

Dental science

For information regarding the BSc Honours program in Oral Biology (Dental Science) please see *School of Dental Science (Oral Biology) (p.896)*.

First year

511-121 Introduction to Biomedical Science

Credit points: 25

HECS-band: 2

Coordinator: Professor E.C. Reynolds

Contact: 89 hours of lectures (*Semester 1*).

Description: This subject provides an overview of whole body structure and function, cellular structure and function, the importance of genes, proteins and biological membranes and the homeostatic mechanisms involved at the molecular, cellular and corporate level.

On completion of this subject, students should have an understanding or appreciation of the principles of the relationship between chemical structure and function of proteins; the structure and function of biomembranes; the molecular basis of human genetics, chromosome replication, gene function, regulation and mutation; the function of genes involved in the normal processes determining cellular growth and proliferation and the relationship between abnormalities in these genes and the development of cancer; the relationship between normal cellular growth and function; the structure and function of different cell types and how they interact in organ systems; the organisation into systems of anatomical structures which contribute to a common function; whole body structure and function; the range of normality in structure and function of cells, organs and the human body; control systems in cells and organs of the normal human body; development, growth and ageing; the major types of disease processes; the characteristics and behaviour of micro-organisms and their relationship to infectious diseases; bacterial and viral chromosome replication and gene expression and the relevance of these processes to the application of antibiotics in disease treatment; and immune response to infection.

Assessment: One 3-hour written examination and one 1500 word assignment.

511-122 Dental Practice 1a

Credit points: 25

HECS-band: 3

Coordinator: Associate Professor M.V. Morgan

Contact: 94 hours, including lectures, tutorials, practicals, student centred learning, clinical and community activities (*Semester 1*).

Description: This subject covers three modules: Introduction to Dentistry I, which acquaints students with the role and responsibilities of a dentist in the community; Human Development and Behaviour I, which links the activities of a dentist with the development and behaviour of individuals in the community, particularly focussing on the constants and variations both in human oral anatomy (ensuring that students will recognise oral health) and human behaviour; and Emergencies in Dental Practice I which consists of student centred learning and 12 hours of practical work run by St Johns Ambulance.

On completion of this subject, the student should:

- appreciate inter-professional team relationships that exist in the provision of oral care; the relevance of behaviour to dental health care;
- comprehend: the range of patient socioeconomic and demographic backgrounds, together with variations in community health; the fundamental terminology and nomenclature of anatomy that is essential for basic dental science knowledge; and
- have developed: the skills and knowledge to act with safety and care within the dental surgery; and the ability to perform lifesaving procedures for staff and patients.

Assessment: One 2-hour written examination; and written and practical work throughout the semester, including problem-based learning assessment and a one-day practical examination in first aid.

511-123 Dental Practice 1b

Credit points: 12.5

HECS-band: 3

Coordinator: Associate Professor M.V. Morgan

Contact: 61 hours, including lectures, tutorials, practicals, problem-based learning and clinical and community activities (*Semester 2*).

Description: This subject is comprised of: Introduction to Dentistry II, which further explores the discipline of dentistry, introducing the actual activities of a dentist; Human Development and Behaviour II, which continues the concepts introduced in Dental Practice 1a, focussing primarily on human oral anatomy and comparative oral anatomy and introduces comparative anatomy, identification of human teeth and their anatomical relationship in a clinical context, and some aspects of forensic dentistry and radiography; and Dental

Materials Science and Conservative Dentistry 1, which incorporates principles and handling of materials relevant to the treatment of oral diseases and includes: structure of matter, classification of materials, and mechanical properties.

On completion of this subject, the student should:

- recognise the philosophy underpinning both the prevention and treatment of oral diseases; common clinical activities undertaken by oral health care providers; and the risks and hazards to the health of dentists;
- comprehend the principles underlying the use of some common materials used in dentistry; the similarities and differences between relevant features of human anatomy and that of other members of the animal kingdom; and
- have developed skills in producing, examining and interpreting radiographs and other non-invasively produced images of the jaws, facial skeleton and temporo-mandibular joint; and providing some non-invasive preventive clinical procedures.

Assessment: One 3-hour written examination; and written and practical work, including problem-based learning assessment, throughout the semester.

511-124 Oral Health Sciences 1

Credit points: 37.5

HECS-band: 2

Coordinator: Professor E.C. Reynolds

Contact: 168 hours, including lectures, tutorials and practicals (*Semester 2*).

Description: This subject is comprised of two modules: Chemistry and Functional Anatomy (Dental), which cover the structure, organisation and development of the human body at both macroscopic and microscopic levels.

On completion of this subject, the student should comprehend the elementary theory of chemical bonding in organic molecules; the stereochemistry of simple organic molecules and its application to the understanding of the relation between molecular shape and biological activity; the nature of biologically important molecules and their functions; the nature of chemical equilibrium with particular reference to acid-base chemistry; the chemistry of polymers, metals and inorganic solids, particularly in a dental context; the chemistry of redox processes; the role of transition metals in life processes; the principles of anatomy, histology and embryology, particularly those most pertinent to modern dentistry; and the anatomy and development of the thorax.

Assessment: One 3-hour written examination; two 2-hour written examinations; one 1-hour practical examination and continuous assessment tests and practicals throughout the semester.

Second year

511-222 Dental Practice 2a

Credit points: 12.5

HECS-band: 3

Coordinator: To be advised

Contact: 79 hours of lectures, tutorials, practical/laboratory classes and clinical activities (*Semester 1*).

Description: This subject is comprised of three modules.

Oral Biology I introduces the common oral diseases concentrating on causation, natural history and clinical appearance, and emphasises the prevention of, and minimal intervention in, these diseases.

Dental Materials Science and Conservative Dentistry (DMS&CD) II expands on the data introduced in DMS&CD I (under Dental Practice 1b), emphasising those materials used for minimal clinical intervention.

Human Development and Behaviour III introduces concepts relating to the growth and development process.

Assessment: One 2-hour written examination at the end of the semester; written work of not more than 1500 words and practical assessment.

511-223 Dental Practice 2b

Credit points: 37.5

HECS-band: 3

Coordinator: To be advised

Contact: 210 hours of lectures, tutorials, practical/laboratory classes and problem based learning and clinical activities (*Semester 2*).

Description: This subject is comprised of three modules.

Oral Biology II expands on the common oral diseases introduced in Oral Biology I, again emphasising the prevention of these diseases.

Human Development and Behaviour IV continues the theme of normal growth and dental/skeletal maturation and introduces common soft tissue pathology, referring to causation, natural history and clinical appearance of the diseases.

Dental Materials Science and Conservative Dentistry III expands on the work undertaken in DMS&CD II (under Dental Practice 2A), with special reference to materials used in operative or surgical interventions for both cariology and periodontology.

Towards the end of Dental Practice 2B, the diagnosis, treatment planning and provision for dental caries and periodontal diseases are integrated; the theoretical, practical and clinical activities of the three modules therefore focus on a more holistic approach in provision of oral health care.

Assessment: One 3-hour written examination at the end of the semester; continuing practical and clinical work; written work of no more than 1500 words and PBL tutor assessment.

511-224 Oral Health Sciences 2a

Credit points: 37.5

HECS-band: 2

Coordinator: Dr M.F. Burrow

Contact: 188 hours of lectures, practical activities and computer assisted learning (*Semester 1*).

Description: This subject comprises three modules.

Physiology covers physiological integration, the interface between tissue cells and the internal environment, biophysics of excitable and contractile tissue, the physiology of mammalian organ-systems: circulatory, respiratory, muscular, renal and digestive and considers the coordination of bodily functions by hormonal and neural mechanisms.

Biochemistry concentrates on the thermo-dynamics and homeostasis of living systems and biochemical adaptation; the structure, function and metabolism of proteins, carbohydrates, lipids and nucleic acids; basic principles of gene structure and expression and metabolic disorders with a genetic basis; and structure and function of immuno-globulins.

Topographical Anatomy provides an overview of the structure and organisation of the head and neck, including development and functional perspectives. It particularly focuses on vocationally-relevant clinical anatomy for dentists and includes practical dissections of the head and neck region of the human body.

Assessment: Three 2-hour written examinations at the end of the semester; two 30-minute practical examinations during the semester; assessment of tutorial performance during the semester; practical work throughout the semester.

511-225 Oral Health Sciences 2b

Credit points: 12.5

HECS-band: 2

Coordinator: Dr M.F. Burrow

Contact: 75 hours of theory and practical activities (*Semester 2*).

Description: This subject is comprised of two modules.

Microbiology focuses on microorganisms involved in oral infections, with an emphasis on the importance of appropriate sterilization and disinfection procedures in the dental setting. Practical class material is presented in case study format reflecting everyday presentations of infections in the oral cavity.

Neuroscience includes the development, structure and function of the human nervous system, emphasising the neural basis of sensory and motor behaviour.

Assessment: Two 2-hour written examinations at the end of the semester; one 1-hour practical examination at the end of the semester; written assignments of no more than 2000 words throughout the semester.

Third year

511-301 Dental Studies 3

HECS-band: 3

Coordinator: Dr S.A. Feik

Contact: 474 hours, including lectures, tutorials, clinical and laboratory work (*Year long*).

Description: This subject covers community dental health; preventive dentistry; growth studies and orthodontics; radiography and radiology; introductory medical and surgical principles; periodontics; endodontics; removable prosthodontics; fixed prosthodontics; occlusion and general practice and diagnosis and treatment planning.

On completion of this subject, students should:

- comprehend the application of epidemiology to solving dental public health problems, caries preventive measures, normal and abnormal growth, radiography and radiation protection, clinical use of dental materials, principles of medicine and surgery, pain control, patient management, operative treatment of teeth, and the sequelae of partial or complete loss of the dentition;
- have developed skills in collection, analysis and presentation of oral health data; communication, counselling and patient management; clinical oral examination diagnosis and treatment planning of simple cases; intra-oral radiography and local analgesia administration. Also have developed psychomotor skills in conservative treatment of dental caries and periodontal diseases; and clinical skills for treatment of edentulous and partially dentate patients; and

- appreciate the needs and difficulties associated with instituting effective preventive programs at an individual and community level; the concepts of total patient care and the dentist's responsibility for the safe and effective management of persons in the dental situation; need for precision, accuracy and self-evaluation.

Assessment: (1) One 2-hour written examination at the end of Semester 1; and (2) Two 3-hour written examinations at the end of the year; a series of practical examinations spread over three days in Semester 2; assessment of clinical, practical and written work throughout the year, plus a 15-minute viva voce examination. A pass in each of the written examinations in Section 2 and in each of the remaining components in Section 2 is required for an overall pass in the subject. Additional tests, including viva voce and/or practical examinations, may be required.

Students will be permitted to proceed to clinical work ONLY after having satisfactorily completed the preclinical units. Students will NOT be permitted to continue with clinical work if progress in the clinic is unsatisfactory.

Prescribed texts: F A Carranza Jr and M G Newman, *Glickman's Clinical Periodontology*, 8th ed., Saunders, 1996. • P W Goaz and S C White, *Oral Radiology: Principles and Interpretation*, 3rd ed., Mosby, 1994. • D M Ranly, *A Synopsis of Craniofacial Growth*, 2nd ed., Appleton and Lange, 1988. • A Thylstrup and O Fejerskov, *Textbook of Clinical Cariology*, 2nd ed., Munksgaard, 1994.

526-039 Microbiology (Dental Course)

HECS-band: 2

Coordinator: Mrs C. Power

Contact: 70 hours, including lectures and practical work (*Semester 2*).

Description: This subject covers microorganisms and their role in human infection; principles of host resistance, immunity and hypersensitivity; indigenous oral flora of humans; and control of microbes: disinfection, sterilisation, asepsis and chemotherapy.

On completion of this subject, students should:

- comprehend the characteristics and behaviour of microorganisms and their relationship to clinical manifestations of infection; the principles of the modes of spread and pathogenesis of infection; the epidemiology and control of infectious disease; the principles of antimicrobial chemotherapy; the immune response to infection and the possible abnormalities of this response; the principles and characteristics of the microbial ecology of the oral cavity;
- have developed basic skills in working in an aseptic environment; skills in applying the relevant diagnostic tests to specific case studies; observational skills in identifying the appearance and behaviour of medically significant microorganisms; the ability to collect, transport and make preliminary investigations of clinical specimens; and
- appreciate the need for rational interpretation of the results of microbiological investigation and for rational judgements about the use of antibiotics; the means of preventing and controlling infectious diseases at the level of both the community and the individual.

Assessment: One 1-hour written examination at the end of Semester 1; one 3-hour written examination and one 1-hour practical examination at the end of Semester 2; and assessment of tutorials during the year.

531-039 Pathology (Dental Course)

HECS-band: 2

Coordinator: Dr H.J. Grossman

Contact: 126 hours, including lectures and practical work. Students are required to attend autopsy presentations (*Year long*).

Description: This subject covers major concepts of general pathology (including disorders of growth and neoplasia, inflammation and repair, circulatory disturbances); a survey of the special pathology of the major organ systems; and pathology of the connective tissues and the effects of failure in major organ systems.

On completion of this subject, students should:

- comprehend the terminology of pathology; the principles and essential information regarding the major types of disease processes, their causes, and the responses of cells, tissues, organs and systems in these disease processes; the morphological and functional characteristics of common and important diseases; the molecular basis of pathological processes;
- have developed observational and organisational skills to identify and interpret the macroscopic appearance of disease processes in exposed structures and cut sections of organs, and the microscopic appearance of disease processes in cells, tissues, organs and systems; communication skills to describe diseases; and
- appreciate the importance of evaluating clinical manifestations of diseases in terms of disturbances of structure and function; the capabilities and limitations of special investigations (including clinical pathology, biochemistry and radiology).

Assessment: One 1-hour written examination at the end of Semester 1; one essay of up to 3000 words (optional) (prize awarded); one 2-hour written examination; and one 2-hour practical examination at the end of Semester 2. *Viva Voce* examinations may be required.

Prescribed texts: EITHER V Kumar, R S Cotran and S L Robbins, *Basic Pathology*, 6th ed., Saunders, 1997. or E Rubin and J L Farber (eds), *Essential Pathology*, 2nd ed., Lippincott, 1997.

534-039 Pharmacology (Dental Course)

HECS-band: 2

Coordinator: Dr A.G. Stewart

Contact: 46 hours, including lectures and tutorials (*Year long*).

Description: This subject covers the principles of pharmacology and mechanisms of action of drugs in common use in dentistry and medicine; route of administration, absorption, distribution, metabolism and excretion of drugs; principles of selective toxicity; drug interactions and toxicology; drug dependence; and drug schedules (Poisons Act).

On completion of this subject, students should:

- comprehend the principles of the absorption, distribution and elimination of drugs in the body; the basic mechanisms of drug action; the pharmacology of: the autonomic nervous system, drugs used to treat diseases of the cardiovascular and central nervous systems, local anaesthetics, and drugs used for the treatment of inflammation; the use and mechanisms of action of antibiotics, anti-viral and anti-tumour drugs; the nature of drug interactions; the nature and use of drugs of abuse;
- have developed measurement and recording skills relevant to the assessment of drug action; skills in using objective sources of drug information; and
- appreciate the responsibilities of dentists under the Dentistry and Poisons Act; the relevance of an understanding of drug action and reaction to dental science; the importance of understanding the principles of drug action to therapeutics; the elements of the design of clinical trials (single and double blind factors and use of statistics).

Assessment: One 1-hour written, multiple-choice question examination at the end of Semester 1; and one 2-hour written, multiple choice and short answer question examination at the end of Semester 2. Oral examinations may be required.

Prescribed texts: J A Yagiela, E A Neidle and F J Dowd, *Pharmacology and Therapeutics for Dentistry*, 4th ed., Mosby, 1998.

Fourth year

511-401 Dental Studies 4

HECS-band: 3

Coordinator: Associate Professor A.C.H. Smith

Contact: 555 hours, including lectures and clinical, laboratory, library and research work (*Year long*).

Description: This subject covers cariology; oral diagnosis and treatment planning; applied behavioural science; preventive dentistry; gerodontics; community dental health; growth studies and orthodontics; applied basic sciences; fixed prosthodontics; periodontics; paediatric dentistry; endodontics; removable prosthodontics; and general practice. This subject also includes a component on a supervised, group research project.

On completion of this subject, students should:

- comprehend the use of drugs in dentistry, differential diagnoses of oral diseases, the principles of extra-oral radiography and radiology, normal and abnormal growth, the principles of orthodontics, the relationship between oral and general health in elderly persons, the potential for control of dental caries and periodontal diseases by preventive strategies, and the delivery and evaluation of dental care in public and private sectors;
- have developed the communication and psychomotor skills necessary for providing total patient care in a general dental practice setting; skills in critical listening and case presentation; skills in the prevention of sports injuries to the mouth; and
- appreciate the concept and practice of ongoing total patient care in the prevention, identification, assessment and treatment of oral diseases as opposed to the episodic management of symptomatic oral problems; the need for the dentist to provide leadership in advocating and practising total patient care.

Assessment: (1) Two 3-hour written examinations at the end of Semester 2; (2) One 2-hour written examination at the end of Semester 2, assessment of practical, clinical and laboratory work on particular areas throughout the year and one 1-hour clinical photographic slide recognition examination; (3) One clinical examination during Semester 2 and viva voce examination at the end of the year; and (4) Two essays of 2,500-3000 words each. A pass in each of the first two written examinations in Section 1 and in each of Sections 2 and 3

is required for an overall pass in this subject. Additional viva voce and clinical examinations may be required.

Students will be permitted to proceed to clinical work ONLY after having satisfactorily completed the preclinical units. Students will NOT be permitted to continue with clinical work if progress in the clinic is unsatisfactory.

Prescribed texts: A Cameron and R Widmer, *Handbook of Paediatric Dentistry*, Mosby Wolfe, 1997. • L Shaw ed., *Self Assessment Picture Tests in Dentistry: Pediatric Dentistry*, Wolfe, 1994. • D M Williams, F S Hughes, E W Odell and P M Farthing, *Pathology of Periodontal Disease*, Oxford University Press, 1992. • T G Wilson and K S Kornman, *Fundamentals of Periodontics*, Quintessence, 1996.

511-402 Oral Medicine, Pathology and Surgery

HECS-band: 2

Coordinator: To be advised

Contact: 155 hours, including lectures, tutorials, practical work and problem-based learning (*Year long*).

Description: This subject is an extension of the third year pathology course, with special reference to the pathology of the oral and related structures; systemic influences on the development of oral and dental structures; the pathology of teeth and their supporting structures; the pathology of the jaws, the salivary glands, temporomandibular joints and associated structures due to local and distant causes; and the pathology of oral diseases correlated with clinical and radiological features.

On completion of this subject, students should:

- comprehend the application of the principles of pathology to the oral region; all the commonly occurring oral diseases and oral manifestations of systemic diseases, and the less commonly occurring diseases, how they develop and how they affect the host;
- be able to apply a sound knowledge of oral pathology to the clinical situation; and
- appreciate the fundamental role that oral pathology has for all who seek to prevent or manage oral disease; that oral disease must not be considered in isolation but must be related to the whole patient.

Assessment: (1) One 3-hour written examination at the end of the year; (2) Assessment of knowledge and understanding during the year; (3) Assessment of professional skills and attitudes during the year. Additional tests, including viva voce and/or practical examinations, may be required. A pass in each of (1), (2) and (3) is required for an overall pass in this subject.

553-411 Medicine (Dental Course)

HECS-band: 3

Coordinator: Dr J.W. Paton

Contact: 106 hours, including lectures, tutorials and clinical demonstrations (*Year long*).

Description: This subject covers common medical problems and diseases, diagnosis and treatment; and diseases of particular importance to dentists, including infective endocarditis, hepatitis, bleeding diseases and acute and chronic cardiac and respiratory disorders.

On completion of this subject, students should:

- comprehend common presentations of medical disease; the use of investigations; the uses and side effects of drugs;
- have developed skills in communicating and relating to patients; the ability to take a comprehensive history and to formulate possible differential diagnoses; and an understanding of: prognosis, the clinical features and natural history of medical conditions, and possible use of investigations in diagnosis and management of disease; and
- appreciate the effect of illness on the social, occupational and recreational activities of patients.

Assessment: One 2-hour written examination and one clinical examination at the end of Semester 2 and continuing assessment in clinical tutorials.

556-411 Surgery (Dental Course)

HECS-band: 3

Coordinator: Mr G.B. Mann

Contact: 44 hours, including lectures and clinical demonstrations (*Year long*).

Description: This subject covers surgical pathology of acute and chronic infection; immunity, control of infection, asepsis and sterilisation; antibiotics and surgical infection; surgical shock, the control of haemorrhage; surgical aspects of fluid and electrolyte balance; wound healing and management; principles of respiratory support; methods of pain relief; surgical affections of face, mouth, nose and throat; cleft lip and palate; diagnosis and management of neck swellings; diseases and tumours of bone.

On completion of this subject, students should:

- comprehend the roles of immunity and antibiotic usage in surgical practice; processes of wound healing and management; pathology, treatment and prevention of cancer; principles of analgesic usage; airways management and respiratory support; diagnosis and treatment of common surgical conditions affecting head and neck;
- have developed an understanding of basic surgical principles as applied to dental practice; basic clinical skills required to recognise surgical conditions affecting head and neck; basic first aid skills necessary to manage acute surgical conditions of head and neck; and
- appreciate the pathological processes underlying manifestation of surgical conditions; the need to evaluate the whole patient when assessing a localised surgical problem; importance of the application of sound surgical principles in management of traumatic, infective and neoplastic processes affecting head and neck.

Assessment: One 2-hour written examination at the end of Semester 2. An oral examination may be required.

Prescribed texts: H A F Dudley and B Waxman (eds), *An Aid to Clinical Surgery*, 4th ed., Churchill Livingstone, 1989.

Fifth year

511-501 Clinical Dental Science

HECS-band: 3

Coordinator: Associate Professor I.H. Johnson

Contact: A total of 200 hours, including lectures, seminars, practical, library and research work (*Year long*).

Description: This subject covers diagnostic and management aspects of patients with multiple problems; specialist referral; advanced radiological interpretation; care of the special patient; systematic desensitisation and hypnosis; the special needs of the elderly and children; pain and pain control; general anaesthesia; management and welfare of dental health personnel; practice management and legal aspects of dental practice; the validation of the preventive philosophy at the individual and community levels; evaluation of current trends in periodontal treatment and research; case analysis and treatment planning in orthodontics; management of complex endodontic problems; advanced aspects of prosthodontics, fixed prosthodontics, maxillo-facial appliances, precision attachments, aesthetics and dental implants; and conduct and presentation of a research project (continued from the previous year).

On completion of this subject, the student should:

- comprehend the nature, pathogenesis and management of diseases and disorders affecting oral tissues, including the oral manifestations of systemic diseases and oro-facial pain;
- have developed skill to assess the dental health needs of all individuals and technical skills to provide a comprehensive range of clinical dental services; and
- appreciate the necessity for accurate examination, diagnosis and treatment planning before commencing the care of all patients; the value of ensuring the maintenance of oral health after treatment of all patients.

Assessment: Four 2-hour written examinations (each covering a number of areas) at the end of Semester 1; research project report; and a 2000 word essay. A pass in each of the written examinations is required for an overall pass in the subject.

Prescribed texts: A Cameron and R Widmer R, *Handbook of Paediatric Dentistry*, Mosby Wolf, 1997e. • P W bGoaz and S C White, *Oral Radiology: Principles and Interpretation*, 3rd ed., Mosby, 1994. • G L Howe, *The Extraction of Teeth*, 2nd ed., Wright, 1990. • G L Howe, *Minor Oral Surgery*, 3rd ed., Wright, 1985. • M J Kastle, *An Atlas of Dental Radiographic Anatomy*, 4th ed., Saunders, 1994. • P-J Lamey and M A O Lewis, *Oral Medicine in Practice*, Brit Dent J, 1991M. or M A O Lewis and P-J Lamey, *Clinical Oral Medicine*, Wright, 1993. • F A Rosewarne, I Harley and P Hore, *Introduction to Anaesthesia*, Department of Anaesthesia, Royal Melbourne Hospital, 1994. • L Shaw (ed), *Self Assessment Picture Tests in Dentistry: Pediatric Dentistry*, Wolfe, 1994. • D M Williams, F S Hughes, E W Odell and P M Farthing, *Pathology of Periodontal Disease*, Oxford University Press, 1992. • T G Wilson and K S Kornman, *Fundamentals of Periodontics*, Quintessence, 1996.

511-502 Integrated Dental Practice

HECS-band: 3

Coordinator: Associate Professor M.J. Tyas

Contact: A total of 530 hours including seminars, demonstrations and clinical experience in all aspects of general dental practice (*Year long*).

Description: Students undertake clinical experience in total patient care at both the Royal Dental Hospital of Melbourne and selected clinical teaching centres and hospitals; observational experience in private general practice; and assignments in special and general aspects of clinical dental practice.

On completion of this subject, the student should:

- comprehend the philosophy of total oral health care for each patient and the interactions of general dental practice with speciality care in the overall treatment plan for the individual; the diversity of clinical techniques and materials available for dental treatment; the limitations of each treatment modality;
- have developed skills in the examination, diagnosis, treatment planning and management of any individual seeking routine dental health care; expertise in providing general dental care; skills in evaluating success and failure in clinical dentistry; the ability to communicate with patients about their oral health status, treatment options and potential outcomes; and
- appreciate the role and responsibilities of the general dental practitioner in the provision of comprehensive total patient care; the need for referral for specialist advice or intervention; the need for constant evaluation of techniques, peer review of processes, and the application of scientific rigour and principles to the resolution of clinical problems.

Assessment: (1) One 20-minute viva-voce examination covering all aspects of endodontics, general practice, fixed prosthodontics, and removable prosthodontics at the end of Semester 2, and one clinical examination during Semester 2, consisting of an approved clinical procedure. A pass in the clinical examination is required for an overall pass in this section. (2) One 2-hour photographic slide examination and one 15-minute viva voce examination at the end of Semester 2, each covering oral anatomy, oral medicine, oral pathology, radiology and surgery. The satisfactory completion of a logbook containing details of clinical experience and attendance at teaching sessions in these areas is required. (3) Continuing assessment during the year in paediatric dentistry, orthodontics and care of the special patient and one 2-hour clinical photographic slide recognition examination covering paediatric dentistry, growth studies, orthodontics and care of the special patient at the end of Semester 2. (4) One 30-minute case presentation and one 15-minute case report presentation at the end of Semester 2 covering periodontics, cariology, gerodontics, preventive dentistry and community dentistry. (5) One 25-minute viva voce examination on integrated treatment planning at the end of Semester 2. A pass in each of (1), (2), (3), (4) and (5) is required for an overall pass in this subject.