

# Diploma in Dental Hygiene and Therapy

## Course Structure (Core Modules)

### YEAR 1 - SEMESTERS 1 & 2

HS1073 Dental Anatomy and Histology  
HS1077 Head and Neck Anatomy  
HS1096 Introduction to Psychology  
HS1097 Introduction to Sociology  
HS1120 Biological Science 1A  
HS1121 Biological Science 1B  
HS1122 General Chemistry  
HS1123 Biochemistry  
HS1124 Microbiology  
HS1125 Oral Pathology  
HS1126 Operative Technique 1A  
HS1127 Operative Technique 1B  
HS1130 Dental Radiography  
HS1128 Dental Hygiene Practice 1A  
HS1129 Dental Hygiene Practice 1B  
HS1131 Clinical Education 1A  
HS1132 Clinical Education 1B

### YEAR 2 - SEMESTERS 1 & 2

HS2134 Research Methods  
HS2135 Statistics  
HS2167 Developmental Psychology  
HS2168 Pharmacology and Pain Management  
HS2169 Oral Health Promotion  
HS2170 Preventive Dentistry  
HS2171 Community Dentistry  
HS2172 Operative Techniques 2A  
HS2173 Operative Techniques 2B  
HS2174 Dental Hygiene Practice 2A  
HS2175 Dental Hygiene Practice 2B  
HS2176 Clinical Education 2A  
HS2177 Clinical Education 2B  
HS9865 National Education

### YEAR 3 - SEMESTERS 1 & 2

HS3100 First Aid and BCLS  
HS3158 Communications and Health Psychology  
HS3159 Dental Project  
HS3160 Clinic Management  
HS3161 Issues of Professional Practice  
HS3162 Dental Care of Special Needs Patients  
HS3163 Clinical Education 3A  
HS3164 Clinical Education 3B

## Synopsis of Modules

### YEAR 1 SEMESTERS 1 & 2

#### Allied Health Modules

##### **HS 1120 Biological Science 1A 60 hours**

This module examines basic principles of human biology and studies the musculoskeletal, hematological, cardiovascular and respiratory systems.

##### **HS 1121 Biological Science 1B 60 hours**

This module examines the function and dysfunction of the nervous, gastrointestinal, endocrine, urinary and reproductive systems and the general effects of aging.

##### **HS1096 Introduction to Psychology 30 hours**

This module provides an overview of lifespan development. It aims to enhance students' occupational and functional functions. In general, upon completion, the students will be able to see the relevance of psychology to healthcare practice; discuss and understand basic concepts of human development and examine the impact of the individual on current social, developmental and moral issues.

##### **HS1097 Introduction to Sociology 30 hours**

This module provides an introduction to the sociological concepts and perspectives used to understand and analyze the broad sociocultural context of society.

##### **HS 1122 General Chemistry 45 hours**

This module will provide students with fundamental knowledge of topics in inorganic, physical and organic chemistry that are important for the understanding of Health Sciences and Medicine. These include concepts of bonding, structure, nomenclature and reaction mechanisms in Chemistry.

##### **HS 1123 Biochemistry 45 hours**

This module will provide students with basic knowledge about the chemistry of biological compounds. Students will be taught the importance of enzymes and metabolism. The processing of biological information will also be discussed.

#### Professional Dental Modules

##### **HS 1124 Microbiology 30 hours**

This module examines the basic principles of microbiology. It will also equip students with knowledge of the transmission of diseases and enable them to apply it in the practice of infection control.

##### **HS 1125 Oral Pathology 30 hours**

This module introduces students to the general principles of disease initiation, progression, transmission and body responses. It also examines diseases affecting the oral and dental tissues. Students will also learn the importance of recognizing the manifestations of diseases and conditions in the head and neck region.

##### **HS 1073 Dental Anatomy and Histology 75 hours**

This module examines the gross functional morphology and microscopic anatomy of dental tissues.

##### **HS 1126 Operative Techniques 1A 120 hours**

The module enables the students to develop fundamental operative skills necessary for dental therapy practice.

**HS 1127 Operative Techniques 1B 150 hours**

This module builds upon the foundation developed in Operative Techniques 1A. Emphasis will be placed on more complex cavity designs and the restoration of tooth forms. Students will also gain knowledge of the various types of restorative and impression materials available.

**HS 1077 Head and Neck Anatomy 45 hours**

This module examines the structures and functions of the orofacial region relevant to dental hygiene and therapy practice

**HS 1128 Dental Hygiene Practice 1A 45 hours**

The aim of this module is to teach the basic preclinical skills that would be utilized while providing dental hygiene care to the patient. The focus is on foundational skills and instrumentation principles.

**HS 1129 Dental Hygiene Practice 1B 45 hours**

The aim of this module is to teach the basic structure and function of the periodontium and the pathogenesis of periodontal disease. Predisposing and host factors that modify the disease process are highlighted to serve as foundation for the management of periodontal diseases.

**HS 1130 Dental Radiography 30 hours**

This module introduces the general principles and techniques of dental radiography. The handling, processing, interpretation, and safety aspects of intraoral and extraoral radiographs will be emphasized.

**Clinical Education****HS 1131 Clinical Education 1A 40 hours**

This module provides opportunities for the students to be orientated to the various Dental Health services and agencies available.

**HS 1132 Clinical Education 1B 40 hours**

This module provides opportunities for the students to further understand the various Dental Health services and agencies available.

**YEAR 2 SEMESTERS 1 & 2****Allied Health Modules****HS 2167 Developmental Psychology 30 hours**

This module aims to provide students with a comprehensive understanding of human psychological development throughout the lifespan with respect to sensory/perceptual, cognitive and affective aspects.

**HS 2134 Research Methods 30 hours**

This module introduces students to the basic concepts and principles of research methodology. It covers areas of research designing related to conceptualisation, operationalisation, validation, sampling, and examines various methodologies for data collection.

**HS 2135 Statistics 30 hours**

This module introduces students to the basic concepts and principles of statistical analysis. It covers various aspects of probability, descriptive and inferential data analysis.

## **Professional Dental Modules**

### **HS 2168 Pharmacology and Pain Management 30 hours**

This module introduces the student to the nature and significance of drug action and interaction and the general principles of pain management. It includes the administration of local anaesthesia and management of any complications arising from it. Students will also learn the importance of recognizing and managing pain and anxiety in dental patients, especially in patients with preexisting medical conditions or complications, using therapeutic and/or alternative methods.

### **HS 2169 Oral Health Promotion 30 hours**

The aim of this module is to introduce the student to the principles of oral health education and promotion. It is designed to enable the student to gain knowledge and develop skills for planning effective dental health education and health promotion programmes for individuals and groups of all ages.

### **HS 2170 Preventive Dentistry 30 hours**

This module examines the various facets of preventive dentistry in the individual. The focus is on prevention of oral diseases and conditions that impair health through the identification of risk factors of disease, and the agents that enhance the state of oral health.

### **HS 2171 Community Dentistry 30 hours**

This module examines the various facets of preventive dentistry in the community. The focus is on the efficient provision of preventive and curative dental services that would meet the dental needs of the community.

### **HS 2172 Operative Techniques 2A 120 hours**

This module builds on the foundation developed in Operative Techniques 1A and 1B. The focus will be on the use of air rotor for cavity preparations on natural teeth, introduction to adhesive/aesthetic restorations (mainly glass ionomer cements) and management of dental care in young children.

### **HS 2173 Operative Techniques 2B 105 hours**

This module builds further on the base of knowledge and skills acquired in Operative Techniques 1A, 1B and 2A. Students will acquire the ability to perform more complex operative skills on the natural dentition and learn to apply a holistic approach in the treatment and management of the patient.

### **HS 2174 Dental Hygiene Practice 2A 30 hours**

This module will build on the knowledge and skills acquired in Dental Hygiene Practice 1A and 1B. The aim of the module is to teach students to recognize the extent and severity of periodontal diseases. The focus will be on the implementation of nonsurgical periodontal therapy based on the varying factors affecting the disease in the individual patient.

### **HS 2175 Dental Hygiene Practice 2B 30 hours**

This module will build on the knowledge and skills acquired in Dental Hygiene Practice 1A, 1B and 2A. It is focused on the holistic management of the periodontal patient and will enable students to recognize the conditions that need referral and differences between periodontal conditions and other oral lesions during assessment.

## **Clinical Education**

### **HS 2176 Clinical Education 2A 160 hours**

This module provides opportunities for the students to integrate theory and practice in clinical practice settings within the community. Students are required to provide dental care to patients under supervision by professional staff.

**HS 2177 Clinical Education 2B 480 hours**

This module provides further opportunities for the students to integrate theory and practice in clinical settings, both in the school dental service and the dental clinical settings in hospitals.

**HS 9865 National Education 10 hours**

The aim of this module is to give the learners an understanding of Singapore's past, present and future. It focuses on how Singapore succeeded against the odds in the past; the challenges, constraints and vulnerabilities that Singapore faces.

**YEAR 3 SEMESTERS 1 & 2****Allied Health Modules****HS 3100 First Aid and BCLS 30 hours**

This module is designed to equip students with the knowledge and skills of rendering first aid and basic cardiac life support.

**HS 3158 Communication and Health Psychology 45 hours**

This module consists of two sections. The section on Communication provides students with applied knowledge and skills in communication and human interaction drawn from various theoretical perspectives and concepts of the behavioural sciences. The section on Health Psychology aims to provide students with an understanding of human behaviours such as pain, stress and disability that affect health, illness and recovery.

**Professional Dental Modules****HS 3159 Dental Project 75 hours**

This module provides students with the opportunity to systematically carry out a project on a specific/related issue of dental theory, practice or intervention that can have direct or indirect benefits towards quality patient care.

**HS 3160 Clinic Management 45 hours**

This module is designed to equip students with the knowledge and skills of dental clinic management through understanding of administrative and documentation procedures. It also provides students with an understanding of the fundamental principles of marketing in the management of dental services.

**HS 3161 Issues of Professional Practice 30 hours**

The module introduces students to the basic principles of law and ethics as applied to health care practice. Related professional issues in dental care and the delivery of dental therapy will be discussed.

**HS 3162 Dental Care of Special Needs Patients 30 hours**

The aim of this module is to develop the knowledge and skills of students in the recognition and management of patients with special needs.

**HS 3163 Clinical Education 3A 480 hours**

This module provides opportunities for students to consolidate and practise with increasing responsibility and autonomy under actual clinical practice settings. Students will be expected to demonstrate competent skills in assessment, planning, evaluation and implementation of treatment procedures.

**HS 3164 Clinical Education 3B 480 hours**

This module builds on the knowledge and skills acquired in HS 3163. This module provides opportunities for students to consolidate and practise with increasing responsibility and autonomy

under actual clinical practice settings. Students will be expected to demonstrate competent skills in assessment, planning, evaluation and implementation of treatment procedures.