

# Module 2: Orthodontic Integrator

## Course Overview

As the old medical adage goes, "**Prevention is Better than Cure**". Successful Phase I, early and interceptive treatment has been shown to **reduce** the need for more complex, aggressive and traumatizing treatment when the patient is older. This module is specifically designed with an emphasis on preventive/interceptive orthodontics. It aims to train the candidate to detect potential problems in all planes of space when the patient is **young** and how to manage these problems to avoid a myriad of more complex problems in Phase II. Over the course of three days, candidates will be taught how to diagnose and treatment plan for Phase I, how to establish **realistic** goals and objectives and how to use an array of appliances to achieve success. The candidate will be exposed to habit breakers, lip bumpers, head gears, face-masks, space maintainers and other functional appliances to treat patients when young and reduce the need for extractions and or orthognathic surgery when they are older. In addition to this, more in-depth biomechanics will be introduced to build upon what has been taught in the previous module. Candidates will also be taught a method of mapping clinical treatment so as to determine what options are best for their patients.

## Course Objectives

- Establishing Phase I Goals and Objectives
- Mixed Dentition Analysis
- Phase I Treatment Planning
- Phase I Treatment Devices
- Arch Development
- Biomechanics and Mechanotherapy I
- Mapping Clinical Treatment

## Course Content

1. Introduction to Module 2
2. How to Time your Treatment?
  - a. Chronological age
  - b. Dental age
  - c. Skeletal age
3. Etiology and Diagnosis of Malocclusions: Transverse, Vertical and Sagittal
4. Mixed Dentition Analysis
5. Treatment Planning Techniques 2
  - a. When to begin treatment?
  - b. Establishing goals and objectives
  - c. What to and not to treat in early treatment
  - d. When to end treatment
6. Soft Tissue Predictions
7. Cephalometric Superimpositions
  - a. Overall superimposition
  - b. Maxillary superimposition
  - c. Mandibular superimposition

Day  
1

1. Biomechanics I
  - a. Center of gravity
  - b. Center of resistance
  - c. Center of rotation
  - d. The Laws of Newton
  - e. Linear force systems
  - f. Force magnitude
  - g. Direction
  - h. Sense
  - i. Law of the transmissibility of forces
2. Biomechanics II
  - a. How linear forces act on objects
  - b. The moment of the force
  - c. The moment of the couple
  - d. How does the ratio of the moment to couple and force affect tooth movement?
  - e. Achieving:
    - i. Uncontrolled tipping
    - ii. Controlled tipping
    - iii. Bodily movement
    - iv. Root movement
    - v. Pure rotation
  - f. The friction debacle: Surface friction & Binding friction

Day  
2

1. Anchorage in Orthodontics
2. Auxiliary Anchorage Devices
  - a. What a TPA can and cannot do?
  - b. The three-step method for TPA placement
  - c. Lip bumper placement
    - i. Space regaining vs maintenance
    - ii. Adjust the lip bumper to determine molar, incisal and transverse changes
    - iii. Why the lip bumper is superior to the lower lingual holding arch?
  - d. Headgear Facebow Delivery: Selection and placement, Cervical, High-pull, Combination and Unilateral
3. Wire Bending II: Finishing Bends - 1<sup>st</sup> and 2<sup>nd</sup> Orders
4. Converting the Orthodontic Patient
5. Conventional Orthodontic Treatment of Malocclusions and Clinical Treatment Mapping Guidelines – Class I, Class II and Class III

Day  
3

### Course Dates:

22 – 24 November 2018  
(Mon, Tue & Wed)

### Course Time:

0900 – 1900 hrs

### Course Venue:

DSS Training Centre  
Blk 28 Kallang Place #05-16/17  
Singapore 339158