**DENT 111: ORAL ANATOMY**

**STUDY GUIDE FOR MODULE 2: DEVELOPMENT OF THE HUMAN DENTITION**

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**Let’s begin**

The development of human dentition starts way before we are born. Our teeth start developing even while we are still in our mother’s womb. Amazing, isn’t it?

In this module, you will learn how the teeth, both deciduous and permanent are developed from the time they are mere cells to the time they erupt into the oral cavity. You will also learn the sequence of eruption and from this knowledge, you will be able to predict the age of a person. This is one skill that is very useful in the field of forensics.

Are you eager to know more? Let’s go!

**Read/Watch**

**Read** the following:

Chapter 2 “Development and Eruption of the Teeth” of your textbook “Wheeler’s Dental Anatomy Physiology and Occlusion” 10th edition by Stanley J. Nelson pp. 21-41.

<http://what-when-how.com/dental-anatomy-physiology-and-occlusion/development-and-eruption-of-the-teeth-dental-anatomy-physiology-and-occlusion-part-1/>

<http://what-when-how.com/dental-anatomy-physiology-and-occlusion/development-and-eruption-of-the-teeth-dental-anatomy-physiology-and-occlusion-part-2/>

**Watch** <https://www.youtube.com/watch?v=wrPEjEqURJg&feature=youtu.be> “How did Teeth Evolve?”. This video is an overview of the evolution of teeth of different species.

**Attend** the online synchronous discussion with Dr. M. Segarra.

**Think**

We will be discussing your answers during the online synchronous discussion.

1. Why is it important for dentists to learn the sequence of eruption of teeth, for both deciduous and permanent?
2. What are the three periods of human dentition? Give a brief description of each.
3. Explain the processes of resorption, exfoliation and eruption. At what period do these processes happen?

**Dig Deeper**

1. Let’s test your knowledge of the sequence of eruption of teeth further by answering the questions pertaining to a couple of hypothetical cases below.

As a backgrounder to this activity, oftentimes when tragedies or calamities occur, some of the dead remain unidentified. Examples are the daycare/orphanage fire in Tondo in 1998 and several maritime disasters here in the Philippines. One way to identify the dead is through forensics and one important branch is Forensic Dentistry. Forensic dentists compare the dental records, when available, of the passengers with that of the body. Another way where forensic dentists can identify the dead is by estimating the age of the deceased by their knowledge of the sequence of tooth eruption. This was how majority of the children in the Tondo daycare/orphanage were identified in 1998.

Given the teeth present inside the oral cavity, predict the age of the person in these 2 hypothetical cases.

1. All permanent 1st molars, all permanent central and some permanent lateral incisors, all deciduous cuspids, all deciduous 1st and 2nd molars.
2. All permanent 1st molars, all permanent central and lateral incisors, both permanent mandibular cuspids, all permanent premolars, both maxillary cuspids.

We will discuss your answers during our synchronous online discussion.

1. Answer the quizlet on this topic on the course site.

Whew! We are done with Module 2. Oral Anatomy gets more and more interesting, don’t you agree?

Our next activity is more on lab work, “Tooth Measurement”.