assessment findings, formulate a care plan utilizing the Human Needs Theory.
- Incorporate procedures introduced this semester into the Dental Hygiene Health Care plan, rationalizing sequence and procedures in each part of the plan.
- Understand basic knowledge of concepts and principles of nutrition and how to incorporate that knowledge in the care plan.
- Follow plan and modify as needed.

Learning Outcome # 8

Implement the dental hygiene process of care that contributes to the client's oral and general health.

In addition to the performance indicators included in each subject heading, the student must be able to successfully demonstrate the following performance indicators consistently in all of the implementation procedures.

1. Verbalize an understanding of the rationale for each procedure.
2. Develop an efficient sequence and technique to ensure an accurate and thorough implementation of clinical procedures, exhibiting skills/knowledge of foundational principles of each procedure.
3. Follow principles of infection control
4. Identify associated structures and anatomical landmarks to ensure proper implementation of procedures.
5. Use appropriate resources to facilitate maximum efficiency and accuracy.
6. Document findings and all associated data accurately, legibly and logically.
7. Problem-solve basic difficulties encountered during the implementation phase, modifying treatment when necessary.
8. Manage discomfort when performing procedures.
9. Integrate theoretical knowledge to practice.

Self-care

- Demonstrate knowledge, skills and attitude learned in DH 160 & 161.
- Recommend self-care regimens for clients with dental prostheses including care of edentulous areas, with minimal guidance.
- Identify modifications to self-care recommendations that may be needed for clients with abnormal and unhealthy oral tissues.
- Evaluate the effectiveness of self-care recommendations.
- Provide self-care instruction for clients with dental prostheses including care of edentulous areas.
- Help client to assess oral self-care progress, reviewing or modifying aids and techniques as needed to help client achieve the oral self-care goals.

Instrumentation Principles (with minimal guidance)

- Demonstrate knowledge, skills, and attitude learned in DH 160 & 161

Debridement; Scaling and Root Planing

- Demonstrate knowledge, skills, and attitude learned in DH 160 & DH 161.
- Recall knowledge about scaling and root planing including self-evaluation criteria.
- Recall knowledge about oral microbiology and pathologies affecting the periodontium (from DHYG 125).
- Discuss difficulties with client acceptance of the need for debridement, calculus detection, planning for calculus removal, instrumentation and techniques used to debride teeth.
- Understand reasons for a client being uncomfortable or in pain during scaling and root planing.

- Estimate fees for dental hygiene health care planned based on Camosun College Dental Programs' fee guide.
- Follow the Dental Hygiene Health Care plan for complete calculus removal.
- Satisfactorily scale and root plane, with minimal guidance, avoiding unnecessary hard and soft tissue trauma, following principles of instrumentation and observing precautions and modifications for care.

Polishing

- Demonstrate knowledge, skills and attitude learned in DH 160 & 161

Fluorides

- Demonstrate knowledge, skills and attitude learned in DH 160 & 161.
- Discuss difficulties applying topical fluoride including client acceptance.
- Describe benefits and controversies concerning the use of fluorides.
- Apply topical fluoride using isolation technique and trays, rationalizing choice.
- Recommend other sources of topical fluoride for clients, as needed.

Dental Prostheses

- Demonstrate knowledge, skills and attitude learned in DH 160 & 161

Desensitizing

- Demonstrate knowledge, skills, and attitude learned in DH 161.

Local Anesthesia: not introduced this semester

Learning Outcome # 9:

Demonstrate critical-thinking skills and apply the problem-solving process in the provision of dental hygiene care

- Demonstrate knowledge, skills, and attitude learned in DH 160 and 161

Learning Outcome # 10

Apply basic knowledge, values, and skills related to self-evaluation to the practice of dental hygiene.

- Demonstrate knowledge, skills and attitude learned in DH 160 & 161.

Learning Outcome # 11

Evaluate the dental hygiene process of care to ensure safety, comfort and understanding.

Evaluating the Success of Dental Hygiene Health Care

- Demonstrate knowledge, skills, and attitude learned in DH 160 & 161.
- Understand the significance of accurate, factual progress notes in the evaluation process.
- Discuss how the problem-solving process can be used to re-assess and re-plan the current appointment based on evaluation findings from the previous appointment.
- Problem-solve difficulties evaluating the success of dental hygiene health care including assessing the success of procedures introduced to date, evaluating the effectiveness of practice from one clinic session to the next and recording progress notes.
- Understand the relationship of dental hygiene care progress and self-care with the client as they relate to the client's oral health goals.
- Re-assess the plan for the current appointment based on the evaluation, if needed.
- Re-plan, if needed, discussing the new plan with the client.
- Provide Dental Hygiene Health Care based on the modified plan.
- Satisfactorily complete post-care evaluation and chart audit protocol.

Learning Outcome # 12

Manage clinical environment to ensure optimal delivery of care.

In addition to the specific performance indicators below, this learning outcome also refers to student's ability to demonstrate accurate and appropriate basic cognitive and affective skills when delivering the process of dental hygiene (see learning outcomes # 1 to 11).

Inventory Control

- Demonstrate knowledge, skills and attitude learned in DH 160 & 161.

Appointment Scheduling

- Demonstrate knowledge, skills and attitude learned in DH 160 & 161.

Accounts Receivable

- Demonstrate knowledge, skills and attitude learned in DH 160 & 161.

Continuing-Care/Maintenance System

- Demonstrate knowledge, skills and attitude learned in DH 160 & 161.

Time Management/Organization

- Demonstrates knowledge, skills and attitudes in all aspects of care delivery in order to complete tasks in an efficient manner.
- Consistently demonstrates the ability to provide dental hygiene care in an organized, efficient and time effective manner.

Learning Outcome # 13

Integrate basic behavioural, biological, dental sciences and professional courses with clinical knowledge, skills, and values, into the practice of dental hygiene.

- Demonstrate knowledge, skills and attitude learned in DH 160 & 161.

5. Basis of Student Assessment (Weighting)

(Should be directly linked to learning outcomes.)

There are two components to student assessment – didactic and clinical evaluation. To successfully complete DHYG 162, the student must satisfactorily pass the didactic component with a minimum grade of 70% as well as satisfactorily complete the clinical requirements with a minimum grade of B.

Didactic

- (b) Assignments
 - 30% - Case Study
 - 25% - Project: Research & Presentations (in groups)
 - 10% - Midterm Self Evaluation
- (c) Exams
 - 35% - Midterm

Clinical

- a) Satisfactory completion of the following coaching/clinical observations and exercises (see form):
 - FMS on DXTTR (Dental X-ray Teaching Training Replica)
 - Ultrasonic Debridement (process on client/peer)
 - Chart Audits
 - Denture Cleaning Exercise
 - Steri-center Exercise
- b) Satisfactory progress relating to client clinical sessions.
- c) Satisfactory completion of a minimum of two clients, unless otherwise indicated.
- d) Satisfactory completion of all formative and summative evaluations.

6. Grading System

(If any changes are made to this part, then the Approved Course description must also be changed and sent through the approval process.)

(Mark with "X" in box below to show appropriate approved grading system – see last page of this template.)

- Standard Grading System (GPA)
- Competency Based Grading System

7. 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>

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.
<http://www.camosun.bc.ca/policies/policies.html>

A. GRADING SYSTEMS <http://www.camosun.bc.ca/policies/policies.php>

The following two grading systems are 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 |
| 70-72 | B- | PASSING GRADE | 4 |
| 65-69 | C+ | Minimum level has not been achieved. | 3 |
| 60-64 | C | | 2 |
| 50-59 | D | | 1 |
| 0-49 | F | | 0 |

2. Competency Based Grading System (Non GPA)

This grading system is based on satisfactory acquisition of defined skills or successful completion of the course learning outcomes

| Grade | Description |
|-------|---|
| COM | The student has met the goals, criteria, or competencies established for this course, practicum or field placement. |
| DST | The student has met and exceeded, above and beyond expectation, the goals, criteria, or competencies established for this course, practicum or field placement. |
| NC | The student has not met the goals, criteria or competencies established for this course, practicum or field placement. |

B. Temporary Grades

Temporary grades are assigned for specific circumstances and will convert to a final grade according to the grading scheme being used in the course. See Grading Policy at <http://www.camosun.bc.ca/policies/E-1.5.pdf> for information on conversion to final grades, and for additional information on student record and transcript notations.

| Temporary Grade | Description |
|-----------------|---|
| I | <i>Incomplete:</i> A temporary grade assigned when the requirements of a course have not yet been completed due to hardship or extenuating circumstances, such as illness or death in the family. |
| IP | <i>In progress:</i> A temporary grade assigned for courses that are designed to have an anticipated enrollment that extends beyond one term. No more than two IP grades will be assigned for the same course. |
| CW | <i>Compulsory Withdrawal:</i> A temporary grade assigned by a Dean when an instructor, after documenting the prescriptive strategies applied and consulting with peers, deems that a student is unsafe to self or others and must be removed from the lab, practicum, worksite, or field placement. |