



Department of Basic Dental Health Sciences

## Dent 111: Oral Anatomy

### COURSE GUIDE

#### COURSE DESCRIPTION

Welcome to the world of Dentistry! Oral Anatomy is the course where you will first learn about the structures that you will be working on which are the teeth, the oral cavity and the structures associated with it. In short, it is the gateway and starting point of your dental life. Oral Anatomy is the study of the stomatognathic system which comprises the teeth, jaws, the soft tissues and structures associated with them. Specifically, the course deals with the morphology of the permanent teeth and their associated structures as well as how the teeth are arranged in the mouth to perform their function in the most efficient manner. It is a pre-requisite course to most higher-level courses in dentistry.

Dentistry 111 is a 5-unit course with both didactic/knowledge and laboratory/skills development components. The didactic and laboratory components are integrated, with the laboratory component focusing on developing the psychomotor skills of the student through drawing and carving exercises. These laboratory exercises are also meant to reinforce what is taught in the didactic component.

#### COURSE LEARNING OUTCOMES

After completing this course, you should be able to ...

At the end of the course, the second-year dental student should be able to:

1. Use the appropriate dental terminologies of the teeth and structures of the oral cavity in verbal and written forms.
2. Use the appropriate systems of nomenclature when identifying teeth in verbal and written forms.
3. Describe the morphological features of the primary dentition.
4. Describe completely the five physiologic forms of the teeth.
  - 4.1. Analyze how each physiologic form contributes to the proper function of the teeth.
  - 4.2. Analyze how each physiologic form protects the supporting structures of the teeth.
5. Differentiate teeth through their morphological features and characteristics accurately.
  - 5.1. Identify teeth based on their morphological features and trait characteristics correctly.
  - 5.2. Describe each tooth based on its morphological features and trait characteristics completely.
  - 5.3. Describe the anatomy of the dental pulp of each teeth completely.
  - 5.4. Discuss the functions of the dental pulp thoroughly.
6. Describe the structures associated with the oral cavity such as the dento-osseous structures, soft tissues in the oral cavity, blood vessels and nerves in detail.



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7. Describe the components of the temporomandibular joint (TMJ) including the muscles of mastication and the accessory ligaments completely.
8. Explain how the mandible moves.
  - 8.1. Analyze the role of each component of the TMJ in the movements of the mandible.
  - 8.2. Explain the concept of neuromuscular control in the movement of the mandible.
  - 8.3. Explain the different movements of the mandible thru illustrations or diagrams.
9. Describe the inter-arch and intra-arch relationship of the teeth and other concepts of occlusion accurately.
10. Demonstrate adequate psychomotor skills thru
  - 10.1. Replicating or copying specified natural tooth specimens or tooth models thru pencil drawing on a cross-section paper, 3x the actual size, accurately.
  - 10.2. Carving a precise mirror-image of a specified tooth in wax on the provided dental cast
11. Demonstrate complete understanding of the morphological and physiologic features of a tooth thru
  - 11.1. Drawing a specified tooth with all the pertinent morphological and physiologic features, using a pencil on a cross-section paper, 3x the given measurements.
  - 11.2. Carving a precise mirror-image of a specified tooth according to the standards set

## COURSE OUTLINE

The course will cover the following:

- I. Introduction to Oral Anatomy
  - A. Role of Oral Anatomy in the Different Specializations of Dentistry
  - B. Basic Dental Terminology
  - C. Anatomical structures found on the surfaces of the teeth
  - D. Systems of Nomenclature
- II. Development of the Human Dentition
- III. The Deciduous Dentition
- IV. Physiologic Forms of the Teeth
  - A. Proximal contacts
  - B. Interdental space
  - C. Embrasures
  - D. Cervical heights of contour
  - E. Curvatures of the CEJ



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#### V. Individual Morphology of the Permanent Teeth

- A. The Incisor
- B. The Canines
- C. The Premolars
- D. The Molars

#### VI. The Dental Pulp

#### VII. Common Tooth Anomalies

#### VIII. Dento-osseous Structures

- A. Maxilla
- B. Mandible

#### IX. The Oral Cavity

#### X. The Temporomandibular Joint

- A. The Anatomy of the TMJ
- B. Mandibular Movements

#### XI. The Arrangement and Articulation of the Teeth

- A. Six Keys to Occlusion
- B. Occlusal Concepts

#### XII. Nerve Supply, Blood Supply and Venous and Lymphatic Drainage of the Oral Cavity

- A. The Trigeminal Nerve
- B. Blood Supply of the Oral Cavity
- C. Venous and Lymphatic Drainage

## MODE OF DELIVERY

### Course Site

Dentistry 111 will be delivered using a blended learning set-up. Lectures will be conducted face-to-face and online. All lab sessions and exams will be face-to-face. The course can be accessed through the UP Manila Virtual Learning Environment (UPM VLE). To access the site, type [vle.upm.edu.ph](http://vle.upm.edu.ph) on your web browser. Log-in with your username and password and click on Dent 111 (2024). All the materials, and other information (including this course guide) pertinent to the course can be found on this site.



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## Communication Plan

The faculty of Oral Anatomy will communicate with you thru

### 1) Course site

The course site will be the main repository for all lecture handouts, manuals and guides.

### 2) Facebook group

A Facebook group will be created for the whole class to ensure that you receive all announcements regarding the course. You can also message me or any of the faculty of Oral Anatomy if you have any questions. We will only entertain chats between 8 am to 6 pm Monday to Friday. Chats received after 6 pm will be replied to the next day. Please refrain from sending messages during weekends and holidays.

### 3) Zoom

Some lectures may be delivered synchronously via Zoom. Synchronous sessions or web conferences are scheduled on a (but not every) Monday (1:00 – 2:00 pm) or Wednesday (8:00 – 9:00 am). These synchronous sessions will be recorded for asynchronous viewing for those who will not be able to view the live web conferences. These recorded lectures will be uploaded on our Facebook group page. You are encouraged to ask questions either live or thru the chat box during these web conferences for clarification or reinforcement.

### 4) E-mail

You can also reach the faculty thru email. The email addresses of the faculty members are shown in the “About the Instructor” part of this Course Guide.

For the laboratory exercises, as this is a large class, your class will be divided into three (3) Sections of at least 15 students per Section. Each group will be supervised by one faculty member – your “Drawing and Carving Gurus”. They will be closely supervising your drawing and carving exercises via Zoom. We have set the laboratory supervision sessions at 2 – 5 PM every Monday or 9 AM – 12 PM Wednesday. Should you miss a laboratory supervision session, please message us thru the messenger group or thru the messenger account or email of your Drawing and Carving Guru to set a laboratory supervision/consultation appointment/make-up.

## COURSE MATERIALS

As this course will be, I have prepared very detailed and explicit course materials for the class. You will be provided with the following:

- 1) Course guide
- 2) Study guides
- 3) Activity guides



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- 4) Assignment guides
- 5) Learning resources

The **course guide** is this document you are reading right now. It provides you the important details about the course in general. You will also be given a **study guide** per module to introduce you to the topic, point you to learning resources you need to watch and read about the topic as well as suggested readings and other learning materials. The study guides will also include questions and activities for formative assessment. For some topics, you will be provided **activity guides** for topics we feel are best understood and appreciated thru discussions, blogging and group activities. For the laboratory exercises (drawing and carving and occlusion exercises), we will be giving you **assignment guides** which include detailed instructions and procedures for the exercises, the evaluation criteria and date of submission and how to submit your works. These assignments will be evaluated.

Anatomy is a very visual course. As such, aside from textbooks and other reading materials, we will be providing you links to visual materials such as YouTube videos, 3D programs and learning apps. These learning apps are easily downloadable from any mobile device and are either free or for a very minimum fee. The linkages are found on the course site ([vle.upm.edu.ph](http://vle.upm.edu.ph)). I will also be using a recording of the 3D Visual Program by eHuman Digital Anatomy, “3D Tooth Atlas” on individual tooth morphology to be posted on the Facebook group page. Additionally, we will have Simodont sessions after the discussion of each tooth.

You will also be needing a half set of tooth models. I will be giving you the exact specifications of the tooth models you will be using for the drawing and carving exercises. Other materials you will need are:

- 1) Inlay (blue) or Carving wax
- 2) Wax carvers and wax knife
- 3) Vernier caliper or Boley gauge
- 4) Cross section paper
- 5) Pencil, ruler, eraser
- 6) Alcohol lamp and alcohol lamp holder
- 7) Denatured alcohol
- 8) Articulator
- 9) Rubber mat/placemat (smooth surface)
- 10) Metal scraper

Textbook: Nelson SJ. Wheeler’s Textbook of Dental Anatomy, Physiology & Occlusion

Reference Books: Scheid & Weiss. Woelfel’s Dental Anatomy  
Concise Dental Anatomy

Mobile apps: can be accessed from Googleplay or IOS Apps Store

Bone box  
Real tooth  
eHuman Digital Anatomy, “3D Tooth Atlas”



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**STUDY SCHEDULE**

The course will run for 16 weeks. Being a 5-unit course, it requires 16 hours a week of total learning time which includes instructional time as well as time spent studying and completing course assignments and activities, and laboratory exercises (drawing and carving).

Week & Hours for Activities	Module/Topic	Target Learning Outcomes	Learning Resources	Learning Activity	Assessment
<b>Week 1</b>					
August 19 (Monday) 2 hrs	Orientation				
August 21 (Wednesday) 3 hrs	Introduction to Oral Anatomy Terminology, Anatomical Landmarks, Systems of Nomenclature	<p>After studying this topic, you should be able to ...</p> <p>Use the proper terminology when describing teeth and structures on the teeth</p> <p>Correctly use the systems of nomenclature when referring to deciduous and permanent teeth</p>	<p>Pre-recorded video of Intro to Oral Anatomy and its significance to the different fields of dentistry</p> <p>Chapter 1: Wheeler’s Dental Anatomy, Physiology and Occlusion 10<sup>th</sup> edition pp 1-9</p> <p><a href="http://what-when-how.com/dental-anatomy-physiology-and-occlusion/introduction-to-dental-anatomy-dental-anatomy-physiology-and-occlusion-part-1/">http://what-when-how.com/dental-anatomy-physiology-and-occlusion/introduction-to-dental-anatomy-dental-anatomy-physiology-and-occlusion-part-1/</a></p> <p><a href="http://what-when-how.com/dental-anatomy-physiology-and-occlusion/introduction-to-dental-anatomy-dental-anatomy-physiology-and-occlusion-part-1/">http://what-when-how.com/dental-anatomy-physiology-and-occlusion/introduction-to-dental-anatomy-dental-anatomy-physiology-and-occlusion-part-1/</a></p>	<p>Watch the pre-recorded video</p> <p>Read Textbook Chapters and web references</p> <p>Lectures by Dr. M. Segarra</p> <p>Discussion Forum – see Study Guide: Introduction to Oral Anatomy</p> <p>Activity Guide– Identification of Landmarks and Nomenclature Exercises</p>	<p>Formative: Discussion Forum</p> <p>Summative: Topic included in the 1<sup>st</sup> Long Exam</p>



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			<a href="#">occlusion-part-2/</a>  <a href="http://what-when-how.com/dental-anatomy-physiology-and-occlusion/introduction-to-dental-anatomy-dental-anatomy-physiology-and-occlusion-part-3/">http://what-when-how.com/dental-anatomy-physiology-and-occlusion/introduction-to-dental-anatomy-dental-anatomy-physiology-and-occlusion-part-3/</a>  <a href="http://what-when-how.com/dental-anatomy-physiology-and-occlusion/introduction-to-dental-anatomy-dental-anatomy-physiology-and-occlusion-part-4/">http://what-when-how.com/dental-anatomy-physiology-and-occlusion/introduction-to-dental-anatomy-dental-anatomy-physiology-and-occlusion-part-4/</a>		
<b>Week 2 – Class Suspension</b>					
<b>Week 3</b>					
September 4 (Wednesday) 1 hour	Development of the Human Dentition	<p>Explain the events that lead to the formation and development of the human dentition</p> <p>Predict the age of a person by the teeth present inside the mouth using knowledge of the sequence of tooth eruption</p>	<p>Chapter 2: Development &amp; Eruption of the Teeth. Wheeler’s Dental Anatomy, Physiology and Occlusion 10<sup>th</sup> edition pp 23-30, 40</p> <p>How did teeth evolve?  <a href="https://www.youtube.com/watch?v=wrPEjEqURJg&amp;feature=youtu.be">https://www.youtube.com/watch?v=wrPEjEqURJg&amp;feature=youtu.be</a></p> <p>Eruption of Primary and Permanent Teeth  <a href="https://www.youtube">https://www.youtube</a></p>	Read and watch all learning resources	<p>Formative: Discussion Activity</p> <p>Summative: Topic included in the 1<sup>st</sup> Long Exam</p>



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			<a href="https://www.youtube.com/watch?v=5g39-1WIg58">e.com/watch?v=5g39-1WIg58</a>		
1 hr	Deciduous Dentition	Describe the characteristics and features of the deciduous dentition.  Distinguish a primary tooth from a permanent tooth	Chapter 3: The Primary Teeth. Wheeler's Textbook of Anatomy, Physiology and Occlusion	Read learning resource  Attend lecture  Activity Guide – Identification of Deciduous Teeth Exercise	Formative: Discussion Activity  Summative: Topic included in the 1 <sup>st</sup> Long Exam
September 4 (Wednesday) 3 hrs	Physiologic Forms of the Teeth	Explain how the physiologic forms/features of the teeth protect the supporting structures/ periodontium.	Physiology of Tooth Form <a href="https://www.slideshare.net/DeepaBhaskaran/physiology-of-tooth-form">https://www.slideshare.net/DeepaBhaskaran/physiology-of-tooth-form</a>  7 Embrasures and Contacts <a href="https://www.youtube.com/watch?v=ngT9-Ru8IPk">https://www.youtube.com/watch?v=ngT9-Ru8IPk</a>  Gingiva/ Interdental Papilla <a href="https://www.youtube.com/watch?v=av_9uS5IGBw">https://www.youtube.com/watch?v=av_9uS5IGBw</a>  Physiologic Tooth Form and Function <a href="https://www.youtube.com/watch?v=WPtgOy_FB6E&amp;t=32s">https://www.youtube.com/watch?v=WPtgOy_FB6E&amp;t=32s</a> Watch from 32:34 min up to 39:24 min to know about (1) Crest of Curvature, and (2) height of curvature of cervical line at proximal aspects  Pre-recorded	Read, watch and view learning resources  Flipped classroom with Dr. A. Segarra	Formative: Activity Guide on Physiologic Forms of the Teeth  Summative: Topic included in the 1 <sup>st</sup> Long Exam





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			<p>lecture videos by Dr. Armin Segarra</p> <p><a href="https://www.youtube.com/watch?v=DhwrvWG3ZRM&amp;feature=youtu.be">https://www.youtube.com/watch?v=DhwrvWG3ZRM&amp;feature=youtu.be</a></p> <p><a href="https://www.youtube.com/watch?v=FnN4m_jUOU4&amp;feature=youtu.be">https://www.youtube.com/watch?v=FnN4m_jUOU4&amp;feature=youtu.be</a></p> <p><a href="https://www.youtube.com/watch?v=fC5Iceh2zHw&amp;feature=youtu.be">https://www.youtube.com/watch?v=fC5Iceh2zHw&amp;feature=youtu.be</a></p> <p><a href="https://www.youtube.com/watch?v=fC5Iceh2zHw&amp;feature=youtu.be">https://www.youtube.com/watch?v=fC5Iceh2zHw&amp;feature=youtu.be</a></p> <p><a href="https://www.youtube.com/watch?v=qyrR0Zm_fK&amp;feature=youtu.be">https://www.youtube.com/watch?v=qyrR0Zm_fK&amp;feature=youtu.be</a></p>		
<b>Week 4</b>					
September 9 (Monday) 3 hrs	The Permanent Maxillary & Mandibular Incisors	<p>Describe the characteristics and traits of the permanent teeth.</p> <p>Draw and carve anatomically correct permanent teeth.</p> <p>Develop the skill in drawing and carving teeth.</p>	<p>Chapters 6 &amp; 7, Wheeler’s Textbook of Anatomy, Physiology and Occlusion</p> <p>Uploaded powerpoint lecture of Dr. M. Yñiguez</p>	<p>Read and view learning resources</p> <p>Flipped classroom discussion with Dr. M. Yñiguez</p> <p>Simodont exercises</p> <p>Study guide on The Permanent Maxillary and Mandibular Incisors</p>	<p>Formative: Do “Think” activity on Study Guide</p> <p>Summative: Topic included in the 1<sup>st</sup> Long Exam</p>
September 11 (Wednesday) 4 hrs	Drawing & Carving of the Maxillary Incisors		Video on “How to Draw a Tooth” by Dr. M. Yñiguez	<p>Lab exercises</p> <p>Simodont exercises</p>	Formative: Discussion Forum on Activity Guide



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			<p><a href="https://www.youtube.com/watch?v=8R6R7Eqw_lk&amp;=18142">https://www.youtube.com/watch?v=8R6R7Eqw_lk&amp;=18142</a></p> <p>Sunico MC (1997) A Laboratory Guide in Tooth Drawing and Carving, Chapter 3: Individual Tooth Drawing pp 23-28 (uploaded on VLE)</p> <p>Video “Guide to Your First Tooth Drawing” by Dr. M. Segarra</p> <p>Video on “How to Carve a Tooth” by Dr. M. Segarra and Dr. M. Yñiguez</p> <p>YouTube videos on drawing and carving the maxillary and mandibular central and lateral incisors</p> <p>Assignment Guide: A Guide to Your Carving Exercises</p>		<p>for Drawing the Maxillary Central Incisor</p> <p>Discussion Forum on Activity Guide on Carving the Maxillary Central Incisor</p> <p>Supervision and Work in progress remarks on individual tooth drawings and carvings</p> <p>Summative: Assessed final product (drawing and carving of the 4 incisors)</p> <p>Anterior practical exam (drawing and carving)</p>
<b>Week 5</b>					
September 16 (Monday) 3 hrs	The Permanent Canines		<p>Chapter 8, Wheeler’s Textbook of Anatomy, Physiology and Occlusion</p> <p>Uploaded powerpoint lecture of</p>	<p>Read all learning resources</p> <p>Flipped classroom discussion with Dr. M. Yñiguez</p> <p>Simodont exercises</p>	<p>Formative: Do “Think” activity on Study Guide</p> <p>Summative: Topic included in the 1<sup>st</sup> Long Exam</p>



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			Dr. M. Yñiguez	Study guide on The Permanent Canines	
September 18 (Wednesday) 3 hrs	Drawing & Carving Exercises (Cuspids)		Sunico MC (1997) A Laboratory Guide in Tooth Drawing and Carving, Chapter 3: Individual Tooth Drawing pp 28-32 (uploaded on VLE)  YouTube videos on drawing and carving the maxillary and mandibular cuspids	Lab exercises  Simodont exercises	Formative: Supervision and Work in progress remarks on individual tooth drawings and carvings  Summative: Assessed final product (drawing and carving of the maxillary and mandibular cuspid)  Anterior practical exam (drawing and carving)
<b>Week 6</b>					
September 23 (Monday) 3 hrs	Continuation of Drawing & Carving Exercises of Anterior Teeth			Lab exercises  Simodont exercises	
September 25 (Wednesday) 4 hrs	<b>1<sup>st</sup> Long Examination Lecture and Move System</b>				
<b>Week 7</b>					
September 30 (Monday) 4 hrs	Continuation of Drawing & Carving Exercises of Anterior Teeth			Lab exercises  Simodont exercises	
<b>SUBMISSION OF ANTERIOR TEETH EXERCISES (DRAWING AND CARVING)</b>					
October 2 (Wednesday) 3 hrs	The Permanent Premolars		Chapter 9 & 10, Wheeler's Textbook of Anatomy, Physiology and Occlusion  Uploaded powerpoint lecture of Dr. M. Yñiguez	Real and view all learning resources  Flipped classroom discussion with Dr. M Yñiguez  Simodont exercises	Formative: Do "Think" activity on Study Guide  Summative: Topic included in the 2 <sup>nd</sup> Long Exam



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				Study guide on the Permanent Premolars	
<b>Week 8</b>					
<b>October 7 (Monday)</b> 4 hrs	<b>ANTERIOR PRACTICAL EXAM (DRAWING AND CARVING)</b>				
October 9 (Wednesday) 4 hrs	Drawing and Carving Exercises of the Permanent Premolars		Sunico MC (1997) A Laboratory Guide in Tooth Drawing and Carving, Chapter 2: Individual Tooth Drawing pp 32-44 (uploaded on VLE)  YouTube videos on drawing and carving the maxillary and mandibular premolars  Instructional Video on carving a posterior tooth by Dr. M. Segarra	Lab exercises  Simodont exercises (Premolar)	Formative: Supervision and Work in progress remarks on individual tooth drawings and carvings  Summative: Assessed final product (drawing and carving of the maxillary and mandibular premolars)  Premolar practical exam (drawing and carving)
<b>Week 9</b>					
October 14 (Monday) 4 hrs	Continuation of Drawing & Carving Exercises of Premolar Teeth			Lab exercises  Simodont exercises	
October 16 (Wednesday) 3 hrs	The Permanent Molars		Chapter 11 & 12, Wheeler's Textbook of Anatomy, Physiology and Occlusion  Concise Dental Anatomy by Fuller, Denehy and Schulein 4th edition; Units 7	Read and view all learning resources  Face-to-face discussion with Dr. M. Segarra  e-Human 3D viewing via Facebook group	Formative: Do activity "Think" found on Study Guide  Summative: Topic included in the 2 <sup>nd</sup> Long Exam



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			and 8: pp 100 – 135  Woelfel’s Dental Anatomy by Scheid and Weiss 8th edition; Chapter 5 pp: 120-163  Powerpoint lecture of Dr. M Segarra	Simodont exercise	
<b>Week 10</b>					
October 21 (Monday) 4 hrs	Drawing and Carving Exercises on the Permanent Molars		YouTube videos on drawing and carving the maxillary and mandibular molars  Instructional Video on carving a posterior tooth by Dr. M. Segarra	Lab exercises  Simodont exercises	Formative: Supervision and Work in progress remarks on individual tooth drawings and carvings  Summative: Assessed final product (drawing and carving of the maxillary and mandibular molars)  Molar practical exam (drawing and carving)
<b>SUBMISSION OF PREMOLAR TEETH EXERCISES (DRAWING AND CARVING)</b>					
October 23 (Wednesday) 4 hrs	<b>PREMOLAR PRACTICAL EXAM (DRAWING AND CARVING)</b>				
<b>Week 11 – WELLNESS BREAK</b>					
<b>Week 12</b>					
November 4 (Monday) 1 hr	The Dental Pulp	Identify the dental pulp and the parts of the pulp cavity.  Explain the	Chapter 13, Wheeler’s Textbook of Anatomy, Physiology and Occlusion	Read and view all learning resources  Lecture and discussion	Summative: Topic included in the 2 <sup>nd</sup> Long Exam



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		functions of the dental pulp.  Describe the dental pulp anatomy of the different types of teeth.	Powerpoint lecture of Dr. M. Yñiguez	with Dr. M. Yñiguez	
1.5 hrs	Common Tooth Anomalies	Describe common anomalies of the human dentition.  Distinguish between normal from abnormal tooth conditions and anomalies	Chapter 11, Woelfel's Dental Anatomy and Its Relevance to Dentistry, 8th ed.	Lecture by Dr. E. Escoto  Read referred chapter in Textbook  Read/watch web learning resource	Summative: Topic included in the 2 <sup>nd</sup> Long Exam
1 hr	The Oral Cavity	Identify and describe soft tissue structures in the oral cavity.	Chapter 18: Oral Examination: Normal Anatomy of the Oral Cavity. Woelfel's Dental Anatomy 439-472.	Read learning resource  Lecture by Dr. E. Escoto	Summative: Topic included in the 2 <sup>nd</sup> Long Exam
November 6 (Monday)  4 hrs	Continuation of Drawing & Carving Exercises of Molar Teeth			Lab exercises  Simodont exercises	
<b>Week 13</b>					
<b>November 11 (Wednesday) 4 hrs</b>	<b>2<sup>nd</sup> Long Examination Lecture and Move System</b>				
November 13 (Wednesday) 2 hrs	Dento-Osseous Structures	Identify and describe structures in the skull and the mandible.	Chapter 14, Wheeler's Textbook of Anatomy, Physiology and Occlusion pp 231-241  Chapter 14 "Structures that Form the Foundation for Tooth Function. Woelfel's Dental Anatomy 8th ed	Read and View learning resources  Lecture and group work with Dr. M. Segarra	Formative: Online quiz  Summative: Topic included in 3 <sup>rd</sup> Long Exam



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			by Scheid and Weiss pp 377-398.  Interactive Powerpoint by Dr. M. Segarra		
2 hrs	Blood Supply, Venous and Lymphatic Drainage and Nervous Innervation of the Oral Cavity	Enumerate and trace/locate the branches of the trigeminal nerve, blood supply, venous drainage and lymphatic drainage.  Identify the structures innervated by the trigeminal nerve.  Identify the arteries that supply blood and veins that drain blood to the structures in the oral cavity.  Identify the lymph nodes that drain lymph from the oral cavity	Chapter 14, Wheeler’s Textbook of Anatomy, Physiology and Occlusion; pp 231 – 241  Chapter 14 “Structures that Form the Foundation for Tooth Function, Section IV. Nerves of the Oral Cavity” Woelfel’s Dental Anatomy 8th ed by Scheid & Weiss pp. 427-439.  Chapter 14 “Structures that Form the Foundation for Tooth Function, Section V. Vessels Associated with the Oral Cavity” Woelfel’s Dental Anatomy 8th ed by Scheid & Weiss pp. 427-439.  Pre-recorded lecture of Dr. M. Segarra	Read and watch all learning resources.  Discussion with Dr. M. Segarra (1 hour)	Online quiz  Topic included in the 3 <sup>rd</sup> Long Exam



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Week 14					
November 18 (Monday) 4 hrs	Continuation of Drawing & Carving Exercises of Molar Teeth			Lab exercises  Simodont exercises	
November 20 (Wednesday) 2 hrs	The Temporomandibular Joint Mandibular Movements	Describe the temporomandibular joint  Explain the role of the different parts of the TMJ, muscles of mastication, and the accessory ligaments in mandibular movements. Describe the different mandibular positions and movements.	Chapter 15, Wheeler's Textbook of Anatomy, Physiology and Occlusion; pp 251-266  Chapter 14 Section II: The Temporomandibular Joint. Woelfel's Dental Anatomy 398-416.  <a href="https://www.youtube.com/watch?v=wBVax9JWS8U">https://www.youtube.com/watch?v=wBVax9JWS8U</a> <a href="https://www.youtube.com/watch?v=mw9aS1fkkCo">https://www.youtube.com/watch?v=mw9aS1fkkCo</a>	Read and watch all learning resources.  Lecture of Dr. A. Segarra	Summative: Topic included in 3 <sup>rd</sup> Long Exam
2 hrs	The Arrangement and Articulation of the Teeth	Explain the six keys to occlusion.  Explain the physiologic basis of the arrangement of teeth in the oral cavity.  Describe the different terminologies in dental occlusion.	Chapter 15, Wheeler's Textbook of Anatomy, Physiology and Occlusion; pp 251-266  <a href="https://www.youtube.com/watch?v=bRRfEzDcG-0">https://www.youtube.com/watch?v=bRRfEzDcG-0</a>	Read and watch learning resources  Lectures of Dr. A. Segarra	Formative: Study Guide No. 3 - Occlusion  Summative: Topic included in the 3 <sup>rd</sup> Long Exam
<b>SUBMISSION OF MOLAR TEETH EXERCISES (DRAWING AND CARVING)</b>					
Week 15					
November 25 (Monday) 4 hrs	<b>MOLAR PRACTICAL EXAM (DRAWING AND CARVING)</b>				
November 27 (Wednesday)	Occlusion Exercise	Apply the concepts of		Lab exercise	Formative: Supervision and





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4 hrs		occlusion in the Occlusion Exercise.			Work in progress remarks on the occlusion exercises  Summative: Assignment Guide on Occlusion Exercise  Graded final product of the occlusion exercise
<b>Week 16</b>					
<b>December 2 (Monday) 4 hrs</b>	<b>3<sup>rd</sup> Long Examination Lecture and Move System</b>				
December 4 (Wednesday) 4 hrs	Continuation of Occlusion Exercise			Lab exercise	
<b>Week 17</b>					
<b>December 9 (Monday) 2 hrs</b>	<ul style="list-style-type: none"> <li>- <b>Lecture Finals</b></li> <li>- <b>SUBMISSION OF OCCLUSION EXERCISE</b></li> </ul>				
<b>FINALS WEEK</b>					
<b>6 hrs</b>	<b>PRACTICAL EXAMINATION</b> <ul style="list-style-type: none"> <li>- Drawing (3 hrs)</li> <li>- Carving (3 hrs)</li> </ul>				



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## COURSE REQUIREMENTS

Dent 111 has a didactic and laboratory component. Your **FINAL GRADE** will be computed as follows:

60% = from **DIDACTIC PART** which in turn will be computed from

1) 3 long examinations	
1 <sup>st</sup> exam	25%
2 <sup>nd</sup> exam	25%
3 <sup>rd</sup> exam	20%
2) Learning activities	10%
3) Final examination	<u>20%</u>
	100%

40% = from the **LABORATORY PART** which will be computed from

1) Drawing and Carving Exercises	(Pass or Fail only)
2) Occlusion Exercise	25%
3) Identification of Errors Exam	5%
4) Practical Examination	<u>70%</u>
	100%

### **DIDACTIC PART (60% of Final Grade)**

#### Course Requirement 1: Three (3) Long Examinations (70%)

These examinations consist of 100 items objective questions such as MCQ's, True or False and the like. There will also be a move system exam for the identification of teeth and structures, and Dento-osseous structures during the first and second long exam.

Only 20% weight is given to the 3<sup>rd</sup> long exam in respect to the students' relative lack of exposure to general anatomy of the human body. The lectures included in the 3<sup>rd</sup> long exam would have been better appreciated and understood by the students if General Anatomy was scheduled one semester ahead of Oral Anatomy. Unfortunately, in the Dentistry Curriculum, Oral Anatomy comes ahead of General Anatomy.

#### Course Requirement 2: Learning Activities (10%)

These activities which include blogging, discussion fora and the like are part of formative assessment. In recognition of your efforts in doing these activities, we will put a weight of 10% (depending on the quality of your work) for these learning activities.



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**Course Requirement 3: Final Examination (20%)**

This is given at the end of the semester to gauge your over-all knowledge of the course gained from the learning activities. This is usually a 100 items objective exam.

EACH CATEGORY (3 long exams, final exams and learning activities) should be graded as passing to be able to pass the course. A failing grade in 1 category will merit a grade of INC or 4.0. Failure in all 3 long exams plus the finals will merit a straight grade of 5.0. To be able to take the finals, the student should pass at least 1 out of 3 long exams. If you pass all 3 long exams and have an average of at least 81%, you may be EXEMPTED from the final exam.

**LABORATORY PART (40% of the Final Grade)**

**Course Requirement 1: Drawing and Carving Exercises (PASS or FAIL only)**

These consist of 14 drawings and 8 carvings. You will be given enough time to finish these exercises. An assignment guide will be given for these exercises. There will be NO NUMERICAL GRADE for each of the drawing and carving exercises. However, you are REQUIRED to submit the exercises on the scheduled deadlines. All submissions must PASS in order for you to qualify to take the practical exams. If you FAIL an exercise or fail to submit your exercises on time, you will take remedial exams scheduled at our discretion. These remedial exams will be Pass or Fail only and you will forfeit your chance to be exempted from the final practical exam.

**Course Requirement 2: Occlusion Exercise (25%)**

This exercise will require you to make cut-outs of your tooth drawings and positioning them to show correct occlusion.

**Course Requirement 3: Identification of Errors (5%)**

Drawings of teeth will be shown and you have to identify the errors present. This activity will test your knowledge of the morphology of the teeth which is essential in the study of dentistry.

**Course Requirement 4: Practical Examination (70%)**

There will be 3 practical exams after each submission date and a final practical exam at the end of the semester. The 3 practical exams (Anteriors, Premolars and Molars) will be 50% and the Final practical exam will be 20%, making the total 70%. It will be a drawing and carving exam. For the drawing exam, a table of measurements will be given and from your knowledge of the morphology of the teeth, you will draw the prescribed tooth. For the carving exam, you will be asked to carve a mirror image of a tooth on a cast. If you pass all 3 exams with an average of at least 81%, you may be exempted from the final practical exam.

EACH CATEGORY (drawing and carving exercises, occlusion exercise, identification of errors and practical examinations) should be graded as passing to be able to pass the course. A failing grade in 1 category will merit a grade of INC or 4.0.



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Sample Computation of Final Grade:

Didactic:

Table with 3 columns: Course Requirement, Grade, % of Final Grade. Rows include 3 Long Exams (70%), Learning activities (10%), Final Exam (20%), and FINAL GRADE for Didactic.

Laboratory:

Table with 3 columns: Course Requirement, Grade, % of Final Grade. Rows include Drawing & Carving Exercises, Occlusion Exercise (25%), Identification of Errors (5%), Practical Exams (50%), Final Practical Exam (20%), and FINAL GRADE FOR Laboratory.

Final Grade for Dent 111 (Didactic and Laboratory combined) = 51.45 + 29.35 = 81.35

TO BE ABLE PASS THE COURSE, BOTH GRADES IN DIDACTIC AND LABORATORY SHOULD BE PASSING. IF YOU HAVE A FAILING SCORE IN EITHER ONE, YOU WILL GET A GRADE OF INC. OR A 4.0.

Exemptions for the final examination and final practical exam will be given when the grade after the 3 exams (Long exams and Practical exams) are both 81% or higher. (equivalent to 1.75). Exemptions will be announced at least 5 days before the finals week.

Any question regarding examination grades should be discussed with the course coordinator promptly.



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#### ABOUT THE INSTRUCTOR/S

I am **Monica Salud M. Yñiguez-Gonzalez**, Assistant Professor. I graduated from UP College of Dentistry in 2009. I did my preceptorships in Orthodontics and Implant Dentistry. After college, I realized that there's more to life than dentistry, so I got into yoga. That being said, I am a certified yin yoga instructor. I find that yoga helps me focus better aside from it being a good physical exercise. I'm also into crafts and DIYs. I'm a doting momma to my little boy who, right now, probably knows a little more in Oral Anatomy than you do because he's been attending my class since he was in my womb. Contrary to popular belief, I'm not as techie as they say I am. That credit goes to my husband. So I will have to get back to you on your tech questions to ask him. If you want to break the ice though, talk to me about Harry Potter & K-Dramas instead and you'll have my full attention.

My contact details are:

E-mail: [mmyniguez@up.edu.ph](mailto:mmyniguez@up.edu.ph)

Messenger and Viber: Monica Yniguez

I will now let the other members of the team introduce themselves.

My name is **Michelle Sunico Segarra**, a Professor and I have taught Oral Anatomy for around 25 years. I have a Masters Degree in Occupational Health from UP College of Public Health and a PhD in Cariology and Operative Dentistry from the Tokyo Medical and Dental University. I am a stage mom to my 13-year old daughter. I enjoy travelling with my family and hosting dinner for family members and friends. I like organizing events. My husband and daughter call me a shopaholic, but that is their opinion. A relaxing time for me will include reading a good book and binge watching. I am described by friends as a neat freak with an obsessive-compulsive streak... and a Scorpio, which I can say are traits that I share with the other faculty member of this course, Dr. Monica Yñiguez. I would like to believe that I am approachable. The faculty members of this course are fun people. As Oral Anatomy is your first course that really deals with dentistry, we try to make learning this subject enjoyable. So sit back, relax and learn as much as you can.

My contact details are:

E-mail: [mssegarra@up.edu.ph](mailto:mssegarra@up.edu.ph)

Messenger & Viber: Michelle Segarra

My name is **Maxine Anne A. Remulla**, Senior Lecturer. I graduated and took the boards in 2019, right before the pandemic hit. I've done preceptorships in Orthodontics and Esthetic Dentistry, and (as corny as it may sound) it excites me to think that there is still a lot to learn in this field. During the lockdown, aside from attending dentistry-related webinars and lectures, I also delved into the world of K-pop and I've been a Seventeen and Twice fan since then. In my downtime, I enjoy deep diving into social media trends and this is led me to discovering my love for matcha lattes. As a millennial borderline Gen Z, I'd like to believe I can still relate to your generation, so hopefully we can build a good relationship throughout this course.



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My contact details are:

E-mail: [maremulla@up.edu.ph](mailto:maremulla@up.edu.ph)

Messenger and Viber: Maxine Remulla

I am **Maxine Denielle T. Gonzaga**, Clinical Assistant Professor, and I am the youngest and newest member of the Oral Anatomy team. I graduated from UP College of Dentistry in January 2024 and took the boards in June 2024. I'd like to think that I'm following Dean Segarra and Dr. Yñiguez-Gonzalez' footsteps as I am also a fellow Scorpio who loves to organize and is meticulous on work and schedules. I love K-pop (a multifan from 2nd to 5th generation), K-dramas, and feel-good Korean reality shows. You can freely approach me both for Oral Anatomy and K-pop/K-drama actor biases.

My contact details are:

E-mail: [mtgonzaga1@up.edu.ph](mailto:mtgonzaga1@up.edu.ph)

Messenger and Viber: Maxine Denielle Gonzaga

## HOUSE RULES

To make our journey in Oral Anatomy pleasant and smooth sailing, please observe the following house rules:

1. As much as possible, attend our sessions, face-to-face and online. Online sessions/web conferences/ lectures/ lab supervision are scheduled same time as our class schedule. **ATTENDANCE WILL BE CHECKED.** The 20% university rule on absences will be upheld. There will only be a 20 minute grace period before the doors are locked.
2. In case you cannot attend lecture sessions, please write an excuse letter accompanied by University Health Service-issued medical clearance. You may send it thru email or present the physical copy to Dr. Segarra, Dr. Yñiguez or Dr. Remulla.
3. For the laboratory exercises, the class will be divided into three sections. Each section will have its own Drawing and Carving Guru who will be rotated per submission. All consultations are to be done **FACE-TO-FACE** during our lab sessions. It is the prerogative of your respective lab gurus whether they will allow online consultations.
4. As much as possible, avoid missing an exam. The schedule of exams will be given way ahead so please mark these important dates in your calendar. If you miss an exam, you need to present a University Health Service-issued medical clearance to be considered for a make-up exam. **WE WILL NOT MOVE EXAMS OR DEADLINES** unless force majeure.
5. If we have online synchronous sessions, if possible, choose a place in your house that is quiet and far from any distraction.
6. Please dress appropriately. You must have your white uniforms with name plates by the time you take your first exam. While waiting for your white uniforms, kindly dress appropriately. You will be future dentists and professionals, so this early, start acting as if you are already one. Do not wear shorts, cropped tops, spaghetti straps, off-shoulder or tube tops or dresses, backless shirts, sandos, slippers and the likes to class.
7. Please keep your appearance neat. Nails should be kept short to make carving easier.



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8. Please be courteous, not only to your teachers but also to your classmates when making comments during classes. Try making “requests”, not “demands”. Try to make saying “please, “thank you” and “may I” second nature to you. You can achieve and gain more with niceness than with aggressiveness. Be diplomatic when dealing with people.
9. Please avoid calling your teachers “Doc”. “Doc” is very informal and disrespectful for a teacher-student relationship. You are students, not patients. We prefer to be called “Ma’am” or Dr. Segarra, Dr. Yñiguez, Dr. Remulla, Dr. Gonzaga. We would also appreciate it if you refrain from calling us by our first names such as “Dr. Michelle, Dr. Monica or Dr. Maxine”.
10. During exams, please do your ablutions before the start of the exam. Going to the bathroom during the exam should be avoided.
11. We will not tolerate cheating or dishonesty in any form. Cheating merits a grade of 5.0 and an administrative sanction.
12. Please follow submission schedules for your lab exercises. In case you will not be able to submit on time, kindly inform your guru. He/she will decide whether a deduction is due based on the validity and veracity of your excuse.
13. Please practice CLAYGO. During our lab sessions, make sure you clean your work area after the session. Avoid dropping wax on the floor. If you do, make sure to scrape it off. Same goes for wax shavings, if you drop them, sweep and/or scrape them off to prevent the wax from sticking on the floor.
14. During live online sessions, please don’t do anything other than attend the class. Should you need to go to the bathroom, leave your computer or mobile gadget on your desk. There have been many instances of zoom participants being watched by many netizens doing private things.

Prepared by:

**Monica Salud M. Yñiguez-Gonzalez, DDM**

*Course Coordinator*

*August 19, 2024*

Reviewed By:

**Elmer Jesus T. Escoto, DDM**

*Chairperson, Department of Basic Dental Health Sciences*





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Approved by:

**Michelle S. Segarra, DDM, MOH, PhD**  
*Dean*

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