DENT20002 Oral Health Sciences 2b

Credit Points:	12.50
Level:	2 (Undergraduate)
Dates & Locations:	2010, Parkville This subject commences in the following study period/s: Semester 2, Parkville - Taught on campus.
Time Commitment:	Contact Hours: 90 hours of lectures and practical activities. Total Time Commitment: Not available
Prerequisites:	Successful completion of all Year 1 subjects.
Corequisites:	None.
Recommended Background Knowledge:	None.
Non Allowed Subjects:	None.
Core Participation Requirements:	For the purposes of considering request for Reasonable Adjustments under the Disability Standards for Education (Cwth 2005), and Students Experiencing Academic Disadvantage Policy, academic requirements for this subject are articulated in the Subject Description, Subject Objectives, Generic Skills and Assessment Requirements of this entry. The University is dedicated to provide support to those with special requirements. Further details on the disability support scheme can be found at the Disability Liaison Unit website: http://www.services.unimelb.edu.au/disability/
Coordinator:	Prof Michael Burrow
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Subject Overview:	This subject comprises two modules: *Microbiology:* Micro-organisms involved in oral infections and the importance of appropriate sterilisation and disinfection procedures in the dental setting. Practical class material is presented in case study format reflecting every day presentations of infections in the oral cavity. *Neuroscience:* The development, structure and function of the human nervous system, emphasising the neural basis of sensory and motor behaviour.
Objectives:	**By completion of this subject, the dental student should:** **(1) Comprehend:** a) The characteristics and behaviour of micro-organisms and their relationship to clinical manifestations of infection; b) The principles of: • the modes of spread and pathogenesis of infection; • antimicrobial chemotherapy; c) The epidemiology and control of infectious disease; d) The immune response to infection and the possible abnormalities of this response; and e) The principles and characteristics of the microbial ecology of the oral cavity. f) The terminology of neuroscience; g) The principles and essential information regarding the: • macroscopic and microscopic structure of the nervous system and • the functional components of the nervous system including their organization and major

	• connections; h) The correlation of structure with function including behaviour; and i) The major effects of lesions to clinically important areas and pathways. **(2) Have developed:** a) Skills in: • working in an aseptic environment; • applying the relevant diagnostic tests to specific case studies; • analysing the structural and functional changes which may occur in disorders of the nervous • system; b) Observational skills in identifying the appearance and behaviour of dentally significant micro-organisms; c) The ability to collect, transport and make preliminary investigations of clinical specimens. d) Observational and organizational skills to identify and interpret the: • macroscopic appearance of the brain and spinal cord including cut sections, and • microscopic appearance of the nervous system. **(3) Appreciate:** a) The need for rational: • interpretation of the results of microbiological investigation and • judgements about the use of antibiotics; b) The means of prevention and control of infectious diseases at the individual and community level; c) The extent and limitations of current knowledge of the organization of the central nervous system, d) particularly in the context of recent profound advances in Neuroscience; and e) The implications of such limitations in our understanding of how the brain works.
Assessment:	(1) Microbiology: One 2-hour written examination and one 1-hour practical examination at the end of the semester and a written assignment of no more than 2000 words during the semester. (2) Neuroscience: One 2-hour written paper at the end of the semester. An overall pass in each of Sections 1 and 2 is required for an overall pass in this subject.
Prescribed Texts:	None.
Recommended Texts:	**Neuroscience:** # Kandel ER, Schwartz JH and Jessell TM **2000** ***Principles of Neural Science*** Elsevier # Nolte J and Angevine JB Jr **1995** ***The Human Brain: In Photographs and Diagrams*** Mosby **Microbiology:** # *Bagg, J, MacFarlane TW, Poston IR, Miller CH and Smith AJ **2004** ***Essentials of Microbiology for Dental Students*** 2nd ed, Oxford *Indicates essential reading
Breadth Options:	This subject is not available as a breadth subject.
Fees Information:	Subject EFTSL, Level, Discipline & Census Date, http://enrolment.unimelb.edu.au/fees
Generic Skills:	# Observation and organisation; # Investigation; # Analysis; and # Interpreting results of investigations.
Related Course(s):	Bachelor of Dental Science