

Orthodontic Management of Simple to Moderate Malocclusions: an online and onsite course for Vietnamese Dentists

Improving your Diagnostic and Treatment Skills in a Fully Interactive Environment

July 2013 - June 2015

Presented by

***Department of Orthodontics
Faculty of Odonto-Stomatology
University of Medicine and Pharmacy
Ho Chi Minh City, Vietnam***

In collaboration with

International Foundation for Dental Education (IFDE)

&

Health Volunteer Overseas (HVO)

INTRODUCTION

“Orthodontic Management of Simple to Moderate Malocclusions: an online and onsite course for Vietnamese Dentists” is a 24 month course that uses blended learning to provide general dentists with an opportunity to learn how to manage orthodontic treatment of patients with simple to moderately complex malocclusions at an internationally acceptable level. The online modules allow students to learn and study at home or work while onsite sessions (in HCMC) and online supervision allow students to learn and practice patient skills under the supervision of orthodontists recognized by the World Federation of Orthodontists (WFO). This course does not replace post-graduate specialist programs, but it is a step forward in teaching international level orthodontic care in Vietnam.

GOAL

This course was designed to improve the knowledge and ability of dentists to diagnose, select and treat patients with simple to moderate malocclusions.

COURSE OBJECTIVES

At the end of the course, the participants are expected to be able to recognize, diagnose and manage the treatment patients with simple to moderate malocclusions. Participating dentists will also learn to refer more severe or complex cases to specialists or other dentists better- trained in orthodontics.

Upon successful completion of the course the participant will be able:

- To perform a comprehensive clinical examination including radiographic and study cast evaluations.
- To analyze the diagnostic records, provide a diagnosis and propose treatment plans.
- To understand the etiology of malocclusions, preventive/interceptive treatment.
- To understand the requirements for a normal functional occlusion and the orthodontic treatment objectives to obtain a functional occlusion.
- To further understand the use and limitation of removable appliances versus the advantages of the contemporary fixed appliances.
- To understand the need for extractions in orthodontic treatment.
- To differentiate between skeletal, dental and myofunctional problems.
- To perform a comprehensive clinical examination, provide a diagnosis and propose an ideal and at least one compromised (limited) treatment plan.
- To evaluate new patients and determine if the patients’ malocclusions are within his/her competence to treat and end with a good result

- To prescribe, insert, adjust and activate a removable appliance.
- To perform fixed orthodontic treatment for simple and moderate malocclusions
 - To select, when indicated, and to cement orthodontic bands
 - To bond orthodontic brackets
 - To insert orthodontic wires and auxiliaries
- To monitor treatment progress to international standards
- To remove orthodontic brackets and provide appropriate orthodontic retainer(s)

COURSE DESCRIPTION

This course “blends” online learning that can be done from home with onsite sessions for learning and practicing clinical skills (in HCMC) and supervised patient care where you work. The combination of (1) a step-by-step presentation of online orthodontic theory by experienced teachers from North American universities, with (2) supervised onsite demonstrations and practice of clinical skills and (3) clinical management of two patients with simple to moderate malocclusions under the guidance of orthodontists provides a novel opportunity to learn orthodontics while employed in Vietnam. The course contains ***eight online modules, five onsite sessions, and supervision for the orthodontic management of two of your orthodontic patients***, and a final review session.

The *online modules* are available at www.discoverortho.com and present theory, concepts and other information using pdf documents (Adobe), online articles & book chapters, webcasts, videos and interactive activities. These online modules provide participants with theory and practice in the proper diagnosis, prognosis, and management of patients with simple to moderate malocclusions. Each module uses a step-by-step approach that guides students as they learn (1) to diagnose malocclusions, (2) to recognize and quantify the severity of the problem, and (3) to competently manage simple to moderate malocclusions. These modules are in English and are designed to prepare participants for the onsite visits that follow.

Each *onsite session* will be five days long and will be held in HCMC after online modules 1, 2, 4, 6 and 8. These onsite sessions give participants opportunities to learn and develop clinical skills needed for competent orthodontic care of patients with simple to moderate malocclusions. Each onsite session will use demonstrations, supervised practice of clinical skills, Virtual Orthodontic Patient Cases (VOCs), seminars, and discussions under the guidance of an orthodontist in conjunction with teachers from the Department of Orthodontics at the Faculty of Odonto-Stomatology (FOS) in HCMC. The onsite sessions will be in English but translation assistance will be available and peer-to-peer conversations in Vietnamese will be utilized.

The *orthodontist supervision* will be available online and at onsite sessions. Participants will be required to treat two patients with simple to moderate malocclusions from initial records through retention. Both *patients must be approved by Dr. Kay before the start of treatment* to insure that they are appropriate. Participants will be responsible for getting Dr. Kay’s approval for *two* patients from among the patients treated by them at their private practice or at their dental job. Each participant will be assigned an orthodontist who will be available by email, Skype or other electronic means to answer questions and to supervise patient records and management for the patient cases needed for successful course completion. In addition, the visiting HVO orthodontists will review patient cases during the onsite sessions in HCMC. Participants will need to successfully present and defend both patient cases to an orthodontist examiner(s) in order to successfully complete the clinical portion of the course.

Participant\Students will be required to upload or email patient photos, x-rays, evaluation data and treatment information for their two required patient cases so that all orthodontic care can be supervised online. Participants will not be asked to bring any patients to be seen in person. Successful completion of the patient cases will require that the patients’ initial, interim and retention records be complete, correct, and up to the standard required by the American Board of Orthodontists (ABO). Participants will also be asked to discuss the patients’ diagnosis, treatment plan, the pros and cons of possible alternative treatments, any unexpected changes, finishing treatment and retention issues.

COURSE CURRICULUM

The course curriculum will have two components; online and clinical. Eight online modules will cover theory and knowledge to prepare participants to examine, treat, and explain the pros and cons of treatment options for patients with simple to moderate malocclusions. Five onsite sessions will require participants to present and discuss orthodontic evaluation and management as well as to learn and practice the clinical skills used in orthodontic care. Each participant must also examine, treat, present and defend two patient cases under the supervision of orthodontists recognized by the WFO. Most importantly, participants will learn which malocclusions are too complex for them to treat competently.

The online and clinical components are closely matched for content and must be taken in the sequence given below. All preceding online modules and onsite sessions **must be successfully completed before** the next session or module can be started.

Orthodontic Course content	
Online Module 1	Onsite* Session 1
<ul style="list-style-type: none"> Orthodontic Diagnosis Basic Cephalometrics Discrepancy Index 	<ul style="list-style-type: none"> Final Examination Module 1 Intra- & Extra- oral examinations Photographic exercise Model Trimming
<ul style="list-style-type: none"> Diagnostic Record Evaluation 	<ul style="list-style-type: none"> Cephalometric tracing & Panoramic radiographic evaluation
<ul style="list-style-type: none"> Differential diagnosis 	<ul style="list-style-type: none"> Full case analysis (VOCS) Case Presentation template
<ul style="list-style-type: none"> Treatment Objectives 	<ul style="list-style-type: none"> Uploading records Software use Diagnosis/ Case selection Discrepancy Index

*Held at Department of Orthodontics; Faculty Odonto-Stomatology; University of Medicine and Pharmacy; Ho Chi Minh City, Vietnam.

Online Module 2	Onsite* Session 2
Biology of tooth movement	Final Examination for Module 2
Bracketing	Bracketing exercise
Different types of tooth movements	Wire insertions Wire bending/loops
	Software use training
Treatment objectives	Case presentations

Online Module 3	
Interceptive – Mixed dentition	
Tooth eruption sequence	
Development of the occlusion PPTX	
Growth and development	

Online Module 4	Onsite* Session 3
Fixed orthodontics	Final Exam for Modules 3 & 4 Mixed dentition analysis
The straight wire appliance	VOCS analysis Case presentations
Asian/Caucasian morphological differences	Cephalometric tracing –Asian/ Caucasian
Wire technology	Class I/II/III mechanics
Periodontal response to orthodontic forces	Auxiliaries

Online Module 5	
Most common orthodontic appliances	
Maxillary expanders	
Molar distalizers	
Functional appliances	

Online Module 6	Onsite* Session 4
Adult treatment	Final Exam for Modules 5 & 6
Coordination with prosthodontics & periodontics	Use of appliances
Importance of the occlusal plane on occlusal balance	Prescription of appliances
	Indications & Contraindications
	VOCS analysis
	Adult VOCS

Online Module 7	
Treatment efficiency and progression	
Progress records	
Cephalometric superimpositions	
Trouble shooting	
How to judge if treatment is progressing okay	

Online Module 8	Onsite* Session 5
Debracketing	Final Exam for Modules 7 & 8

Finishing check list & retention	Progress records
	Cephalometric superimpositions
	Student case progress review
	Case presentation
	Finishing wires and bends
	Retainers fixed & removable

Post Course Online Module	Post Course* Onsite Session
Trouble shooting	Defense of patient cases
Common mistakes	
Final records	
Conclusions and comments	

Suggested Textbooks, References, and Manuals

The website www.discoverortho.com is the main reference “manual” to be used. More lectures will be included during the course. These lectures will be given during the onsite portion and will be made available to the participants.

A list of articles will be posted by module and participants are expected to read these articles before attending the onsite session that follows that module(s).

Suggested Reference Texts (for more information)

- *Contemporary Orthodontics*. Proffit, W.R. and Fields, H.W. Mosby Year Book, Third Edition, 1999.
- *Orthodontics – A patient education guide*. American Association of Orthodontists.
- *Orthodontic Glossary – Glossary of dentofacial orthopedic terms*; American Association of Orthodontists. 1993 Edition.
- *Handbook of Orthodontics*. Moyers, R.E. Fourth Edition, 1998. Year Book Medical Publishers.
- *Orthodontics – Current principles and techniques*. Graber, T.B., Vanarsdall, R.I. Mosby Year Book. Second Edition, 1994.
- Enlow: *Essentials of Facial Growth*

COURSE LENGTH

Participants should be able to complete the course's eight online modules and five onsite sessions in 18 months. However, the time to complete treatment and retention for the two patient cases required for successful course completion will take longer; about 24 months.

Successful Course Completion requires that participants:

- Pass final examinations for online modules that will be given onsite;
- Successfully participate in all onsite sessions by successfully completing all skills, answering questions and participating in discussions about patient care;
- Successfully complete all patient records then present and defend the two patient cases to demonstrate successful examination, management, and retention of patients with simple to moderate malocclusions.

COURSE FEES

Each online module will cost Canadian \$400.00 (about 8,360,000 VND) and will be paid to IFDE online at www.discoverortho.com. Payment for a module will be required before access to that module is given. While enrolled in the course, students will have access to all completed modules in addition to the current one. The total cost for the eight (8) online modules for the class starting in June 2013 will be C\$3,200 or about 66,880,000 VND. Any questions about this component should be addressed to Dr. Jean-Marc Retrouvey and IFDE using www.discoverortho.com.

Onsite sessions will cost 12,500,000 VND each and must be paid to the Faculty of Odonto-Stomatology at the University of Medicine and Pharmacy in HCMC. The total cost for 5 onsite sessions will be 62,500,000 VND for the class starting in June 2013. Questions about registration dates, fees, etc. should be addressed directly to the Department of Orthodontics.

There will be no additional fees for the supervision or support that will be available between sessions and modules to help guide students to successful course and patient case completion. Supervising orthodontists will be working with HVO and coordinated by Dr. Neil Kay. Any questions about this component should be addressed to Dr. Neil Kay using www.discoverortho.com.

A post-course online module will be available online to all students who successfully complete the online portion of the course and have received a *Certificate of Course Completion*. There is no charge for this final module. All students who successfully complete the online portion will need arrange a mandatory final session in HCMC where he/she will present and defend his/her two required patient cases. Upon successful defense of the patient cases treated, a *Certificate of Clinical Completion* will be awarded.

APPLICATION TO COURSE

Dentists that practice in Vietnam can apply online at www.discoverortho.com. It is anticipated that the course will be given more than once so applicants who are not accepted for the first course starting online in June 2013 will be automatically be considered for the next course given. Each class is limited to 30 students.

CERTIFICATES of COMPLETION

After successful completion of all online modules and onsite sessions participants will be awarded a *Certificate of Course Completion* signed by representatives from each of the 3 sponsoring partners.

After successful defense of two complete patient cases that were approved in advance, the participant dentist will be awarded a *Certificate of Clinical Completion*. This certificate will be signed by representatives of the 3 sponsoring agencies including Dr. Neil Kay and supervising orthodontists. This certificate will verify that the patient cases met standards used by the American Association of Orthodontists (AAO) as applied to patients with simple to moderate malocclusions.

Course Sponsors

The development and implementation of this course is a joint effort of the (1) International Foundation for Dental Education, (2) Health Volunteers Overseas and the (3) Department of Orthodontics, Faculty of Odonto-Stomatology at the University of Medicine and Pharmacy in Ho Chi Minh City, Vietnam. The respective contributions and responsibilities of each partner include:

Department of Orthodontics; Faculty of Odonto-Stomatology; HCMC, Vietnam

Description: The teachers in the Department of Orthodontics at the Faculty of Odonto-Stomatology in the University of Medicine and Pharmacy; Ho Chi Minh City are responsible for teaching orthodontics to dental students and treating patients with malocclusions.

Responsibilities: The teachers in the Department of Orthodontics will coordinate all onsite sessions and provide an in-country contact for course participants and potential course students.

Bac sy Hung will be the course coordinator in the Department of Orthodontics.

International Foundation for Dental Education (IFDE)

Description: IFDE is a non-profit organization based in Montreal, Quebec (Canada). Information about IFDE can be found at www.discoverortho.com

Responsibilities: IFDE, under the leadership of Dr. Retrouvey, is in charge of course development and the creation of all online modules including lessons and activities. Experienced teachers will contribute content under the guidance of Dr. Retrouvey.

Dr. Jean-Marc Retrouvey, Director of the Division of Orthodontics at McGill University in Montreal, Quebec; Canada has been teaching and developing curricula for diagnostic skills and treatment planning in orthodontics for the past 14 years. He is the author of the “Orthodontic Diagnosis” CD and creator of the Virtual Orthodontic Case Study (VOCS) interactive orthodontic treatment planning software.

Health Volunteers Overseas (HVO)

Description: HVO is a non-profit organization based in Washington, DC (USA). Information about HVO can be found at www.hvousa.org.

Responsibilities: HVO, under the project leadership of Dr. Kay, is responsible for leading and coordinating on-site sessions, recruiting and orienting orthodontists to mentor and to supervise participants’ patients, and to manage the final review of patient records required for course completion.

Dr. C Neil Kay owns and operates a private orthodontic practice in Illinois (USA). He managed an HVO orthodontic program in Vietnam from 1993-2011. For the past 20 years, Dr. Kay has been teaching orthodontics in Vietnam and seeing Vietnamese patients regarding the management of their malocclusions.