



COURSE OUTLINE

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Course Name: Orthodontics 1

Department Head/Coordinator: Allan White

Effective Date: Sept 2014

School or Centre:		Department:	
School of Health Sciences		Denturist/Dental Technology Department	
Course History:		Year of Study:	
Replacement Course		1st Year Post-secondary	
Name of Replacing Course (if applicable):	DENT 2004	Course Number:	DENT 1260
		Number of Credits:	3.0

Course Pre-requisites (if applicable):

All semester one courses

Course Co-requisites (if applicable):

DENT 1210 and DENT 1220

PLAR (Prior Learning Assessment & Recognition)

No Yes (details below):

N/A

Course Description:

The theoretical knowledge and supportive laboratory skills related to the fabrication of simple fixed and removable orthodontic appliances, and their repair will be introduced and practiced. The fabrication of removable Hawley retainers, removable appliances with bite planes, fixed unilateral and bilateral space maintainers, night guards, bleaching trays, Essix retainers and simple repairs of orthodontic appliances are the foundation of the theory and applied laboratory practice of this course. Students are assessed to level 1 production proficiency standards.

Note to instructors: An instructional strategy is an approach that an instructor uses to achieve the learning outcomes (e.g., lecture, case study, video, group work).

Instructional Strategies:

Lecture, demonstration, project lab work

Course Learning Outcomes:

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

1. Apply knowledge of dental and occlusal anatomy and physiology, dental materials and laboratory procedures to the design and fabrication of orthodontic appliances;
2. Assess, plan and make decisions relating to the design and fabrication of orthodontic appliances;
3. Implement skills and techniques to design and fabricate simple orthodontic appliances including a fixed lingual retainer, bleaching trays, Hawley retainer, and unilateral space maintainers.
4. Apply skills and techniques to repair orthodontic appliances;
5. Describe the basic concepts related to the design and fabrication of various orthodontic appliances including: fixed lingual retainer, unilateral and bilateral space maintainers, bleaching trays, Hawley retainer, orthodontic diagnostic study models, traditional and digital (CAD-CAM), orthodontic appliance repair and snoring and Obstructive Sleep Apnea (OSA);
6. Practice to current workplace health and safety standards including dental laboratory asepsis, and infection control.

Program Learning Outcomes:

The graduate of the VCC Dental Technology program will have the skills and abilities to:

1. Design, fabricate, modify and repair removable oral/dental prostheses;
2. Design, fabricate, modify and repair fixed oral/dental prostheses;
3. Design, fabricate, modify and repair oral/dental appliances used in orthodontics, oral and maxillo-facial surgery and other dental treatments;
4. Integrate general knowledge of dental laboratory procedures, physics and chemistry principles, associated with the fabrication of oral appliances and dental restorations;
5. Assess the characteristics and properties of dental materials associated with the fabrication of oral appliances and dental restorations and make decisions about their appropriate application in practice;
6. Assess the characteristics and operation of equipment and special instrumentation associated with the fabrication of oral appliances and dental restorations and make decisions about their appropriate application in practice;
7. Assess the fundamental elements of dental anatomy, dental physiology, dental morphology and basic elements of oral pathological conditions and apply relevant knowledge to dental technology practice;
8. Practice to current workplace health and safety standards including dental laboratory asepsis, and infection control;
9. Apply essential elements and skills of behavioural sciences, communications, professional ethics, legal obligations and business management to dental technology practice;
10. Make decisions that reflect critical thinking and problem solving; integrate pertinent theoretical knowledge and empirical data and information literacy skills to justify and/or revise services.

Evaluation/Grading System *(Click on drop down box arrows to see list of options)*

Grading System	Specify if 'Other':	Specify Passing Grade:
Letter Grades		C +64%

Components and Weighting of the Assessment/Evaluation Plan: *(Click on drop down box arrows to see list of options)*

Type	Percentage	Evaluation Plan (provide a brief explanation for each component especially if value exceeds 35%):
Midterm Exam	35	Written exam-multiple choice, short and long answer
Assignments	30	Assignment-technique and skill assessment
Final Exam	35	Written exam-multiple choice, short and long answer
		Practical Projects (x3) Grade will be Satisfactory (S) or Unsatisfactory (U) utilizing competency rubrics
		Students must earn an "S" grade in all projects to pass this course
	Total	100

Learning Environment/Type *(Select all that are used within the course)*

Instruction Type	Hours Per Instruction Type	Comments
B - Lab (Computer, Chemistry...)	70	
L - Classroom	10	
E - Seminar	10	
Enter Total Hours	90	

Resource Material(s):

Resources are items in addition to tuition that the student is responsible for purchasing. Course resource information will be supplied by the department/instructor.

Course Topics and Sequence Covered:

Production proficiency Level 1
Angles classifications of occlusion
Six keys to normal occlusion
Orthodontic diagnostic study models; traditional and digital; CAD-CAM
Orthodontic appliance components
Orthodontic appliance retention
Fixed retainers
Bleaching trays
Space maintainers
Hawley retainers
Orthodontic appliance repair
Snoring and obstructive sleep apnea (OSA)

VCC Education and Education Support Policies

There are a number of **Education** and **Education Support** policies that govern your educational experience at VCC, please familiarize yourself with them.

The policies are located on the VCC web site at:

<http://www.vcc.ca/about-vcc/policies/index.cfm>

To find out how this course transfers, visit the BC Transfer Guide at www.bctransferguide.ca.

FOR COMMITTEE USE ONLY

Date Approved by Education Council:		Date Approved by VCC Board (if applicable):	
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