Republic of the Philippines
OFFICE OF THE PRESIDENT
COMMISSION ON HIGHER EDUCATION

CHED MEMORANDUM ORDER
No. 33
Series of 2006

SUBJECT: POLICIES, STANDARDS AND GUIDELINES FOR DENTAL EDUCATION

In accordance with the pertinent provisions of Republic Act (RA) No. 7722, otherwise known as the "Higher Education Act of 1994," and in view of CHED Resolution No. __s. 2006, for the purpose of rationalizing Dental Education in the country towards keeping at pace with the demands of global competitiveness, the following policies, standards and guidelines for Dental Education are hereby adopted and promulgated by the Commission, thus:

ARTICLE 1
INTRODUCTION

Section 1. Dental education aims to prepare students for the general practice of the profession who are biologically, scientifically and technically-oriented to develop competencies in the maintenance of oral health care.

Dental education shall develop and equip the students to be adept in the prevention, diagnosis and treatment of oral diseases. It shall develop graduates who:

a. are committed to provide community dental services;
b. are sensitive to social and moral climate of the Filipino people;
c. are research-oriented;
d. can assume leadership role in the national and global community.

ARTICLE II
AUTHORITY TO OPERATE

All private higher education institutions (PHEIs) intending to offer the Doctor of Dental Medicine must first secure proper authority from the Commission in accordance with existing rules and regulations. State universities and colleges (SUCs), and local colleges and universities should likewise strictly adhere to the provisions of this policies, standards and guidelines.

Section 2. Representatives from the CHED and the members of the Technical Committee for Dental Education shall make an ocular inspection of all facilities of the institution to assure that they conform with the required policies, standards and guidelines prior to the issuance of initial permit to operate the program.

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Section 3. The number of students admitted to the schools offering the Dentistry program shall be appropriate to the school's capabilities to offer the program in terms of facilities and faculty.

ARTICLE III
PROGRAM SPECIFICATIONS

Section 4. Program Name. Doctor of Dental Medicine (DMD)

Section 5. Program Description.

The Doctor of Dental Medicine (DMD) is a straight six-year program administered by the Dean of the College of Dentistry. The first two years is the Pre-Dental covering the General Education and other health-related subjects, and a Four-year Dentistry curriculum with the first two years covering Basic Medical and Dental sciences, and Pre-clinical subjects, the last two years on clinical training.

a. Objectives. The Dental education aims to prepare the graduates to be globally competitive for the following tasks:

1. providing quality oral health care,
2. providing proper patient education,
3. community service delivery,
4. conduct basic and clinical researches,
5. application of business principles, entrepreneurship, practices, and processes
6. proper patient management and treatment, and
7. ethical/legal/moral applications in dental practice.

b. Specific professions, careers, occupations or trades that the graduates of this program may be:

1) Private Dental practitioner
2) Health care provider in hospitals, local government units, private companies and the military service
3) Academician. Dentists can be employed in colleges and universities offering Dentistry program.
4) Dental industry experts, consultants and researchers

ARTICLE IV
COMPETENCY STANDARDS

The competency standards present the minimum level of competence for graduates of Doctor of Dental Medicine who must be able to:

1. Provide quality health care
   1.1 Obtain medical, dental, social and occupational history
   1.2 Obtain and interprets diagnostic information and procedures
   1.3 Maintain record of patient
   1.4 Develop comprehensive oral health plan
   1.5 Perform appropriate clinical procedures

1.6 Provide oral and preventive care
1.7 Refer to specialists if necessary
1.8 Provide emergency dental services
1.9 Implement and monitor infection control and environmental safety
1.10 Maintain adequate clinical equipment and facilities

2. Provide proper patient education
   2.1 Conducts proper oral health education
   2.2 Participates in continuing professional education
      2.2.1 Local Chapters/Affiliates
      2.2.2 Regional
      2.2.3 National
      2.2.4 International
   2.3 Explains proper treatment plan to the patient
   2.4 Gives chair side instruction to the patient
   2.5 Provides post operative instructions
   2.6 Recalls patient

3. Community service delivery
   3.1 Conducts community services
      3.1.1 Oral health education
      3.1.2 Preventive health measures
      3.1.3 Corrective treatment
   3.2 Participates in oral healthcare awareness programs
   3.3 Coordinates with other health professionals

4. Conduct clinical researches
   4.1 Identifies oral health related problems as subject for research
   4.2 Conduct research projects
   4.3 Identifies sources of funds
   4.4 Solicits and allocates funds
   4.5 Recommends improvements as output of research

5. Apply business principles, entrepreneurship and practices
   5.1 Identifies dental business opportunities/needs
   5.2 Identifies other business opportunities
   5.3 Able to source capitalization
   5.4 Uses business principles in dental practice
   5.5 Registers name of business with concerned agencies
   5.6 Observes labor laws
   5.7 Provides fringe benefits
   5.8 Observes merit system

6. Proper management of patient
   6.1 Shows compassion to patients
   6.2 Exercise honesty
   6.3 Shows empathy to the patients

7. Apply ethical/legal/moral standards in dental practice
   7.1 Applies the code of ethics in Dentistry
   7.2 Applies the principles of jurisprudence in the practice of Dentistry
   7.3 Pays taxes and other obligations

ARTICLE V
CURRICULUM

Section 6. Curriculum Description

The Dentistry program consists of courses arranged from Pre-Dental in the first two years, Basic Medical and Dental sciences, Pre-Clinical subjects in the next two years and Clinical Training in the last two years. The student is required to complete the 4-year residency on a regular semestral basis.

The minimum requirements for the Dentistry curriculum are flexible depending on the needs of the profession and in accordance with the Policies and Standards of CHED.

Section 7. Curriculum Outline

	Units	Total
I - Two-year Pre-dental Curriculum		**108**
A. Language/Humanities		21
English	6	
Filipino	6	
Humanities subjects (Logic, Philosophy, Literature)	9	
B. Mathematics, Natural Sciences and Information Technology		12
Mathematics	3	
Basic Statistics with Epidemiology	3	
Science, Technology & Society	3	
Computer	3	
Natural Sciences**		25
Zoology		
Vertebrates/Invertebrates	5	
Botany	5	
Chemistry		
Inorganic	5	
Organic	5	
Physics	5	
C. Social Sciences		21
Health Ethics	3	
Psychology	3	
Socio/Anthropology	3	
Life and Works of Rizal	3	
Health Economics w/ TLR	3	
Philippine Government & Constitution	3	
Philippine History	3	

D. Human Health Sciences		15
Genetics	5	
Human Anatomy and Physiology	5	
Primary Health Care	5	
E. Physical Education		6
F. National Service Training Program (NSTP)		8
II – Four-Year Dentistry Curriculum		**173**
A. Basic Medical Sciences		**37**
General Anatomy 1	5	
Biochemistry	5	
General Microscopic Anatomy and Embryology	4	
General Anatomy II	5	
General Physiology with Family Planning	4	
Nutrition	2	
Microbiology	3	
General Pathology	4	
Pharmacology	3	
Principles of Medicine	2	
B. Basic Dental Sciences*		**73**
Oral Anatomy	4	
Dental History and Orientation	2	
Computer Fundamentals and Dental Informatics	3	
Oral Microscopic Anatomy and Embryology	4	
Dental Materials	3	
Restorative Dentistry I	4	
Prosthodontics I (FPD)	4	
Oral Physiology and Occlusion	3	
Oral Pathology 1	4	
Prosthodontics II (RPD)	4	
Prosthodontics III (CD)	4	
Anaesthesiology	3	
Orthodontics I	3	
Roentgenology	3	
Oral Surgery I	2	
Oral Diagnosis and Treatment Planning	2	
Endodontics	3	
Research I –Methods of Research	2	
Periodontology	2	
Oral Surgery II	2	
Research II-Research Presentation	2	
Practice Management and Entrepreneurship	2	
Oral Pathology II (Oncology)	3	
Forensic Dentistry	1	
Dental Jurisprudence and Ethics	2	
Pediatric Dentistry with Child Psychology	2	
C. Pre-Clinical Subjects		**6**
Restorative Dentistry II	3	
Orthodontics II	3	
D. Clinical Dentistry		**43**

Clinical Dentistry I	6	
Clinical Dentistry II	6	
Clinical Dentistry III	10	
Clinical Dentistry IV	10	
Current Trends in Dentistry	1	
Special Studies:		
Ortho-Pedo Seminar I	1	
Prosthodontics Seminar I	1	
Restorative Dentistry Seminar I	1	
Oral Surgery Seminar	2	
Ortho-Pedo Seminar II	1	
Prosthodontics Seminar II	1	
Restorative Dentistry Seminar II	1	
Endo-Perio Seminar	2	
E. Hospital Dentistry		**6**
Hospital Dentistry I	3	
Hospital Dentistry II	3	
F. Community Dentistry		**8**
Community Dentistry I	2	
Community Dentistry II	3	
Community Dentistry III	3	
	TOTAL =	**173**

*Basic Dental Sciences can also be considered Pre-Clinical courses as follows:
Prosthodontics I (FPD), Prosthodontics II (RPD), Prosthodontics III (CD) and Endodontics

** Natural Sciences should have a minimum of 25 units

Section 8. Program of Study

TWO-YEAR PRE-DENTAL CURRICULUM

FIRST YEAR

1st Semester

Subjects	Lec	Lab	Units
Inorganic Chemistry	3	2	5
General Physics	3	2	5
Communication and Study Skills in English	3	0	3
Sining ng Komunikasyon	3	0	3
Philippine History, Culture & Current Issues	3	0	3
College Algebra	3	0	3
Physical Education 1	2	0	2
		TOTAL	24

2nd Semester

Subjects	Lec	Lab	Units
Organic Chemistry	3	2	5
General Zoology	3	2	5
College Reading and Writing	3	0	3
Politics and Governance	3	0	3
Fundamentals of Logic and Ethics	3	0	3
Kasanayan sa Malikhaing Pagpapahayag	3	0	3
Science, Technology and Society	3	0	3
NSTP 1 (ROTC,CWTS)	3	0	3
Physical Education 2	2	0	2
		TOTAL	30

SECOND YEAR

1st Semester

Subjects	Lec	Lab	Units
Elementary Botany	3	2	5
General Psychology	3	0	3
Philippine Literature	3	0	3
Human Anatomy and Physiology	3	2	5
Health Care	3	2	5
Health Economics w/ TLR	3	0	3
NSTP 2 (ROTC,CWTS)	3	0	3
Physical Education 3	2	0	2
		TOTAL	29

2nd Semester

Subjects	Lec	Lab	Units
Genetics	3	2	5
Basic Statistics	3	0	3
Introduction to Computer	3	0	3
Sociology-Anthropology	3	0	3
Philosophy of Man	3	0	3
Life and Works of Rizal	3	0	3
Health Ethics	3	0	3
Physical Education 4	2	0	2
		TOTAL	25

DOCTOR OF DENTAL MEDICINE
Minimum Curriculum Requirements

FIRST YEAR

1st Semester

Subjects	Lec	Lab	Units
General Anatomy 1	3	2	5
Biochemistry	3	2	5
General Microscopic Anatomy and Embryology	2	2	4
Oral Anatomy	2	2	4
Dental History and Orientation	2	0	2
Computer Fundamentals and Dental Informatics	3	0	3
		TOTAL	23

2nd Semester

Subjects	Lec	Lab	Units
General Anatomy II	3	2	5
Oral Microscopic Anatomy and Embryology	2	2	4
General Physiology with Family Planning	2	2	4
Dental Materials	2	1	3
Nutrition	2	0	2
Microbiology	2	1	3
Community Dentistry 1	2	0	2
		TOTAL	23

SECOND YEAR

1st Semester

Subjects	Lec	Lab	Units
General Pathology	2	2	4
Pharmacology	2	1	3
Restorative Dentistry 1	2	2	4
Prosthodontics 1 (FPD)	2	2	4
Roentgenology	2	1	3
Oral Physiology and Occlusion	3	0	3
		TOTAL	21

2nd Semester

Subjects	Lec	Lab	Units
Oral Pathology 1	2	2	4
Restorative Dentistry II	2	1	3
Prosthodontics II (RPD)	2	2	4
Prosthodontics III (CD)	2	2	4
Anesthesiology	2	1	3
Orthodontics I	2	1	3
		TOTAL	21

THIRD YEAR

1st Semester

Subjects	Lec	Lab	Clinic Hours	Units
Oral Surgery I	2	0	-	2
Oral Diagnosis and Treatment Planning	2	0	-	2
Endodontics	2	1	-	3
Orthodontics II	2	1	-	3
Research I (Methods of Research)	2	0	-	2
Principles of Medicine	2	0	-	2
Periodontology	2	0	-	2
Clinical Dentistry I	-	-	18	6
			TOTAL	22

2nd Semester

Subjects	Lec	Lab	Clinic Hours	Units
Oral Surgery II	2	0	-	2
Research II-Research Presentation	2	0	-	2
Practice Management with Entrepreneurship	2	0	-	2
Oral Pathology II- (Oncology)	3	0	-	3
Forensic Dentistry	1	0	-	1
Dental Jurisprudence and Ethics	2	0	-	2
Pediatric Dentistry with Child Psychology	2	0	-	2
Clinical Dentistry II	-	-	18	6
			TOTAL	20

FOURTH YEAR

1st Semester

Subjects	Lec	Lab	Clinic/ Hosp. Duty/ Field Work Hours	Units
Hospital Dentistry I	1	2	6	3
Community Dentistry II	2	1	3	3
Current Trends in Dentistry	1	0	-	1
Special Studies:				
Oral Surgery Seminar	2	0	-	2
Ortho-Pedo Seminar I	1	0	-	1
Prosthodontics Seminar I	1	0	-	1
Restorative Dentistry Seminar I	1	0	-	1
Clinical Dentistry III	-	0	30	10
			TOTAL	22

2nd Semester

Subjects	Lec	Lab	Clinic/Hosp. Duty/ Field Work Hours	Units
Hospital Dentistry II	1	2	6	3
Community Dentistry III	1	2	6	3
Special Studies:				
Ortho-Pedo Seminar II	1	0	-	1
Prosthodontics Seminar II	1	0	-	1
Restorative Dentistry Seminar II	1	0	-	1
Endo-Perio Seminar	2	0	-	2
Clinical Dentistry IV	-	0	30	10
			TOTAL	21

ARTICLE VI
COURSE SPECIFICATIONS

Section 9.

Course Name	:	**GENERAL ANATOMY I (REGIONAL ANATOMY)**
Course Description	:	This subject deals with the architecture and interrelation of the different parts of the body obtained by gross dissection and studied by regions involving the different tissues such as bones, muscles, nerves, blood vessels and different visceral organs which constitute a systemic anatomical knowledge and form the basis for clinical study.
Course Credit	:	5 units- 3 units lecture; 2 units laboratory
Hours	:	3 lecture hours; 6 laboratory hours per week
Pre-requisite	:	Zoology, Anatomy
Placement	:	1st year, 1st semester
Course Objectives	:	1. To present to the students of dentistry a detailed account of the structures of the different organs that form the different systems of the human body. 2. To provide an intensive foundation of anatomical knowledge to meet the needs of its application in clinical context.
Course Outline	:	Course Outline: 1. Introduction to Anatomy- Definition 1.1 Anatomical Terminology 2. Skeletal System 2.1 Classification of Bones 2.2 Markings on Bones 2.3 Bones of the Upper Extremities 2.4 Bones of the Lower Extremities 2.5 Bones of the Thorax 3. Muscular System 3.1 Muscles of the Upper Extremities 3.2 Muscles of the Lower Extremities

		3.3 Muscles of the Thorax and Respiratory Muscles 3.4 Muscles of the Abdomen and Perineum 4. Visceral Organs 4.1 Anatomy of the Heart 4.2 Anatomy of the Lung 4.3 Anatomy of the Esophagus, Stomach, Small and Large Intestines 4.4 Anatomy of the Liver, Pancreas and Gall bladder 4.5 Anatomy of the Kidney 4.6 Anatomy of Male and Female Reproductive Organs 5. Endocrine Glands 6. Circulatory System 6.1 Arterial Supply 6.2 Venous Drainage 7. Innervation 7.1 Brachial Plexus 7.2 Lumbar Plexus 7.3 Spinal Nerves
Equipment and Materials	:	Audiovisual facilities, human cadaver, dissecting set, anatomical models, skeletons, laboratory gowns.
Textbook and References	:	Textbooks: 1. Henry Gray, Anatomy Textbook. 19th ed. Churchill Livingstone, 2004 Suggested References: 1. W. Henry Hollinshead, Anatomy Textbook 2. Cunningham, Anatomy Textbook 3. Snell, Richard, Clinical Anatomy. Little, Brown and Company 4. Anne Agur, Grant, Atlas of Human Anatomy, William and Wilkins, 1998 5. Seeley,Stephens and Tate, Essentials of Anatomy and Physiology

Course Name	:	**GENERAL ANATOMY II (HEAD AND NECK)**
Course Description	:	This course deals with the thorough study of the head and neck with anatomical details on the skull, face, oral cavity and other maxillofacial structures.
Course Credit	:	5 units – 3 units lecture, 2 units laboratory
Contact Hours	:	3 hours lecture/6 hours laboratory per week
Pre-requisite	:	General Anatomy I
Placement	:	1st year, 2nd semester
Course Objectives	:	1. To have a thorough working knowledge of the different maxillofacial structures and correlate them with other fields of dentistry. 2. To apply the anatomical knowledge of head and neck in clinical context.
Course Outline		1. Skeletal System of the Head and Neck 2. Temporo-Mandibular Joint 3. Musculature of the Head and Neck 4. Salivary Glands and Accessory Glands of the Oral Cavity

		5. Oral Cavity 6. Pharynx and Larynx 7. Thyroid and Parathyroid Glands 8. Sensory organs 9. Vascular supply of Head and Neck 10. Central and Peripheral Nervous System 11. Venous Drainage of the Head and Neck
Equipment and Materials	:	Audiovisual facilities, human cadaver, dissecting set, anatomical models, skeletons, laboratory gown
Textbook and References	:	Textbook: 1. Henry Gray, Anatomy Textbook. 19th ed. Churchill Livingstone, 2004 Suggested References: 1. W. Henry Hollinshead, Anatomy Textbook 2. Snell, Richard, Clinical Anatomy. Little, Brown and Company 3. Anne Agur, Grant, Atlas of Human Anatomy, William and Wilkins,

Course Name	:	**GENERAL MICROSCOPIC ANATOMY AND EMBRYOLOGY**
Course Description	:	This course deals with the biological structures of functionally complex integrated cells and tissues that compose the human organ system. It includes the basic concept of embryonic development of the basic types of tissues.
Course Credit	:	4 units (2 units lecture, 2 units laboratory)
Contact Hours	:	2 hours lecture/6 hours laboratory per week
Pre-requisite	:	Zoology
Placement	:	1st year; 1st semester
Course Objectives	:	1. To understand how cells function in the complex interactive system that makes up the tissues and organs of the body. 2. To develop a sense of responsibility towards analytical methods of studying microscopical structures of cells and tissue components in relation to clinical application.
Course Outline	:	1. Definition of Terms 2. Microscopy 3. Cell Biology 4. Basic Types of Tissue 4.1 Epithelial tissue 4.2 Connective tissue 4.3 Muscular tissue 4.4 Neural tissue 4.5 Vascular tissue 5. Visceral Organ 6. Salivary Glands 7. Development 7.1 Digestive organs 7.2 Respiratory organs 7.3 Excretory and Reproductive organs

		7.4 Neural organs 7.5 Sensory organs Endocrine Glands
Equipment and Materials	:	Audiovisual facilities, microscope, slides
Textbook and References	:	Textbooks: 1. Bloom and Fawcette, Textbook of Histology Suggested References: 1. David Cormack. Histology 2. Jienqueira, Cornero. Basic Histology

Course Name	:	**BIOCHEMISTRY**
Course Description	:	Deals with study of chemistry of the biomolecules in the human body and all underlying biochemical processes related to dentistry.
Course Credit	:	5 units – 3 units lecture, 2 units laboratory
Contact Hours	:	3 hours lecture/6 hours laboratory
Pre-requisite	:	Chemistry I and II (Organic and Inorganic Chemistry)
Placement	:	1st year 1st semester
Course Objectives	:	1. To understand the metabolism of the different biomolecules and underlying mechanisms in the body. 2. To recognize the different oral pathological conditions arising from disturbances in the normal mechanism of the biomolecular structures in the body.
Course Outline	:	Course Outline: 1. Definition of Terms 2. Cell and Its Components 3. Active Transport of Substances 4. Bioenergetics 5. Metabolism 5.1 Carbohydrates 5.2 Proteins 5.3 Lipids 5.4 Vitamins and Minerals 6. Enzymes 7. Structure of DNA and RNA 8. Blood Chemistry 9. Urine 10. Stools
Equipment and Materials	:	Audiovisual facilities, microscopes, slides, test tubes, different reagents, beakers, Erlenmeyer flask, weighing balance, filter paper, Bunsen burner, graduated cyclinder, pipettes, evaporating dish, Petri dishes, blood specimen, hemocytometer, centrifugal machine, urine and stool samples
Textbook and References	:	Textbooks: Voet, Donald. Biochemistry Suggested References: White. Biochemistry C.K. Matthews. Biochemistry

Course Name	:	**ORAL ANATOMY**
Course Description	:	The study of the morphology of deciduous and permanent dentition, the macroscopic or gross structure of the human teeth, their contact with each other in the dental arches, alignment, occlusion including growth and development of the skull and jaws.
Course Credit	:	4 units – 2 units lecture, 2 units laboratory
Contact Hours	:	2 hours lecture/6 hours laboratory per week
Pre-requisite	:	None
Placement	:	1st year, 1st semester
Course Objectives	:	1. To describe, distinguish and identify the external and internal morphology of the teeth and their relationship to the surrounding and supporting tissues; 2. To acquire the skills in tooth carving and drawing with precision to develop manual dexterity 3. To help student appreciate the characteristics of the teeth and the jaw.
Course Outline	:	1. General considerations – Dental formula using the 2-digit system and other notations for tooth identification. 2. Formation and Physiology of the Deciduous and Permanent Dentition 3. The deciduous and permanent dentition 4. Occlusion
Equipment and Materials	:	Wax, soap, vernier calipers, graphing paper, ruler and pencil
Textbook and References	:	Wheeler's Dental Anatomy, Physiology and Occlusion By Ash Major (W.B. Saunders Co.) 7th edition, 1997

Course Name	:	**COMPUTER FUNDAMENTALS AND DENTAL INFORMATICS**
Course Description	:	The principles and programs of computer as applied to the practice of dentistry.
Course Credit	:	3 units – 3 units lecture with hands-on
Contact Hours	:	3 lecture hours per week
Pre-requisite	:	Basic Computer course from General Education courses
Placement	:	1st year; 1st semester
Course Objectives	:	1. To apply the basic concept and principles in the use of information technology. 2. To be able to use information technology in relation to dentistry.
Course Outline	:	1. Introduction 2. Review of IT concepts and principles 3. Application and Usage of IT in Dentistry
Equipment and Materials	:	Computers, softwares and hardwares, internet access, CD Roms.
Textbook and References	:	1. Introduction to Computers, 5th edition, Peter Norton ed., McGraw Hill, New York, c 2004 2. Computer Concepts (New Perspectives) 5th edition, June Jamrich Parsons and Dan Oja, c 2002, Thomson Learning, Singapore. 3. Computers, Information Technology in Perspective, Larry Long and

		Nancy Long, 10th edition, Prentice J Hall c 2002, New Jersey. 4. Windows XP Professional Complete, Fugazzotto and Dendy eds., Sybex, California, c 2002 5. Mastering Office XP Premium Edition, Gini Courter, et al, Sybex, California, c 2001

Course Name	:	**ORAL MICROSCOPIC ANATOMY AND EMBRYOLOGY**
Course Description	:	Study of microscopic structures of oral/dental tissues. This deals with the detailed histologic structures of the teeth and its associated structures with emphasis on its development and clinical considerations.
Course Credit	:	4 units – 2 units lecture, 2 units laboratory
Contact Hours	:	2 hours lecture; 6 hours laboratory per week
Pre-requisite	:	Oral Anatomy, General Microscopic Anatomy and Embryology
Placement	:	1st year; 1st semester
Course Objectives	:	To identify the different histologic structures of the dental/oral tissues and appreciate their importance in relation to clinical practice.
Course Outline	:	1. Embryology of the face and oral cavity 1.1 Glossogenesis 1.2 Odontogenesis 2. Development of the palate 3. Temporomandibular joint 4. Enamel 5. Dentin 6. Cementum 7. Pulp 8. Periodontal ligament 9. Bone and alveolar bone 10.Oral mucosa
Equipment and Materials	:	Microscope, slides, graphing paper, colored pencil
Textbook and References	:	Orban's Oral Histology and Embryology By B. Orban, latest edition

Course Name	:	**GENERAL PHYSIOLOGY WITH FAMILY PLANNING**
Course Description	:	This course deals with the integration of the different cells and organs into a functional human body with emphasis given to the practical application to dentistry together with the integration of items on Family Planning.
Course Credit	:	4 units – 2 units lecture, 2 units laboratory
Contact Hours	:	2 hours lecture/6 hours laboratory per week
Pre-requisite	:	General Anatomy I
Placement	:	1st year; 1st semester
Course Objectives	:	1. To understand the functional mechanism of the different structures and organs of the body. 2. To develop a working knowledge on the basic concept on how regulatory system of the body control functions to maintain homeostasis. 3. To cultivate information, make reasonable analysis and incorporate critical

		thinking activities to help students apply their knowledge in clinical context.
Course Outline	:	1. Structural and Functional Organization 2. Homeostasis 3. Cell Structures and their Functions 4. Nerve Physiology 4.1 Central Nervous System 4.2 Motor Function 4.3 Peripheral Nervous System 4.4 Autonomic Nervous System 4.5 Sensory Function 5.Muscle Physiology 5.1 Physiology of Muscle Contraction 5.2 Fatigue and Rigor 6. Cardiovascular Physiology 6.1 Composition and Functions of Blood 6.2 Structures and Functions of the Heart 6.3 Blood Pressure 6.4 Regulation of Heart Actions 7. Physiology of Respiration 7.1 Types and Phases of Respiration 7.2 Lung Volumes 7.3 Control of Respiration 7.4 Abnormal Reflexes 8. Physiology of the Digestive System 8.1 Organs of Digestion and Functions 8.2 Saliva and Regulation of Salivary Flow 9. Renal Function 9.1 Acid-Base Balance Mechanism 9.2 Urine Formation 10.Physiology of Male and Female Reproductive Organs 10.1 Hormones Secreted and Functions 11. Endocrine Glands 12. Vitamins and Minerals
Equipment and Materials	:	Audiovisual facilities, microscope, slides, blood specimen, urine, experimental animal, hemocytometer, kymograph, tongue depressor, rubber mallet, flash light, stop watch, laboratory reagents, staining materials, glass slides, test tube, test tube rack, filter paper, capillary tube, sphygmomanometer and stethoscope
Textbook and References	:	Textbook: Guyton, Arthur. Medical Physiology Suggested References: Ganong. Physiology Best and Taylor. Physiological Basis for Medical Practice

Course Name	:	**DENTAL MATERIALS**
Course Description	:	The study of the physical and chemical properties of the metallic and non-metallic materials used in Dentistry, including the manipulation and uses of the different dental materials, and the different variables that affect the properties of the dental materials.
Course Credit	:	3 units – 2 units lecture, 1 unit laboratory
Contact Hours	:	2 hours lecture;3 hours laboratory per week
Pre-requisite	:	Oral Anatomy
Placement	:	2nd year; 2nd semester
Course Objectives	:	1. To present the basic chemical and physical properties of the dental materials. 2. To introduce and distinguish the different types of dental materials and their manipulation in relation to Dentistry.
Course Outline	:	1. Introduction – History of dental materials, structure of matter, physical properties of dental materials, color, thermal property, biological considerations 2. Gypsum products 3. Impression materials 4. Metals 5. Dental cements 6. Resins 7. Waxes and Casting
Equipment and Materials	:	All dental materials, spatula, glass slabs, plaster bowl, alcohol lamp and articulator.
Textbook and References	:	Textbooks Philip's Science of Dental Materials By Kenneth L. Anusavice, latest edition Suggested References: Skinner, Dental Materials All textbooks and journals related to dental materials

Course Name	:	**NUTRITION**
Course Description	:	Nutrition deals with physical, chemical and biological processes that develop and renew tissues of the body by absorption and assimilation of food materials. It relates the importance of nutrition to dental health especially during the formation and maturation of tooth development.
Course Credit	:	2 units – 2 units lecture
Contact Hours	:	2 lecture hours per week
Pre-requisite	:	Biochemistry
Placement	:	2nd year, 2nd semester
Course Objectives	:	1. To identify the different nutrients needed by the human body and relate its importance to dentistry. 2. To know the importance of nutrition during the prenatal life. 3. To recognize the nutritional factors that affect tooth development.

Course Outline	:	1. Composition of Cells 2. Process of Digestion 3. Classification of Nutrients 4. Process of Metabolism 5. Normal Requirements of the Different Nutrients 6. Malnutrition 7. Effects of Nutrition for the Soft and Hard Dental Tissues 8. Role of Flourides in Nutrition and Dental Health
Equipment and Materials	:	Audiovisual facilities, flip charts, leaflets, hand-outs and microscope
Textbook and References	:	Textbooks Nizel and Papas. Nutrition in Clinical Dentistry Selected References: All reference materials about Nutrition

Course Name	:	**MICROBIOLOGY**
Course Description	:	A basic course on the biology of pathogenic microorganisms which include bacteria, virus, fungi, rickettsiae, helminthes and others in relation to oral health.
Course Credit	:	3units – 2 units lecture, 1 unit laboratory
Contact Hours	:	2 hours lecture/3 hours laboratory per week
Pre-requisite	:	General Physiology
Placement	:	1st year, 2nd semester
Course Objectives	:	To understand the microbiology of oral and non-oral infectious diseases including pathogenesis, etiology, diagnosis, prevention and therapy and its relation to Dentistry.
Course Outline	:	1. Characterization and Identification of Microbes 2. Microscopical Examination of Microbes 3. Physiology of Microorganisms 4. Airborne diseases 5. Viral Infection 6. Microbiota of the Oral Cavity 7. Immunology
Equipment and Materials	:	Audiovisual facilities, microscopes, slides, wire loop, staining materials, culture media and laboratory reagents.
Textbook and References	:	Textbooks Felizar, Michael. Microbiology Suggested References: Textbooks related to Microbiology

Course Name	:	**COMMUNITY DENTISTRY I**
Course Description	:	Concepts and principles of community dentistry and an introduction to biostatistics and epidemiology.
Course Credit	:	2 units lecture
Contact Hours	:	2 lecture hours per week
Pre-requisite	:	None

Placement	:	1st year, 2nd semester
Course Objectives	:	1. To learn the basic concepts and principles of community dentistry , biostatistics and epidemiology 2. To acquire the skills in the interpretation of oral health indices relevant to community dentistry
Course Outline	:	1. Definition of Terms 2. Biostatistics 3. Epidemiology 4. Prevalence, Incidence, Morbidity and Mortality 5. Types of Indices 6. Types of statistical techniques
Equipment and Materials	:	Audiovisual equipment
Textbook and References	:	Dental Public Health and Community Dentistry by Anthony Jong Primary Preventive Dentistry by Harris and Christen Manual in Community Dentistry and Dental Health Education by Corpus

Course Name	:	**GENERAL PATHOLOGY**
Course Description	:	General Pathology is the study of the origin and the basic reaction of cells or tissues to abnormal stimuli underlying all diseases with emphasis on the pathologic processes of the oral cavity.
Course Credit	:	4 units – 2 units lecture, 2 units laboratory
Contact Hours	:	2 hours lecture/6 hours laboratory per week
Pre-requisite	:	General Physiology with Family Planning, General Anatomy I & II and Biochemistry
Placement	:	2nd year, 2nd semester
Course Objectives	:	1. Define and explain the fundamental aspects of a disease process and to integrate basic mechanism in the clinical diagnosis of a particular disease. 2. Determine the appropriate assessment of diseases commonly encountered by dentist.
Course Outline	:	1. Introduction 2. Cellular Injury and cell death 3. Glandular Disorders 4. Inflammation and repair 5. Genetic Disorders 6. Immunologic Disorders 7. Neoplasia 8. Nutritional Disorders 9. Infectious Diseases 10. Skin Disorders 11. Cardiovascular Disorders 12. Respiratory Disorders 13. Gastrointestinal Disorders 14. Reproductive Disorders

Equipment and Materials	:	Audio-Visual Facilities, Compound Microscope - Slides on the subject matter and staining reagent.
Textbook and References	:	Textbooks 1. Robins, Pathologic Basis of Disease Suggested References: 1. Color Atlas of Histopathology, R.C. Curran, 4th revised edition, 2000, Oxford University Press 2. Radiation Pathology, 2001, Fajardo L.G., Berthong/R.E. Anderson, Oxford University Press 3. Head and Neck Histology and Anatomy, 2000, S.K. Smith/N.S. Karst Appleton and Lange 4. Dermatology in Systemic Disease, 2001, B.R.-Smoller/T.D. Horn, Oxford University Press 5. Immunology, 6th edition, 2001, I. Roitt, J. Brostoff, D. Male Churchill Livingstone 6. Jawetz, Melrich, Adelberg Medical Microbiology, 22nd edition, 2001, G.F. Brooks, J.S. Butel, S.A. Morse, McGraw Hill 7. Diagnostic Pathology of Parasitic Infections with Clinical Correlation, 2nd edition, Y. Gutierrez, Oxford University Press

Course Name	:	**RESTORATIVE DENTISTRY I**
Course Description	:	The principles of cavity preparation and the manipulation of filling materials necessary for the restoration of carious teeth.
Course Credit	:	4 units – 2 units lecture, 2 units laboratory
Contact Hours	:	2 hours lecture/6 hours laboratory per week
Pre-requisite	:	Oral Anatomy, Dental Materials, Oral Microscopic Anatomy and Embryology
Placement	:	2nd year, 1st semester
Course Objectives	:	1. To acquire the basic operative principles in cavity preparation. 2. To achieve the required skills and dexterity necessary to start a pre-clinical restorative practices in relation to other disciplines in dentistry.
Course Outline	:	1. Nomenclature and fundamental concepts of operative procedures 2. Instrumentation and general instrumentation for cavity preparation 3. Intermediary bases 4. Cavity preparation- Class I, II, III, IV, V and its modifications 5. Different kinds of filling materials/restorations 6. Amalgam restorations 7. [illegible]nposite resins 8. Light cured composite resins 9. Glass ionomer cements
Equipment and Materials	:	Simulators, mannequins, handpiece, amalgamator, light cure, typodonts, other hand instruments

Course Name	:	**PROSTHODONTICS I (FIXED PARTIAL DENTURE)**
Course Description	:	Study of fixed partial prosthesis considering the biological requirements for restoring the normal oral functions and aesthetics.
Course Credit	:	4 units – 2 units lecture, 2 units laboratory
Contact Hours	:	2 hours lecture/6 hours laboratory per week
Pre-requisite	:	Dental Materials
Placement	:	2nd year, 1st semester
Course Objectives	:	1. To develop the skills in making accurate diagnosis for jacket crowns and fixed partial prosthesis and to formulate a concise treatment plan; 2. To describe the different principles of tooth preparation and the indications and contraindications of the different types of artificial crowns and fixed partial restorations.
Course Outline	:	1. Overview of fixed partial prosthesis 2. Diagnosis and treatment planning 3. Principles of tooth preparation 4. Artificial crowns 5. Fixed partial prosthesis 6. Indication of Different Cements 7. Clinical aspects and troubleshooting
Equipment and Materials	:	Articulators, typodont, model casts, handpiece, cements, spatula, glass slab and hand instruments
Textbook and References	:	Johnston, Modern Practice in Crown and Bridge, 4th ed.

Course Name	:	**ORAL PHYSIOLOGY AND OCCLUSION**
Course Description	:	The physiology of the stomatognathic system and occlusion and its application to dental practice.
Course Credit	:	3 units -3 hours lecture
Contact Hours	:	3 lecture hours per week
Pre-requisite	:	General Physiology and Biochemistry
Placement	:	2nd year, 1st semester
Course Objectives	:	To describe the different structures and functions of the oral cavity and the importance of physiologic processes in the oral cavity.
Course Outline	:	1. Anatomy of oral cavity 2. Stomatognathic system and its primary functions 3. Physiology of teeth and its supporting tissues – normal and pathologic 4. Secretions of the oral cavity 5. Mechanism of tooth eruption 6. Occlusion 7. Temporomandibular articulation 8. Wound healing
Equipment and Materials	:	Skull model, articulator
Textbook and References	:	Jenkins, G. The Physiology and Biochemistry of the Mouth, 4th Ed. Lavelle, Applied Oral Physiology

Course Name	:	**PHARMACOLOGY**
Course Description	:	Pharmacology deals with mechanism of drug action on living tissue that is used in prevention and treatment of diseases.
Course Credit	:	3 units – 2 units lecture, 1 units laboratory
Contact Hours	:	2 hours lecture/3 hours laboratory per week
Pre-requisite	:	General Physiology with Family Planning and Biochemistry
Placement	:	2nd year, 2nd semester
Course Objectives	:	1. To learn the indications and contraindications of drugs. 2. To know the different action of drugs used in Dentistry. 3. To learn how to write prescription of drugs.
Course Outline	:	1. Introduction 2. Characterization of drug actions 3. Routes of administration 4. Pharmacokinetics 4.1 drug absorption 4.2 drug distribution 4.3 mechanism of action 4.4 drug termination 5. Classification of Drugs used in Dentistry 6. Pharmacodynamics
Equipment and Materials	:	Audio-Visual Facilities, Experimental animals, weighing scales, calculators, laboratory reagent, syringes, stop watch, individual observation cages, gloves and indicated drugs.
Textbook and References	:	Textbooks: Holroyd, Wynn, Requa-Clark Pharmacology in Dental Practice, 4th edition, C.V. Mosby Company, 1988 Suggested Reference: 1. Cawson, R.A. Spector, Ray and Shelly Anna Basic Pharmacology and Clinical Drug Use in Dentistry, 8th edition (London: Churchill 2000) 2. Mcromack, James, et. al, Drug Therapy and Decision Making (Philadelphia; WB Sauders, 1996) 3. Gage, Tommy and Pickett, Frida Dental Drug Response (St. Louis: Mosby, 1994) 4. Gilmans, Alfred et. Al, Goodmans and Gilman Pharmacological Basic of Therapeutics, 8th edition (New York: McGrow Hill, Vol. 1 and 11) 5. Cowan, Fred Dental Pharmacology, 2nd edition (Philadelphia: Lee & Febiger, 1999)

Course Name	:	**ORAL PATHOLOGY I**
Course Description	:	The study that deals with the gross and microscopic abnormalities, as well as the clinical manifestations of oral diseases.

Course Credit	:	4 units – 2 units lecture, 2 units laboratory
Contact Hours	:	2 hours lecture/6 hours laboratory per week
Pre-requisite	:	General Pathology; Oral Microscopic Anatomy and Embryology
Placement	:	2nd year, 2nd semester
Course Objectives	:	To identify and classify different diseases of the oral cavity based on their clinical signs and symptoms with emphasis on their histopathologic features as differentiated from normal structures.
Course Outline	:	1. Development disturbances of the teeth 2. Hard tooth tissue reduction 3. Traumatic injuries of the teeth 4. Dental caries 5. Diseases of the pulp 6. Odontogenic infections 7. Cysts of the oral region 8. White lesions 9. Metabolic disturbances 10. Viral diseases 11. Bacterial diseases 12. HIV infection
Equipment and Materials	:	Slides, microscopes, graphing paper, pencil, clinical slides, radiographs,
Textbook and References	:	A Textbook of Oral Pathology By Shafer, William et.al 5th edition Oral Pathology by Regezi and Sciuba 3rd edition

Course Name	:	**RESTORATIVE DENTISTRY II**
Course Description	:	Technical procedures in restoring lost tooth structure to their proper form, function and aesthetics using live patient and typodont.
Course Credit	:	3 units – 2 units lecture, 1 unit laboratory
Contact Hours	:	2 hours lecture/3 hours laboratory per week
Pre-requisite	:	Restorative Dentistry I
Placement	:	2nd year, 2nd semester
Course Objectives	:	1. To know the importance of oral prophylaxis as an integral component of good operative dentistry program; 2. To describe and compare the different treatment options that may be considered in restorative dental care and the choice and manipulation of restorative materials.
Course Outline	:	1. Oral prophylaxis 2. Amalgam restoration: A Review 3. Inlay preparations and restorations 4. Onlay restorations 5. Seven-eight crown preparation 6. Class IV light cured resin restoration 7. Other conservative aesthetic treatment options 8. Pin-retained restorations
Equipment and Materials	:	Typodont, hand instruments, handpiece, burs, and restorative materials

Textbook and References	:	Sturdevant's Art and Science of Operative Dentistry By Theodore M. Roberson, 4th edition, 2002

Course Name	:	**PROSTHODONTICS II (REMOVABLE PARTIAL PROSTHODONTICS)**
Course Description	:	The basic principles of restoring missing teeth and associated structures of partially edentulous dental arches with removable prosthesis. This course also includes designing, prescription writing and the selection of the appropriate biocompatible materials
Course Credit	:	4 units – 2 units lecture, 2 units laboratory
Contact Hours	:	2 hours lecture/6 hours laboratory per week
Pre-requisite	:	Prosthodontics I
Placement	:	2nd year, 2nd semester
Course Objectives	:	To have a clear understanding of the basic concepts and principles and their applications of the removable partial denture prosthodontics;
Course Outline	:	1. Introduction – definition of terms, objectives, indications and contraindications, sequelae 2. Classification of partially edentulous arches 3. Classification and types, components, pontics, bases, metal framework 4. Surveying 5. Direct retainers 6. Major and minor connectors 7. Indirect retainers 8. Rest and rest seats and proximal plates 9. Principles of partial denture designing 10. Examination, diagnosis and treatment planning 11. Mouth preparations 12. Maxillomandibular relations 13. Insertion, and adjustment procedures and patient education
Equipment and Materials	:	Dental surveyor, model casts, waxes, hand instruments, alcohol lamp, wax carver and etc.
Textbook and References	:	Mc Craken, latest edition

Course Name	:	**PROSTHODONTICS III (COMPLETE PROSTHODONTICS)**
Course Description	:	A study of rehabilitation of completely edentulous patient based on the principle of biomechanics and aesthetics using appropriate biocompatible materials.
Course Credit	:	4 units – 2 units lecture, 2 units lab
Contact Hours	:	2 hours lecture/6 hours laboratory per week
Pre-requisite	:	Prosthodontics I and II
Placement	:	2nd year, 2nd semester
Course Objectives	:	1. To describe the actual procedures in the construction of complete denture; 2. To identify the various dental materials needed for complete denture construction; 3. To acquire necessary background to make appropriate judgments for comprehensive patient management of completely edentulous patients.
Course Outline	:	

		1. Introduction – definition of terms, indications and contraindications for complete denture 2. Review of the anatomy and physiology of the stomatognathic system 3. Tissue response to complete dentures and sequelae 4. Preparation of patient 5. Clinical and laboratory procedures in complete denture construction 6. Supplemental prosthodontic procedures for edentulous patient 7. Rehabilitation of edentulous patients with special dentures alternative treatment, modalities and latest trends.
Equipment and Materials	:	Dental surveyor, model casts, waxes, hand instruments, alcohol lamp, wax carver and etc.
Textbook and References	:	Boucher's Prosthodontic Treatment for Edentulous Patients By Hickey, Zarb and Bolender, 11th edition, 2001

Course Name	:	**ANESTHESIOLOGY**
Course Description	:	The principles and techniques of regional anesthesia in dental practice and the study of the pharmacology of different local anesthetics used in dentistry. It also includes topics regarding general anesthesia and conscious sedation.
Course Credit	:	3 units – 2 units lecture; 1 unit lab.
Contact Hours	:	2 lecture hours, 3 hours laboratory per week
Pre-requisite	:	Pharmacology
Placement	:	2nd year, 2nd semester
Course Objectives	:	1. To understand pain and its implications in the effectiveness of local anesthesia; 2. To enable students to learn the proper skill in injection techniques and manage specific complications that may arise.
Course Outline	:	1. Pain 2. Trigeminal nerve and other related nerve structures 3. Pre-anesthetic evaluation 4. Local anesthesia 5. Local anesthetic solutions 6. Local anesthetics techniques 7. Nerve block 8. Complications 9. Emergencies 10. Conscious Sedation
Equipment and Materials	:	Syringes, needle, anesthetic solution, anatomical model, chart of the trigeminal nerve
Textbook and References	:	Monheim's Local Anesthesia and Pain Control in Dental Practice By Richard Bennet, 7th edition

Course Name	:	**ORTHODONTICS 1 (GROWTH AND DEVELOPMENT)**
Course Description	:	Fundamentals of growth and development of both normal and abnormal craniofacial structures and their relation to the stomatognathic system
Course Credit	:	3 units – 2 unit lecture, 1 unit laboratory
Contact Hours	:	2 hour lecture/3 hours laboratory per week
Pre-requisite	:	Oral Anatomy, Oral Histology and Oral Physiology
Placement	:	2nd year, 2nd semester
Course Objectives	:	1. To identify the features of a normal occlusion 2. The apply the knowledge of growth and development in relation to orthodontic diagnosis and treatment.
Course Outline	:	1. Introduction 2. Definition of terms 3. Stomatognathic system 4. Growth and development of the head and face 5. Growth and development of dentition and occlusion 6. Neuromuscular maturation 7. Current trends in Orthodontics
Equipment and Materials	:	Cephalometric and orthopantomogram x-ray, articulator, orthodontic casts/models, orthodontic pliers, orthodontic wires, soldering machine, impression materials
Textbook and References	:	Graver, T.M. Orthodontic Principles and Practice Moyers, R.E. Handbook of Orthodontics

Course Name	:	**ROENTGENOLOGY**
Course Description	:	The study of the different types of radiographic apparatus, their operations, application and maintenance. It also includes the processing, mounting, reading and interpretation of the radiographs
Course Credit	:	3 units – 2 units lecture, 1 unit laboratory
Contact Hours	:	2 hours lecture/3 hours laboratory per week
Pre-requisite	:	General and Oral Anatomy
Placement	:	2nd year, 2nd semester
Course Objectives	:	1. To train clinicians to take, read and interpret radiographs; 2. To recognize the importance of radiographs as primary diagnostic tool. 3. To know the hazards in the use of radiographic machines.
Course Outline	:	1. Introduction – definition of terms, scope of Oral Radiology 2. The concepts of ionizing radiation 3. Biological effects of irradiation 4. Radiation safety and protection 5. Imaging principle 6. Infection control 7. Radiographic techniques and principles 8. Recognition of normal anatomy 9. Radiographic interpretation of pathosis
Equipment and Materials	:	X-ray machine, films, developing and fixing solution, dark room, megathoscope, film holder, safety light, film badge, lead apron, automatic processor

Textbook and References	:	Oral Radiology Principles and Interpretation By P. Goaz and S.C. White, 3rd edition, 1993 Oral Radiology by Mc Call All other textbooks and journals related to Dental Radiology

Course Name	:	**ORAL SURGERY I**
Course Description	:	The general principles of surgery and its application in dentistry.
Course Credit	:	2 units – 2 hours lecture
Contact Hours	:	2 hours lecture per week
Pre-requisite	:	Anesthesiology, General and Oral Anatomy, Roentgenology, General and Oral Pathology I
Placement	:	3rd year, 1st semester
Course Objectives	:	1. To teach students on the fundamental principles of surgery 2. To know the principles and techniques in Oral Surgery particularly those pertaining to surgical removal of teeth (exodontia).
Course Outline	:	1. Principles of Surgery 2. Armamentarium for surgical procedures 3. Exodontia (Use of forceps and elevators) 4. Incision and drainage 5. Basic emergency procedures 6. Management of Infection 7. Traumatic injuries of teeth and alveolar process
Equipment and Materials	:	Surgical instruments for exodontia, gloves, mask, sterile gauze, suturing materials, suturing needle, scalpel, surgical scissors, radiographs
Textbook and References	:	Peterson, Oral and Maxillofacial Surgery Kruger, Gustav. Oral and Maxillofacial Surgery Archer, Oral and Maxillofacial Surgery Scully, Oral and Maxillofacial Surgery

Course Name	:	**ORAL DIAGNOSIS AND TREATMENT PLANNING**
Course Description	:	Principles and procedures in making a diagnosis and treatment planning.
Course Credit	:	2 units – 2 hours lecture
Contact Hours	:	2 hours lecture per week
Pre-requisite	:	General and Oral Anatomy, General and Oral Pathology, Roentgenology,
Placement	:	3rd year, 1st semester
Course Objectives	:	1. To learn the mechanics on the formulation of diagnosis 2. To be able to gather systematically pertinent data relative to the clinical manifestation of disease. 3. To examine and evaluate the collected data to formulate an accurate diagnosis. 4. To utilize and correlate the different diagnostic tools to arrive at a correct diagnosis.
Course Outline	:	1. Introduction – Scope and definition, case history, clinical examination, clinical signs and symptoms

		2. Diagnostic tools 3. Oral examination
Equipment and Materials	:	Radiographs, laboratory test equipment such as syringe, needle, microscope, slides,
Textbook and References	:	Ash and Millard. Oral Diagnosis and Treatment Planning Oral Diagnosis by Cox

Course Name	:	**CLINICAL DENTISTRY 1**
Course Description	:	Clinical application of the basic competencies acquired in Restorative Dentistry, Prosthodontics and Roentgenology. Clinicians will work on actual patients and on typodonts under the close supervision of the clinical supervisor.
Course Credit	:	6 units
Contact Hours	:	18 hours clinical practice
Pre-requisite	:	Restorative Dentistry I and II, Prosthodontics I, II & III, Roentgenology
Placement	:	3rd year, 1st semester
Course Objectives	:	1. To perform satisfactorily cavity preparation and condensation using different filling materials on both patients and typodonts. 2. To perform within the minimum standards, all the basic clinical procedures in Prosthodontics. 3. To take periapical radiograph correctly. 4. To read and interpret the result of the periapical radiograph done 5. To manage properly patients needing conservative and prosthodontic treatment.

Clinical Requirements: Prior to the performance of the clinical requirements below, a periapical radiograph is a MUST:

Types of Restorations	Clinical Requirements	No. of Cases
Class I Am	Live patients	2
Class II Am	Typodont (Cavity Preparation and Condensation) Live patient	1 1
Class III GIC/Co	Typodont Live patient	1 1
Class IV GIC/Co	Typodont Live patient	1 1
Class V GIC/Co	Typodont Live patient	1 1
Class V Am	Live patient	1
Oral Prophylaxis	Live patient	10
FPD	Typodont Ant. (preparation of 2 abutments)	1
RPD U/L (Designing Only)	Upper	1
	Lower	1
Porcelain Jacket Crown (Ant.)	Live patient	1
Acrylic Jacket Crown (Ant)	Live patient	1
Written Comprehensive Examination*		

*A written Comprehensive Examination must be passed prior to taking up Clinical Dentistry II.

Course Name	:	**ORAL SURGERY II**
Course Description	:	Study of surgical management of complicated extractions, reduction and fixation of traumatic injuries of the face and jaws and surrounding structures, and other conditions related to orthognathic surgery and other pathological lesions of the oral cavity.
Course Credit	:	2 units lecture
Contact Hours	:	2 hours lecture per week
Pre-requisite	:	General and Oral Pathology, General and Oral Anatomy, Anesthesiology, Roentgenology, Oral Surgery I
Placement	:	3rd year, 2nd semester
Course Objectives	:	1. To learn the different surgical procedures performed in oral cavity. To adapt appropriate surgical treatment plan.
Course Outline	:	1. Different anesthetic technique used for oral surgical procedures 2. Management of wounds 3. Principles of complicated extraction 4. Odontectomy 5. Orthodontic surgery

		6. Endodontic surgery 7. Pre-prosthetic surgery 8. Surgical management of cystic lesions 9. Diseases of salivary glands 10. Diseases of maxillary sinus and its dental implications 11. Management of fractures of maxilla and mandible 12. Cardio-pulmonary resuscitation 13. Principles of implantology 14. Management of neuralgia
Equipment and Materials	:	Surgical instruments for exodontia, radiographs, gloves, mask, sterile gauze, suturing materials, suturing needle, scalpel, surgical scissors, biomaterials, arch bars and wires, wire cutters, oxygen, mosquito forceps, needle holders, hemostatic forceps, hemostatic materials, electocautery machine, tongue depressors, suction apparatus, sphygmomanometer, stethoscope
Textbook and References	:	Petterson – Oral and Maxillofacial Surgery Archer – Oral and Maxillofacial Surgery Kruger – Oral and Maxillofacial Surgery Daniel Laskin - Oral Surgery

Course Name	:	**RESEARCH I**
Course Description	:	Principles and methods in research and its application to dentistry focused on developing a research protocol.
Course Credit	:	2 units lecture
Contact Hours	:	2 lecture hours per week
Pre-requisite	:	Biostatistics
Placement	:	3rd year, 1st semester
Course Objectives	:	1. To develop the interest and ability to conduct research work 2. To inculcate the ability in data gathering scientifically
Course Outline	:	1. Identification of the problem 2. Significance of the study 3. Scope, limitation and delimitation 4. Review of Related Literature 5. Methodology 6. Data Gathering 7. Interpretation of Result/Analysis 8. Conclusion and Recommendation
Equipment and Materials	:	Journals and related references
Textbook and References	:	Guides/Principles in Making a Research

Course Name	:	**ORAL PATHOLOGY II (ONCOLOGY)**
Course Description	:	The pathology of neoplasm and other diseases of the oral cavity and adjacent structures with emphasis on diagnostic and laboratory procedures.

Course Credit	:	3 units lecture
Contact Hours	:	3 lecture hours per week
Pre-requisite	:	Oral Pathology I, Oral Diagnosis and Treatment Planning, Roentgenology
Placement	:	3rd year, 2nd semester
Course Objectives	:	1. To develop a comprehensive and thorough understanding of the various types of oral neoplasms; 2. To identify oral neoplasm in relation to the total health of the patient. 3. To develop the skill to recognize the early clinical signs and symptoms of a disease. 4. To identify the different types of tumors in the oral cavity.
Course Outline	:	1. Introduction 2. Tumors of odontogenic and non-odontogenic origin 3. Salivary gland diseases 4. Diseases of unknown etiological factors 5. Hereditary diseases 6. Sexually Transmitted Diseases (STDs) 7. Acquired Immune Deficiency Syndrome (AIDS) 8. Infectious diseases 9. Cystic lesions 10. Congenital and deformity diseases 11. Bone diseases affecting the jaw 12. Vascular and Lymphatic Diseases
Equipment and Materials	:	LCD, Audio Visual Aids, slides, projectors (Slides, OHP), transparencies
Textbook and References	:	Oral Pathology: Clinical Pathologic Correlation By S. Regezzi and Sciubba 3rd edition, 1995(for verification) Suggested References: Oral Pathology by Shaffer Oral Pathology by Gilman and Goodman Oral Pathology by Kurt Thomas Oral Medicine by Burkett Oral Pathology by Lucas Atlas of Diseases of Oral Mucosae by Pindborg, Jan

Course Name	:	**Forensic Dentistry**
Course Description	:	Deals with the study of dental/oral parts of the body in the confirmation of identity of the victims
Course Credit		I unit
Contact Hours		1 hour per week
Pre-requisite		General Pathology, Oral Pathology, Oral Diagnosis, General Anatomy, Oral Anatomy, Radiology, Restorative Dentistry, Prosthodontics & Histology
Placement		3rd Year, 1st Semester
Course Objectives		1. To be able to know forensic sciences particularly forensic dentistry/odontology 2. To be able to know the different methods used in forensic science/ forensic odontology

		3. To be able to know the various scientific & ethical principles pertinent to forensic odontology
Course Outline		1. Definition & Scope of forensic science 2. The realm of forensic science systematic & ethical principles of the science 3. Non-dental techniques & methods 4. Definition of forensic odontology 5. The techniques in forensic dentistry in various activities and identification through: 5.1 Age estimation 5.2 Gender determination 5.3 Examination of soft tissues, hard tissues of the mouth & associated structures 5.4 Examination of prosthetics & other inserts related to the oral cavity 5.5 The scientific & ethical principles involved in forensic activities
Equipment & Materials		AV Equipment, models, casts, slides, x-ray films, pictures and charts
Textbooks & References		Manual of Forensic Dentistry by C. Michael Bowers and Gary L. Bell - 1995 Forensic Dentistry by Paul G. Stinison & Curtis A. Mertz - 1997 Practical Forensic Odontology by Derek H. Clark & Prof Perti Sainiv

Course Name	:	**DENTAL JURISPRUDENCE AND ETHICS**
Course Description	:	The relation of law and ethics to dental practice.
Course Credit	:	2 units lecture
Contact Hours	:	2 lecture per week
Pre-requisite	:	None
Placement	:	3rd year, 2nd semester
Course Objectives	:	1. To acquaint students with existing laws and ethics regulating the practice of dentistry. 2. To provide information to dental students on their rights and privileges as well as the rights of the patients.
Course Outline	:	1. Definition of terms 2. Bases of state regulation 3. Dental Law 4. The Professional Regulation Commission 5. Knowledge of the Different laws relative to the practice of dentistry 6. The Regulatory Code of Dental Practice 7. Obligations and Contracts 8. Criminal and Civil liabilities of a dentist 9. Dental Fees and Compensation 10. Protection of dentists from risk in practice
Equipment and Materials	:	Audio-visual facilities
Textbook and References	:	Dental Jurisprudence and the Regulatory Code of Dental Practice by Gundena, Asprer, DMD, LlB. Dental Jurisprudence by Joven Dental Jurisprudence by Robles Dental Team Management by Ellen Dietz

Course Name	:	**ENDODONTICS**
Course Description	:	The study of prevention, diagnosis and treatment of diseases of the dental pulp and periradicular tissues.
Course Credit	:	3 units – 2 units lecture, 1 units laboratory
Contact Hours	:	2 lecture hours, 3 laboratory hours per week
Pre-requisite	:	Oral Anatomy, Microscopic Anatomy and Embryology, Anesthesiology, Oral Pathology I and Roentgenology
Placement	:	3rd year, 1st semester
Course Objectives	:	1. To arrive at an accurate diagnosis and correct treatment plan; 2. To identify and specify the use of instruments and materials in endodontic therapy 3. To identify the indications and contraindications to endodontic treatment
Course Outline	:	1. Anatomy of the pulp 2. Diseases of the pulp and periradicular tissues 3. Diagnosis 4. Armamentaria 5. Tooth Isolation 6. Access preparation 7. Determination of working length 8. Removal of the pulp 9. Root canal cleaning and shaping 10. Bacteriologic examination 11. Root canal obturation 12. Restoration of an endodontically-treated tooth 13. Failures in endodontic treatment 14. Bleaching 15. Other endodontic procedures (using endodontic microscope)
Equipment and Materials	:	Radiograph machine, films, basic hand instruments, electric pulp tester, carpule syringe, local anesthesia, nerve broaches, files, rotary instruments, burs, rubber dam, rubber dam clamp, rubber dam frame, clamp holder, saliva ejector, irrigating solution, dampen dishes, hypodermic syringe, cotton points, cotton balls, sterile gauze, disinfecting solution, gutta percha points, endodontic cements, EDTA, obturating materials, cement spatula, glass slab, alcohol lamp, apex locator, glass beads, culture media, incubator
Textbook and References	:	Textbooks: Pathways of the Pulp by Cohen-9th edition Suggested references: Endodontic Practice by Grossman, Louie- 11th edition Endodontics by Ingel Endodontic Therapy by Weine Handbook of Clinical Endodontics by Bence Endodontics by Torabinajad

Course Name	:	**ORTHODONTICS II**
Course Description	:	The study of prevention, interception and treatment of malocclusion.
Course Credit	:	3 units – 2 units lecture, 1 unit laboratory
Contact Hours	:	2 lecture hours; 3 laboratory hours per week
Pre-requisite	:	Orthodontics I
Placement	:	3rd year, 1st semester
Course Objectives	:	1. To distinguish preventive from interceptive orthodontics through the different essential and supplemental diagnostic tools; 2. To understand the different techniques in the management of orthodontic cases 3. To apply preventive and interceptive measures on the models in the laboratory 4. To appreciate orthodontic treatment as an adjunct to the procedures in other dental disciplines.
Course Outline	:	1. Normal occlusion vs. malocclusion 2. Incidence and recognition of malocclusion 3. Etiology and effects of malocclusion 4. Classification of malocclusion 5. Diagnostic aids and their interpretation 6. Anchorage 7. Biomechanical principles of orthodontic tooth movements 8. Preventive and interceptive orthodontics in patient aged 8-14 years 9. Current trends in orthodontics
Equipment and Materials	:	Radiographic machine, panoramic radiograph, cephalometric radiograph, cast models, diagnostic pictures, acrylic inclined plane, Hawley's plate, brackets, orthodontic wires, orthodontic pliers, soldering machine, orthodontic cement, pre-fabricated molar bands, buccal tube, elastics
Textbook and References	:	Textbooks: Graber, T.M. Orthodontic Principles and Practice References: Moyers, R.E. Handbook of Orthodontics Rickets Orthodontics

Course Name	:	**RESEARCH II**
Course Description	:	The basic principles in preparing a technical paper and theses for presentation and discussion in scientific forum and/or for publication
Course Credit	:	2 units lecture
Contact Hours	:	2 lecture hours per week
Pre-requisite	:	Biostatistics, Research I
Placement	:	3rd year, 2nd semester
Course Objectives	:	1. To develop the interest and ability to write research paper 2. To learn the ethical standards in conducting research 3. To be able to formulate graphs, tables and charts 4. To be able to interpret data accurately 5. To be able to apply correct and precise bibliography 6. To be able to defend the research output before an oral defense panel

Course Outline	:	1. Interpretation of Result and Analysis 2. Conclusion and Recommendation 3. Acknowledgment 4. Bibliography 5. Oral presentation 6. Publication and Dissemination
Equipment and Materials	:	Journals and related references
Textbook and References	:	Guides/Principles in Making a Research Journals and pamphlets

Course Name	:	**PRINCIPLES OF MEDICINE**
Course Description	:	This course is designed to provide a logical framework for learning and working knowledge of internal medicine needed for diagnosis of dental patients with medical illnesses in relation to dentistry.
Course Credit	:	2 units lecture
Contact Hours	:	2 lecture hours per week
Pre-requisite	:	General Anatomy I and II, General Physiology and General Pathology, Biochemistry, Pharmacology, Microbiology
Placement	:	3rd year, 1st semester
Course Objectives	:	1. To have a thorough knowledge of the pathogenesis, etiology, diagnosis and management of the different systemic diseases. 2. To be able to identify oral manifestation of different systemic diseases. 3. To be able to relate the systemic condition with oral problems as the source of dysfunction
Course Outline	:	1. Cardiovascular diseases 2. Pulmonary diseases 3. Hematogenous diseases 4. Gastrointestinal diseases 5. Renal and urogenital diseases 6. Allergic and Immunologic diseases 7. Rheumatoid diseases 8. Fluid and electrolytes disorders 9. Infectious diseases 10. Vitamin and Mineral Deficiency diseases 11. Congenital diseases
Equipment and Materials	:	Audiovisual facilities
Textbook and References	:	Textbooks: Internal Medicine by Harrison References: Medicine by Myers All other related Medical books and journals

Course Name	:	**PERIODONTOLOGY**
Course Description	:	The study of normal and abnormal periodontium, together with the etiology, pathology and management of periodontal diseases.
Course Credit	:	2 units lecture
Contact Hours	:	2 lecture hours per week
Pre-requisite	:	Oral Microscopic Anatomy and Embryology, Oral Pathology I, Roentgenology, Oral Diagnosis
Placement	:	3rd year, 1st semester
Course Objectives	:	1. To understand the biology and pathology of the periodontium 2. To acquire clinical skills related to provision of periodontal treatment; 3. To correlate the clinical appearance of the periodontal tissues with the histologic and histopathological changes through radiograph. 4. To be able to relate the importance of periodontium in other fields 5. To understand the implication of chronic systemic diseases in relation to periodontal diseases
Course Outline	:	1. Biology of the healthy periodontium 2. Etiology of the diseases of the periodontium 3. Diagnostic tools for gingival and periodontal diseases 4. Diseases of the periodontium 5. Classification of gingival diseases 6. Classification of periodontal diseases 7. Differentiation between healthy gingiva and pathologic gingiva 8. Management of gingival and periodontal 9. Indications for non-surgical and surgical periodontal treatment
Equipment and Materials	:	Radiographic machine, films, basic hand instruments, periodontal probe, scalers, ultrasonic scalers, carpule syringe, anesthesia, hypodermic syringe, normal saline solution, periodontal curettes and knives, surgical pack, saliva ejector, suction, electrocautery machine
Textbook and References	:	Textbooks Periodontics by Carranza – 11th edition Suggested references Periodontics by Glickman Periodontics by Goldman Periodontology by Grant

Course Name	:	**PRACTICE MANAGEMENT AND ENTREPRENEURSHIP**
Course Description	:	The practice of dentistry in relation to the social, economic and cultural conditions of the community
Course Credit	:	2 units lecture
Contact Hours	:	2 lecture hours per week
Pre-requisite	:	None
Placement	:	3rd year, 2nd semester
Course Objectives	:	1. To acquire the necessary skills in managing a dental office.

		2. To be able to practice dentistry in a community with social and cultural responsibility. 3. To be able to identify business opportunities and sourcing of funds. 4. To be able to establish marketing strategies. 5. To be able to keep abreast with the current trends in dentistry by attending continuing professional education courses. 6. To be able to control hazards in the dental office. 7. To be able to control spread of infection in the dental office.
Course Outline	:	1. Definition of Terms 2. Dental Ergonomics 2.1. Location 2.2. Design 2.3. Facilities and Equipment 2.4. Type of Practice 2.5. Population 3. Clinic/Office Management 4. Healthcare Waste Disposal Systems 5. Hazard and Infection Control 6. Maintenance and Other Operating Expenses (MOOEs) 7. Professional Fees 8. Insurance, Licenses, Taxes and Permits 9. Professionalism 10. Entrepreneurship
Equipment and Materials	:	Audiovisual equipment, softwares, flip charts etc. Note: Output must include visitation/exposure to different dental clinics and dispensaries
Textbook and References	:	Practice Management by Robertson Practice Management by Kirk Patrick Practice Management by Swenson Dental Team Management by Ellen Dietz

Course Name	:	**PEDIATRIC DENTISTRY WITH CHILD PSYCHOLOGY**
Course Description	:	The study of principles and techniques in the management of the child with dental problems including treatment of injuries and interceptive orthodontics.
Course Credit	:	2 units lecture
Contact Hours	:	2 lecture hours per week
Pre-requisite	:	Oral Surgery I, Anesthesiology, Orthodontics I and II, Restorative I and II, Prosthodontics I
Placement	:	3rd year, 2nd semester
Course Objectives	:	1. To classify the types of pediatric patients; 2. To learn to diagnose the different childhood diseases 3. To perform the correct treatment for each type of pediatric patient; 4. To be able to recognize special cases that need referral to specialist
Course Outline	:	

		1. Introduction – definition of terms 2. Oral diagnosis 3. Psychological development of the child 4. Clinical techniques for child patients 5. Behavior management 6. Sequence of tooth eruption both primary and permanent 7. Preventive dentistry 8. Restorative dentistry 9. Pulp treatment 10. Traumatic injuries of anterior teeth 11. Local anesthesia 12. Dental extraction in pediatric patients 13. Current trends in pediatric dentistry
Equipment and Materials	:	Audiovisual equipment, basic hand instrument, pediatric dental forceps, restorative instruments and materials, topical fluoride solution, sealants, local anesthesia, syringe, carpule syringe, endodontic instruments and materials, steel crowns, wires, acrylic, pediatric trays, impression materials, cast stones, plaster of Paris
Textbook and References	:	Textbooks Dentistry for the Child and the Adolescent By Mc Donald and David Avery, 7th edition, 2000. Suggested References: Nelson's Textbook in Pediatric by Behrman, Richard Practical Pedodontics by Berk Child Management in Dentistry by Wright, Gerald Fundamentals of Pediatric Dentistry by Matthewson, Richard

Course Name	:	**CLINICAL DENTISTRY II**
Course Description	:	Clinical application of the basic competencies acquired in Oral Surgery, Endodontics, Oral Diagnosis and Pediatric Dentistry in addition to the prerequisite subjects in Clinical Dentistry I. Clinicians will work on actual patients and typodonts under the close supervision of a clinical supervisor. A validation examination based on the finished requirements will serve as a certification of completion of Clinical Dentistry II.
Course Credit	:	6 units
Contact Hours	:	18 hours clinical practice
Pre-requisite	:	Finished requirements in Clinical Dentistry I Passed validating examination in Clinical Dentistry I
Placement	:	3rd year, 2nd semester
Course Objectives	:	1. To perform competently and skillfully the basic clinical procedures in restorative dentistry for all types of patients. 2. To demonstrate properly the basic clinical procedures in prosthodontics using typodonts. 3. To exhibit competence in managing all types of patients needing restorative interventions in Prosthodontics, Endodontics and Oral Surgery

Clinical Requirements: Prior to the performance of the clinical requirements below, a periapical radiograph is a MUST:

Types of Restorations	Clinical Requirements	No. of Cases
Restorative		
Class I Am	Live patients	2
Class II Am	Typodont (Cavity Preparation and Condensation) Live patient	1 1
Class III GIC/Co	Typodont Live patient	2 2
Class IV Co	Live patients	2
Class V GIC/Co	Typodont Live patient	1 1
Oral Prophylaxis	Live patient	10
Surgery		
Adult Extraction	Monorooted Multirooted	6 (3 maxillary; 3 mandibular) 10 (5 maxillary; 5 mandibular)
Prosthodontics		
Ant. FPD	Typodont	1
Bilateral RPD	Maxillary (Live patient) Mandibular (Live patient)	1 1
Porcelain Jacket Crown	Anterior (Live patient)	1
CD w/ semi-adjustable articulator	Live patient	1
Endodontics		
Anterior RCT	Monorooted	1
Pediatric Dentistry		
Any Anterior restoration	Live patient	1
Any Posterior restoration	Live patient	1
Space maintainer	Live patient	1
Validation Examination on the finished requirements		Passed

Course Name	:	**HOSPITAL DENTISTRY I**
Course Description	:	Dental externship for senior students at a local or university training hospital or affiliated hospital designed to orient with hospital decorum, scope and overall functions of the different Departments and or Divisions.
Course Credit	:	3 units – 1 unit lecture, 2 units hospital duty
Contact Hours	:	1 lecture hour, 6 hours hospital duty
Pre-requisite	:	General and Oral Pathology, Microbiology, Pharmacology and Principles of Medicine
Placement	:	4th year, 1st semester
Course Objectives	:	1. To be acquainted with hospital decorum 2. To be familiar with the overall functions of the hospital
Course Outline	:	1. Introduction 2. Mission and Vision 3. Definition of Terms 4. Classification of Hospital 5. Organizational Structure of Hospital 6. Hospital Governance 7. Hospital Staff 8. Dental Department
Equipment and Materials	:	Accredited hospitals with complete facilities and equipment
Textbook and References	:	Hospital Dentistry Practice and Education by R.F. Zambito Introduction to Hospital Dentistry by Bruce Douglas All references in General and Oral Anatomy, General and Oral Pathology, General and Oral Microscopical Anatomy, Pharmacology and Microbiology, Anesthesiology, Oral Surgery, Principles of Medicine, Internal Medicine

Course Name	:	**COMMUNITY DENTISTRY II**
Course Description	:	The study of the concepts, principles and methods of community dentistry, health service administration, oral health education, preventive dentistry and primary health care.
Course Credit	:	3 units – 2 units lecture, 1 unit field work
Contact Hours	:	2 hours lecture;3 hours community services per week
Pre-requisite	:	Community Dentistry I
Placement	:	4th year, 1st semester
Course Objectives	:	1. To be able to acquire knowledge and skills in the administration of primary health care in the community. 2. To be able to acquire knowledge and skills in the art of preventive dentistry and primary health care.
Course Outline	:	1. Definition of Terms 2. Principles of Administration of Community Health Programs 3. Oral Health Planning 4. Health Care Systems

		5. Formulation of Program Plan 6. Introduction to ART Technique 7. Levels of Prevention of Dental Diseases 8. Primary Health Care 9. Oral Health Education program
Equipment and Materials	:	Dental Education Materials, leaflets, hand-outs on oral health care
Textbook and References	:	Principles of Dental Public Health by Dunning, James Public Health by Jong, Anthony

Course Name	:	**CLINICAL DENTISTRY III**
Course Description	:	Clinical application of the competencies acquired in all the clinical dental subjects. Clinicians will work on actual patients and typodonts under the close supervision of the clinical supervisor. A written validation examination based on the finished requirements will be taken by the student. A certification that a student has finished Clinical Dentistry II will be given after passing the examination.
Course Credit	:	10 units
Contact Hours	:	30 hours clinical practice
Pre-requisite	:	Finished requirements in Clinical Dentistry II Passed validation examination in Clinical Dentistry II
Placement	:	4^{th} year, 1^{st} semester
Course Objectives	:	1. To demonstrate consistent satisfactory performance of all procedures for all types of patients needing treatment in clinical dentistry. 2. To manage competently all types of patients needing clinical dentistry procedures. 3. To arrive at the accurate interpretation of radiograph. 4. To establish personal rapport with the patient during the actual interactions.

Course Objectives: Clinical Requirements: Prior to the performance of the clinical requirements below, a periapical radiograph is a MUST:

Types of Restorations	Clinical Requirements	No. of Cases
Restorative		
Class I Am	Live patients	4
Class II Am	Typodont (Cavity Preparation and Condensation) Live patient	2 1
Class III GIC/Co	Typodont Live patient	2 2
Class IV Co	Live patient	1
Class V GIC/Co	Typodont Live patient	1 1
Oral Prophylaxis	Live patient	10
Surgery		
Adult Extraction	Monorooted Multirooted	6 (3 maxillary; 3 mandibular) 10 (5 maxillary; 5 mandibular)
Pediatric Extraction		5
Prosthodontics		
Porcelain Fused to Metal Crown	Anterior	1
Porcelain Fused to Metal Jacket Crown	Posterior	1
Anterior Fixed Bridge	Typodont	1
Posterior Fixed Bridge	Live patient	1
Bilateral RPD	Live patient either maxillary or mandibular	1
Complete Denture	Live patient	1
Dowel (Casted or Ready-made)	Live patient either anterior or posterior	1
Endodontics		
Posterior RCT	Live patient- Posterior RCT (multi-rooted, either 2 or 3 canals)	1
Periodontics		
Perio. Routine	Finished case-Live patient	1
Perio. Surgical	Finished case – Live patient	1
Pediatric Dentistry		
Class I Am	Live patient	2
Class II Am	Live patient	2
Space Maintainer or Inclined Plane	 Live patient	1
Pulpotomy	Live patient	1
Stainless steel crown	Typodont Posterior-Live patient	1 1
Stripped-off crown	Anterior-Live patient	Optional for additional credit
Roentgenology		
Panoramic	Live patient	1
Validation exam		Passed

Course Name	:	**HOSPITAL DENTISTRY II**
Course Description	:	Internship for senior students in a local hospital with rotation to the different departments, and learn referral system and proper hospital decorum.
Course Credit	:	3 units – 1 unit lecture, 2 units hospital duty
Contact Hours	:	1 hours lecture/6 hours hospital duty per week
Pre-requisite	:	Hospital Dentistry I
Placement	:	4th year, 2nd semester
Course Objectives	:	1. To be able to learn the importance of laboratory test in relation to any medical and dental problems. 2. To be able to know how to give orders, admit and discharge patient and how to make consultations and referrals.
Course Outline	:	1. Medical Record 2. Dental Out-Patient Facilities 3. Admission and Discharge Procedures 4. Consultation 5. Referrals 6. Clinico-Pathological Conference (CPC) 7. Basic Life Support
Equipment and Materials	:	Accredited hospital with complete equipment and facilities
Textbook and References	:	Hospital Dentistry Practice and Education by R.F. Zambito Introduction to Hospital Dentistry by Bruce Douglas All references in General and Oral Anatomy, General and Oral Pathology, General and Oral Microscopical Anatomy, Pharmacology and Microbiology, Anesthesiology, Oral Surgery, Principles of Medicine, Internal Medicine

Course Name	:	**COMMUNITY DENTISTRY III**
Course Description	:	The principles and methods designed in the practice of community dentistry including field experience.
Course Credit	:	3 units – 1 unit lecture;2 units field work
Contact Hours	:	1 hour lecture;6 hours fieldwork per week
Pre-requisite	:	Community Dentistry I and II
Placement	:	4th year, 2nd semester
Course Objectives	:	1. To be able to acquire knowledge and skills in planning, implementing and evaluating community oral health survey. 2. To be able to establish social relationship with the community officials. 3. To apply the acquired knowledge, attitude and skills in the practice of dentistry in the community
Course Outline	:	1. Introduction 2. Review of Community Dentistry I and II 3. Community Organization 4. Community Survey 4.1 Demographic profile

		4.2 Oral health profile 4.3 Socio-economic condition 4.4 Treatment of minor dental problems 5. Output/Evaluation
Equipment and Materials	:	Flip charts, hand-outs for dental education, all instruments needed for dental survey
Textbook and References	:	Principles of Dental Public Health by Dunning, James Public Health by Jong, Anthony

Course Name	:	**CLINICAL DENTISTRY IV**
Course Description	:	Clinical application of the competencies acquired in Clinical Dentistry III. This is a continuation of the requirements in Clinical Dentistry III. A validation examination will be given in Restorative Dentistry, Prosthodontics and Roentgenology. This examination will be included as a part of the requirement in Clinical Dentistry IV and a pre-requisite for graduation.
Course Credit	:	10 units
Contact Hours	:	30 hours clinical practice
Pre-requisite	:	Clinical Dentistry III
Placement	:	4^{th} year, 2^{nd} semester
Course Objectives	:	To be able to demonstrate competency in managing all types of patients needing appropriate treatment in clinical dentistry.

Types of Restorations	Clinical Requirements	No. of Cases
Restorative		
Class I Am	Live patients	2
Class II Am	Live patients	2
Class III GIC/Co	Live patients	1 1
Class IV Co	Live patient	1
Class V GIC/Co	Live patient	1
Oral Prophylaxis	Live patient	10
Surgery		
Adult Extraction	Monorooted Multirooted	6 (3 maxillary; 3 mandibular) 10 (5 maxillary; 5 mandibular)
Odontectomy or any special surgical procedures	Live patient	1
Pediatric Extraction	Live patient	5
Prosthodontics		
Posterior porcelain jacket crown	Live patient	1
Complete denture	Live patient	1
Posterior FPD	Live patient	1
Endodontics		
RCT	Immediate either anterior or posterior	1
Apicoectomy	Live patient	1
Pediatric Dentistry		
Class I Am	Live patient	3
Class II Am	Live patient	3
Oral Rehab case with at least 2 quadrants for treatment but must do entire/all necessary treatment	Live patient	1
Roentgenology		
Cephalometric	Live patient	1

A clinical proficiency examination in Restorative Dentistry, Prosthodontics, Pediatric Dentistry and Roentgenology should be taken and passed and is included as a requirement for graduation.

SPECIAL STUDIES

Course Name	:	**RESTORATIVE DENTISTRY SEMINAR I**
Course Description	:	Clinical conferences on problems encountered in Restorative Dentistry clinic which is designed to develop critical thinking based on the principles and techniques learned from the basic knowledge in Restorative Dentistry.
Course Credit	:	1 unit lecture
Contact Hours	:	1 lecture hour per week
Pre-requisite	:	Restorative Dentistry I & II and all basic clinical courses
Placement	:	4th year, 1st semester
Course Objectives	:	1. To discuss the principles of cavity design with their corresponding filling materials; 2. To examine and evaluate the application of new concepts, improvements and correct techniques in the use of materials in restorative dentistry;
Course Outline	:	1. Orientation 2. Journal articles 3. Dental caries 4. Cavity design, intermediary bases, filling materials 5. Current and new concepts in restorative dentistry 6. Manipulations of dental materials 7. Toxicity of dental materials 8. Failures in restorative treatment
Equipment and Materials	:	Audiovisual facilities, flip charts, leaflets and hand-outs, software, CD Roms
Textbook and References	:	Local and foreign journals, on-line references

Course Name	:	**PROSTHODONTICS SEMINAR I**
Course Description	:	A special study concerned with problem-based learning consisting of case presentation by the students following the principles and concepts of fixed partial denture and removable partial denture prosthodontics.
Course Credit	:	1 unit lecture
Contact Hours	:	1 lecture hour per week
Pre-requisite	:	Prosthodontics I and II and all basic clinical courses
Placement	:	4th year, 1st semester
Course Objectives	:	1. To apply the basic principles and concepts in fixed and removable partial prosthodontics through problem-based learning. 2. To appreciate the course in relation to other disciplines in Dentistry as a whole.
Course Outline	:	1. Introduction 2. Case presentation 3. Causes of failure 4. Problem-solving
Equipment and Materials	:	Audiovisual facilities, flip charts, leaflets and hand-outs, software, CD Roms
Textbook and References	:	Local and foreign journals, on-line references

Course Name	:	**ENDODONTICS-PERIODONTICS SEMINAR**
Course Description	:	A special study concerned with problem-based learning consisting of case presentation by the students following the principles and concepts of Endodontics and Periodontics.
Course Credit	:	2 unit lecture
Contact Hours	:	2 lecture hours per week
Pre-requisite	:	Oral Pathology I, Endodontics, Periodontics
Placement	:	4th year, 2nd semester
Course Objectives	:	1. To introduce the students to a more specialized field in Endodontics and Periodontics. 2. To enable the students to appreciate the value of recognizing oral lesions and their treatment. 3. To identify the causes of failures in Endodontics and Periodontic treatment.
Course Outline	:	1. Introduction 2. Principles and concepts of differential diagnosis 3. Laboratory examinations 4. Principles and concepts of biopsy 5. Recognition of oral diseases 6. Causes of Failures in Endo-Perio treatment 7. Problem-solving
Equipment and Materials	:	Audiovisual facilities, flip charts, leaflets and hand-outs, software, CD Roms
Textbook and References	:	Local and foreign journals, on-line references

Course Name	:	**ORTHODONTICS-PEDIATRIC DENTISTRY SEMINAR I**
Course Description	:	This course is designed to implement the principles and techniques learned from the basic Orthodontics and Pediatric Dentistry courses.
Course Credit	:	1 unit lecture
Contact Hours	:	1 lecture hour per week
Pre-requisite	:	Orthodontics I &II and Pediatric Dentistry
Placement	:	4th year, 1st semester
Course Objectives	:	1. To categorize the different treatment modalities for the child patient 2. To apply the current trends in problems related to pediatric dentistry; 3. To appreciate the importance of oral health of the child patient 4. To recognize early problems in orthodontics. 5. To learn interceptive orthodontics.
Course Outline	:	1. Child management in the dental clinic 2. Infant oral health care 3. Pulp therapy in children

		4. Accidents and injuries to primary anterior teeth 5. Current trends in clinical pediatric dentistry 6. Interceptive Orthodontics
Equipment and Materials	:	Audiovisual facilities, flip charts, leaflets and hand-outs, software, CD Roms
Textbook and References	:	Local and foreign journals, on-line references

Course Name	:	**RESTORATIVE DENTISTRY SEMINAR II**
Course Description	:	A special study concerned with problem-based learning consisting of case presentation by the students following the principles and concepts of restorative dentistry. This will also include management of Geriatric patients.
Course Credit	:	1 unit lecture
Contact Hours	:	1 lecture hour per week
Pre-requisite	:	Restorative Dentistry I and II and all basic clinical courses
Placement	:	4^{th} year, 2^{nd} semester
Course Objectives	:	1. To apply the basic principles and concepts in restorative dentistry through problem-based learning. 2. To appreciate the course in relation to other disciplines in Dentistry as a whole. 3. To acquire the skills in solving problem commonly encountered in Restorative Dentistry and Geriatric patient. 4. To appreciate the importance of new trends in Restorative Dentistry
Course Outline	:	1. Introduction 2. Case presentation 3. Causes of failures in Restorative treatment 4. Problem-solving 5. Management of Geriatric patient
Equipment and Materials	:	Audiovisual facilities, flip charts, leaflets and hand-outs, software, CD Roms
Textbook and References	:	Local and foreign journals, on-line references

Course Name	:	**PROSTHODONTICS SEMINAR II**
Course Description	:	A special study concerned with problem-based learning consisting of case presentation by the students following the principles and concepts of complete denture Prosthodontics.
Course Credit	:	1 unit lecture
Contact Hours	:	1 lecture hour per week
Pre-requisite	:	Prosthodontics III and other basic clinical courses
Placement	:	4^{th} year, 2^{nd} semester
Course Objectives	:	1. To prepare the students in the recognition of abnormalities in edentulous patients.

		2. To develop the students the skills to perform procedures in the rehabilitation of special cases in complete denture fabrication. 3. To develop understanding on the methods of repairing ill-fitting complete dentures. 4. To develop the skills in the fabrication of prosthesis for implant purposes
Course Outline	:	1. Introduction 2. Case presentation 2.1 Rebase 2.2 Reline 2.3 Obturator 2.4 Implant fabrication 3. Causes of Failures in denture fabrication 4. Problem-solving
Equipment and Materials	:	Audiovisual facilities, flip charts, leaflets and hand-outs, software, CD Roms
Textbook and References	:	Local and foreign journals, on-line references

Course Name	:	**ORAL SURGERY SEMINAR**
Course Description	:	A special study concerned with problem-based learning consisting of case presentation by the students following the principles and concepts of Oral and Maxillofacial Surgery. This will also include different surgical procedures in the treatment of oral diseases and acquired defects of the jaws and its associated structures.
Course Credit	:	2 units lecture
Contact Hours	:	2 lecture hours per week
Pre-requisite	:	Oral Diagnosis, General and Oral Pathology, Principles of Medicine, Roentgenology, Anesthesiology, Pharmacology and Oral Surgery I & II
Placement	:	4^{th} year, 1^{st} semester
Course Objectives	:	1. To apply the basic principles learned in Oral Surgery. 2. To recognize abnormalities affecting the oral cavity and its associated structures. 3. To learn how to manage medically-compromised patients in Oral Surgery 4. To interpret laboratory findings and correlate with oral condition prior to any surgical intervention.
Course Outline	:	1. Introduction 2. Case presentation 3. Medically-compromised patients 4. Biopsy and Laboratory Findings 5. Cardio-Pulmonary Resuscitation 6. Management of Abnormalities and Other Lesions of the Jaw 7. Management of the Fractures of the Jaw 8. Implantology 9. Facial Neuropathy

		10. Temporo-Mandibular Joint Disorder
Equipment and Materials	:	Audiovisual facilities, flip charts, leaflets and hand-outs, software, CD Roms
Textbook and References	:	Local and foreign journals, on-line references

Course Name	:	**ORTHODONTICS-PEDIATRIC DENTISTRY SEMINAR II**
Course Description	:	A special study concerned with problem-based learning consisting of case presentation by the students following the principles and concepts of Orthodontics and Pediatric Dentistry.
Course Credit	:	1 unit lecture
Contact Hours	:	1 lecture hour per week
Pre-requisite	:	Orthodontics I and II, Pediatric Dentistry
Placement	:	4th year, 2nd semester
Course Objectives	:	1. To identify Orthodontics and Pediatric Dentistry cases that can be treated by the clinician in the dental infirmary. 2. To recognize cases that are within the scope of Interceptive Orthodontics. 3. To emphasize the importance of proper analysis of orthodontic data as the basis of correct treatment. 4. To learn how to handle and manage pediatric patient including special cases. 5. To learn how to manage common injuries encountered by pediatric patients.
Course Outline	:	1. Introduction 2. Case Presentation 3. Interceptive Orthodontics 4. Management of Special Pediatric Patients 5. Limitations in the Treatment of Pediatric Patients 6. Consultation and Referrals to specialist
Equipment and Materials	:	Audiovisual facilities, flip charts, leaflets and hand-outs, software, CD Roms
Textbook and References	:	Local and foreign journals, on-line references

Course Name	:	**CURRENT TRENDS IN DENTISTRY**
Course Description	:	The study concerned with the latest developments in Dentistry like in Dental Materials, Dental Technology, new techniques and other areas related to Clinical Dentistry like infection control practices, genetics and medically compromised patients.
Course Credit	:	1 unit lecture
Contact Hours	:	1 lecture hour per week
Pre-requisite	:	none

Placement	:	4th year, 1st semester
Course Objectives	:	To be updated with the current developments in Dentistry
Course Outline	:	Current Developments in Dentistry
Equipment and Materials	:	Audiovisual facilities, flip charts, leaflets and hand-outs, software, CD Roms
Textbook and References	:	Local and foreign journals, on-line references

ARTICLE VII
GENERAL REQUIREMENTS

Section 9. Program Administration

a) Dean/Associate Dean

The school/college should be administered by a full-time dean or as needed, associate dean serving at least eight (8) hours a day with the following qualifications:

a. must be a Filipino citizen with good moral character;

b. must be currently a Registered Dentist and a holder of a Master's degree or its equivalent (any post graduate training/study of 2 years);

c. must have an academic rank of at least Associate Professor with tenure;

d. must have a minimum of ten (10) years of clinical practice;

e. must have a minimum of five (5) consecutive years of teaching experience within the last ten years;

f. must have a minimum of two (2) years appropriate administrative experience;

g. must be a member of good standing of the Philippine Dental Association, Inc.

Section 10**. Faculty**

A faculty of the Dentistry program must possess any of the following qualifications:

a. Filipino citizen and/or visiting professor invited for a particular period of time;

b. graduate of Dentistry and/or any related fields by recognized higher education institutions;

c. Registered/licensed dentist or any related field and must have at least a master's degree or its equivalent by two (2) years or more of postgraduate training in a recognized university or hospital)

d. must have an academic rank and tenure;

e. a practicing dentist or related field for at least three (3) years;

f. must be of good moral character.

g. must be a member of good standing of the Philippine Dental Association, Inc or related accredited professional organizations.

The faculty member must possess the academic degrees and preparation appropriate to their teaching assignments.

The following are the suggested guidelines for ranking purposes:

a. Assistant Professor – must possess DMD or related degrees and post-graduate training

b. Associate Professor - must possess DMD or related degrees with Master's degree or its equivalent (Fellowship in Specialty Field)

c. Professor – possess DMD or related degrees with PhD or its equivalent (Diplomate in Specialty Field)

*Special lecturer must possess appropriate degree on the subject he/she is teaching and will be ranked according to his/her credentials.

The following conditions of employment shall be observed:

a. A full-time faculty member is one who teaches in the dental school for a minimum of eighteen (18) hours per week.

A part-time faculty is one whose teaching time does not exceed twelve (12) hours per week.

At least sixty percent (60%) of the subjects shall be taught by full-time faculty members.

b. Salary rates of faculty members shall be commensurate with their ranks, academic preparation, teaching experiences and comparable with others who teach other academic subjects.

Faculty Development Program

For an effective operation of the school, institute, college or university offering Dentistry, there should be a faculty development program carried out through:

a. Scholarship grants to full-time faculty members;

b. Educational loans or tuition fee discounts to faculty members enrolled in the graduate school;

c. Subsidized attendance in Continuing Education Programs, conferences, professional and scientific meetings, etc.;

d. In-service or in-house training.

There should be a system to encourage faculty research, creative works and development of other teaching materials.

Each college/university shall have a faculty manual containing information and policies of all matters pertaining to the faculty.

Section 11. **Library**

1. The library must be managed by a full-time licensed librarian.

2. A well-equipped dental library, whether established separately or as a section in a general library should be clearly defined as a dental collection.

3. The library should be open at least eight (8) hours a day on school days without prejudice to increasing the number of hours upon the discretion of the institution.

4. The institution offering Dentistry program must assure the availability of at least five (5) titles each of current edition of Dental books, pamphlets, monographs, and serials specifically used as basic reference reading materials for the dental course/subjects.

5. To update the students and faculty staff in the latest developments in the field of Medicine and Dentistry, subscription to a minimum of ten (10) titles of international journals and Health Science periodicals must be maintained.

6. The institution offering Dentistry program must provide at least five (5) copies of each basic textbooks to be used by the students in all the subjects specified in the curriculum and minimum of three (3) references with four (4) copies each.

7. All income from the students' library fee should be spent strictly for the acquisition of books, journals, publications and other expenses towards the improvement of the library.

8. The Dental library should have the following state-of-the-art materials and equipment:

    a. audio-visual facilities.
    b. at least two (2) computer facilities for Medical and Dental Informatics for students' access;
    c. photocopier should be available for Dental students' use;
    d. at least one CD-ROM for each subject or its equivalent.

9. The dental library must be accessible or in close proximity to the dental college.

10. The Dental library should be a part of the institution's web site.

Section 12. **Facilities and Equipment**

1. Every school, institution, college or university offering Dentistry program must have adequate laboratory/clinic facilities to enable all students to acquire correct specific and clinical skills, knowledge and attitude.

2. The specific requirements of the Dentistry laboratory facilities are as follows:

2.1 One (1) cadaver should be provided for ten to fifteen (10-15) students at any given academic year. The use of plastic mannequins and models, multi-media devices, etc. may be allowed to supplement laboratory instruction.

2.2 One (1) set of apparatus should be assigned for every five (5) students in Physiology, Pharmacology and Biochemistry.

2.3 One (1) set of monocular microscope and apparatus and a set of slides should be assigned for every two (2) students in Biochemistry, Microbiology, Pathology, and Microscopic Anatomy and a minimum of five (5) binocular microscopes per class.

2.4 Adequate audio-visual materials should be available for instruction for faculty and students.

2.5 There shall be separate laboratories for Basic Medical, Basic Dental and pre-clinical subjects as:

2.5.1 Basic Medical subjects – Biochemistry, General Physiology and Pharmacology, Microscopic Anatomy, General Pathology and Microbiology;
2.5.2 Basic Dental subjects – Oral Anatomy, Oral Microscopic Anatomy, Oral Pathology and Oral Physiology and Dental Materials;
2.5.3 Pre-Clinical subjects – Restorative Dentistry, Endodontics, Prosthodontics, Orthodontics, and Pedodontics.

2.6 There should be an adequately equipped Pre-Clinical laboratory facilities whose features will have the following:

2.6.1 one (1) mannequin or phantom head per student;
2.6.2 at least ten (10) simulators per class to start with;
2.6.3 one (1) articulated metal or acrylic jaw per student;
2.6.4 two (2) sets adjustable anatomic articulator with accessories for demonstration purposes;
2.6.5 dental surveyor set: eight (8) pieces for a class of 40-50 students;
2.6.6 two (2) pieces of curing unit for every class;
2.6.7 cast trimmer, centrifugal casting machine, furnace, acethylene torch and tank, lathe machine, spot welder;

2.7 There should be an adequately equipped Clinical Facilities consisting of:

2.7.1 A ratio of one (1) dental chair and unit for every four (4) students.
2.7.2 An adequately equipped Radiology Laboratory consisting of:

a. x-ray machine - one (1) periapical x-ray machine for every 100 students and at least one panoramic/cephalometric x-ray machine with adequate dark room which is manned by a licensed/registered radiology technician;

b. lead-protected x-ray room and lead apron for patients;

The x-ray room must be located in close proximity to the clinic.

2.7.3 sterilizing equipment;

a. autoclave
b. glass beads

The sterilizing room must be manned by a personnel trained in infection control.

2.7.4 amalgamator, one (1) for every ten (10) students;
2.7.5 light cure machine, one (1) for every fifteen (15) students;
2.7.6 oxygen tank with regulator;
2.7.7 suction apparatus for every chair in oral surgery;
2.7.8 electrocautery unit;
2.7.9 cast trimmer, dental surveyor, waterbath and dental lathe machine.

Section 13. **Instructional Standards**

1. The institution must maintain a standard of instruction, utilize an updated syllabi and instructional methods to enhance quality dental education.

2. A system of evaluating quality of instruction should be instituted, implemented and monitored.

3. The institution shall provide for a systematic and continuing plan of evaluation of the students' progress through a grading system that is consistent with the standards set by the CHED.

4. No student shall be given credit for a course unless he/she fulfills all the requirements in each subject.

5. The institution must prescribe the basic and standard textbooks to be used. These must be of recent edition and must reflect the current trends in the Dental profession. The institution may change textbooks only once in five (5) years.

6. The institution must provide the necessary instructional materials like anatomy models, teaching slides, video tapes and CD ROMS , charts, etc. including audio-visual equipment for a more effective teaching-learning process.

7. The ratio of faculty to student in practicum or laboratory classes in dental subjects must not exceed 1:25, while the ratio in lecture classes must not exceed 1:50. The ratio of student to clinical supervisors must be 1:10.

The number of sections in every year level of the Dentistry course must be in proportion to the size of the faculty, classroom, Laboratory and clinical facilities with a faculty-student ratio as specified above.

Section 14. **Admission**

1. The institution shall establish its own set of admission and retention policies and standards consistent with the policies of the CHED.

2. A basic criteria for admission shall however include the following :

    a. The applicant must have completed a two-year pre-dental program or a degree related to health in order to meet the requirements for Certificate of Eligibility for Dentistry (CED) issued by CHED. Autonomous and deregulated dental colleges and universities can issue CED.

    b. The applicant must have been issued the Certificate of Eligibility for Dentistry.

    c. The applicant should never been convicted of any crime and is of good moral character.

3. The applicant must have passed a physical, psychological, aptitude and dexterity examination to determine his/her suitability to the profession.

4. Retention will depend upon the individual institutions and should be consistent with the policies of the CHED.

ARTICLE VIII
SANCTIONS

Failure to comply with the above minimum requirements shall be a ground for revocation of the authority to operate the program.

ARTICLE IX
REPEALING CLAUSE

This Order supersedes all previous issuances concerning dental education which may be inconsistent or contradictory with any of the provisions hereof.

ARTICLE X
EFFECTIVITY CLAUSE

This set of Policies, Standards and Guidelines for Dental Education shall take effect beginning school year 2007-2008.

CARLITO S. PUNO, DPA
Chairman

Pasig City, Philippines
July 11, 2006