



# DIPLOMA IN DENTAL THERAPY

**DEPARTMENT OF ORAL HEALTH  
UNIVERSITY OF OTAGO**

**TABLE OF CONTENTS**

**Page Three**..... General Information

**Page Four** .....DENT 101

**Page Five** ..... DENT 102

**Page Six** .....DENT 103

**Page Seven** .....DENT 201

**Page Eight** ..... DENT 202

**Page Nine** ..... DENT 203

## General Information

Founded in 1907, the Faculty of Dentistry is the only Faculty and School of Dentistry in New Zealand. It forms an integral part of the Division of Health Sciences within the University of Otago in Dunedin. It offers courses in Dentistry, Dental Therapy, Dental Hygiene, Clinical Dental Technology and Dental Technology.

The School offers excellent facilities. It serves as a teaching hospital for the people of Dunedin and surrounding community. It has an international reputation for excellence.

### **Diploma in Dental Therapy (DipDentTher)**

The School of Dentistry offers a two-year course of study leading to the Diploma in Dental Therapy. The goal of this program is to facilitate the development of graduates with contemporary knowledge and clinical skills to work as dental therapists in the School Dental Service and in Community Dental Practice settings.

### **Graduate Profile**

Graduates with the Diploma in Dental Therapy will be able to obtain and evaluate knowledge from a range of sources. The Faculty is committed to developing high standards and supporting students to develop intellectual independence. Graduates will have developed excellent communication skills and will be competent at working within the dental team. They will demonstrate a commitment to lifetime learning and professional development. The course will also develop an awareness of relevant cultural and ethical issues in providing dental care in New Zealand.

### **Career Opportunities**

Dental Therapy forms part of the oral health services in New Zealand communities. Dental Therapists currently work under the direction of the Director General of Health. They provide primary health care with other dental and health professionals, for pre-school and school children in school-based dental clinics, and for other members of the community in community dental practice settings including hospital dental departments and with Maori Health Providers. Dental Therapists work directly with patients to provide oral health education, preventive dental care and restorative dental care. Dental Therapy is a rewarding career, with a strong emphasis on caring for people and encouraging them to care for their own oral health. Dental Therapists foster life-long dental health habits in young people.

### **The Course**

The course of study includes the following papers:

- DENT 101 - General Health Science
- DENT 102 - Oral Health Science
- DENT 103 - Clinical Dentistry
- DENT 201 - Society and Health
- DENT 202 - Advanced Clinical Dentistry
- DENT 203 - Dental Therapy Practice

# DENT 101 - General Health Science

## DENT 101 OUTLINES

DENT 101 is a one-year course for Dental Hygiene, Dental Therapy and Dental Technology students which aims to provide a broad basic understanding of the major disciplines supporting health sciences and the provision of health care. The course is presented as discrete modules covering Structural and Functional Anatomy, Cell Biology, Biochemistry, Microbiology and Immunology. This two-semester course involves lectures and laboratory sessions.

### 1. **Anatomy**

This module is designed as a general introduction to the tissues and systems of the human body, at all levels from cells and tissues to gross anatomy. Anatomy is the largest module in the DENT 101 course, running for the entire first semester. The anatomy module also has a significant practical component.

### 2. **Cell Biology**

This module is included to support the anatomy module and provides a general understanding of the structure and function of cells, centered mainly at the cell and organelle level.

### 3. **Biochemistry**

This module provides molecular level knowledge to understand details of cellular life processes many of which are relevant to the practice of dentistry.

Biochemistry is taught as three separate modules: protein structure and function, metabolism, DNA and Gene Structure.

### 4. **Microbiology**

This module provides a basic knowledge of the characteristics and diversity of viruses, bacteria and fungi, especially in relation to infectious disease and cross-infection control.

### 5. **Immunology**

This module provides an understanding of the responses of the body to attack by micro-organisms, on the mechanisms developed by micro-organisms to overcome these defences, and the concepts and basis of practice of protective immunity.

## ASSESSMENT

Satisfactory attendance at laboratory sessions is a terms requirement. A terms test will be held at the conclusion of the first semester covering all anatomy and cell biology lectures and will constitute 40% of the total grade. All remaining material will be examined in the final exam at the end of the year which will constitute 60% of the total grade. Oral exams will be held for pass/fail and distinction candidates.

# DENT 102 - Oral Health Science

## DENT 102 OUTLINES

DENT 102 is a one year course for Dental Therapy students in their first year. It introduces the student to general anatomy relevant to dental therapy practice, head and neck anatomy and physiology, and the diseases and infections which impact on these. This course will enable the students to progress to the clinical examination and diagnosis of oral health and disease in patients. The course consists of four major subdivisions:

1. Anatomy and Histology
2. Microbiology
3. Oral Biology
4. Oral medicine and Pathology

### **1. Anatomy and Histology**

*Aims:* The subject provides knowledge of the integrated basic anatomy, histology and physiology of selected body systems; relevant examples of the application of those systems to clinical practice; competence in the management of medical emergencies in dental practice.

### **2. Microbiology**

*Aims:* To provide basic knowledge of the process of infectious disease, the microbial ecology of the oral cavity and pathogenic plaque. To provide a biological basis for measures of infection control in clinical dental practice.

### **3. Oral Biology**

*Aims:* To provide an understanding of the development, structure and function of the craniofacial complex and its components, and to provide knowledge of the biology of the oral environment in health and an introduction to the pathogenesis of common oral diseases relevant to school dental therapy and dental hygiene practice.

### **4. Oral medicine and oral pathology**

*Aims:* To provide knowledge of the pathogenesis of common oral disease relevant to school dental therapy and dental hygiene practice with emphasis on clinical manifestations and treatment

## ASSESSMENT

The course is assessed at 70% final examination and 30% internal assessment. Internal assessment consists of tests and assignments, as will be advised during the year. The final examination will consist of a written paper and a practical examination.

In order to gain terms students must:

- i) Complete the written terms test
- ii) Hand in completed assignment by the due date.
- iii) Complete group case presentation.

# DENT 103 - Clinical Dentistry

## LEARNING AIMS

### *Knowledge, Skills, Attitudes*

To use the knowledge of structure, function, growth and development to develop skills in clinical examination and recording patient information in order to make diagnoses and treatment plans. To develop basic skills in preventative and restorative dentistry.

### *Understanding*

To develop an understanding of normal and diseased tissues in the face and mouth. To develop an understanding of communication with patients and parents of patients.

### *Ethical and social implications*

To develop responsibility and understanding of the ethical and legal requirements when treating patients.

### *Lifelong learning*

To provide a foundation of clinical and communication skills to ensure the student appreciates their importance and can use this foundation to continue developing skills during their lifetime of dental practice.

## Outline of Areas to be Covered

1. Communication skills
2. Dental surgery assisting
3. Cross infection control
4. Pharmacology
5. Dental diseases and their prevention
6. Dental caries and its clinical management
7. Periodontal disease in children
8. Local analgesia and pain control
9. Radiology
10. Radiography
11. Basic dental materials for dental therapy practice
12. Introduction to patient management

## ASSESSMENT

The course is assessed at 50% final examination and 50% internal assessment. Internal assessment consists of tests and assignments, as will be advised during the year. The final examination will consist of a written paper and a short oral exam.

In order to gain terms students must:

- i) Sit all class tests.
- ii) Hand in completed assignments by the due date.
- iii) Satisfactorily attend classes, clinics and seminars.
- iv) Demonstrate competence in clinical tasks as set out on the clinical assessment sheets.

# DENT 201 - Society and Health

DENT 201: *Society and Health* is intended to develop an understanding of the basic concepts of community and society and their implications for health and oral health.

## LEARNING AIMS

### *Knowledge, Skills, Attitudes*

To develop knowledge of the basic concepts of community, society and culture, and their implications for health and oral health.

### *Understanding*

To understand and apply the principles of oral health promotion, including oral health education.

To understand the implication of the Treaty of Waitangi for the provision of health care and oral health care.

### *Ethical and social implications*

To appreciate the ethical and social implications of health promotion and oral health care.

### *Lifelong learning*

To encourage the development of an interest in preventive approaches to general and oral disease and to have an ongoing commitment to these.

The DENT 201 paper comprises three modules:

### **Module 1: New Zealand Society and Health**

- i) New Zealand Society
- ii) Maori oral health
- iii) Sociology of health and illness

### **Module 2: Health Promotion Theory and Practice**

- i) Health promotion concepts and principles
- ii) Health education
- iii) The prevention of oral disease in populations

### **Module 3: Oral Health Care**

- i) The New Zealand health system
- ii) Allies in health
- iii) Quality in oral health care

## ASSESSMENT

The course is assessed at 60% final examination and 40% internal assessment. Internal assessment consists of tests and assignments, as will be advised during the year. The final examination will consist of a written paper.

In order to gain terms students must:

- i) Hand in completed assignments by the due date.
- ii) Satisfactorily attend classes and seminars.

# DENT 202: Advanced Clinical Dentistry

## LEARNING AIMS

### *Knowledge, Skills, Attitudes*

To continue to develop knowledge and skills in diagnosing and treating dental disease. To develop skills in patient management.

### *Understanding*

To understand the psychology of growth and development. To understand the causes of fear and anxiety in the dental situation. To be able to understand the appropriate use of dental equipment and materials.

### *Ethical and Social implications*

To know the ethical responsibilities of the dental therapist to dental patients.

### *Lifelong learning*

To encourage the student to seek confirmation of information and be able to adapt to change and continue to learn and practice new dental treatments and use materials as they are developed.

## Outlines of Areas to be Covered

1. Dental radiography (continuation from Dent 103)
2. Operative management of dental caries - (use of amalgam, GIC, composite and compomers, and stainless steel crowns)
3. Dental pain (toothache) - differential diagnosis of dental pain
4. Management of deep carious lesions
5. Pulp therapy for the primary dentition
6. Extraction of deciduous teeth
7. Management of traumatic injuries and school dental therapist's role
8. Management of periodontal diseases in children (continuation from Dent 103)
9. Orthodontic treatment and school dental therapist's role
10. Routine dental care of children with special needs (medically compromised children and children with disabilities)
11. Clinical oral pathology
12. Anomalies of tooth formation and eruption
13. Teenage issues - behaviour management and caries
14. Young permanent dentition - premolars and molars

## ASSESSMENT

The course is assessed at 60% final examination and 40% internal assessment. Internal assessment consists of tests and assignments, as will be advised during the year. The final examination will consist of a written paper, clinical presentation and an oral exam.

In order to gain terms students must:

- i) Sit all class tests.
- ii) Hand in completed assignments by the due date.
- iii) Satisfactorily attend classes, clinics and seminars.
- iv) Demonstrate competence in clinical tasks as set out on the clinical assessment sheets.

# DENT 203: Dental Therapy Practice

DENT 203: *Dental Therapy Practice* is a full-year paper which is intended to enable students to become familiar with all aspects pertaining to the organization and support necessary to practice Dental Therapy. This includes knowledge of the Dental Therapy work environment, records (including computer records), work experience, and the legal requirements to practice Dental Therapy.

## LEARNING AIMS

### *Knowledge, Skills, Attitudes*

To develop knowledge of the role of the dental therapist in dental practice in New Zealand, and the role of the dental therapist in dental public health.

To develop skills and attitudes that are appropriate to dental therapy practice.

### *Understanding*

To have an understanding of the roles of all dental health workers and their relationships with dental therapists

### *Ethical and social implications*

To know the ethical responsibilities of dental therapists in relation to their treatment and referral of patients.

To know the legal responsibilities and requirements for practice as a dental therapist.

### *Lifelong learning*

To develop basic skills in patient audit and practice audit to allow the graduates throughout their careers, in order to review and improve their practice.

### *Other*

To spend four weeks in a District Health Board carrying out dental care under supervision in a school dental clinic

To complete a project related to dental therapy practice in a school dental service.

Requirements to gain terms in Dent 203:

- i) Attendance at lectures.
- ii) Completion of assignments, project, presentation, and four week section placement.