

OPTO90011 Ocular Therapeutics A

Credit Points:	25
Level:	9 (Graduate/Postgraduate)
Dates & Locations:	This subject is not offered in 2014.
Time Commitment:	Contact Hours: This subject will be completed by guided learning and formal didactic teaching of not less than a total of 80 hours. This subject is offered in February and March each year and is delivered in an intensive block format on Friday afternoons (after 3pm) and weekends at the Parkville campus. Total Time Commitment: Not available
Prerequisites:	None
Corequisites:	None
Recommended Background Knowledge:	None
Non Allowed Subjects:	None
Core Participation Requirements:	It is University policy to take all reasonable steps to minimise the impact of disability upon academic study and reasonable steps will be made to enhance a student's participation in the University's programs. Students who feel their disability may impact upon their active and safe participation in a subject are encouraged to discuss this with the relevant subject co-ordinator and the Disability Liaison Unit.
Contact:	Melbourne Graduate School of Science Faculty of Science The University of Melbourne Victoria 3010 Tel: + 61 3 8344 6128 Fax: +61 3 8344 3351 Web: http://graduate.science.unimelb.edu.au/ (http://graduate.science.unimelb.edu.au/)
Subject Overview:	<p>The purpose of this subject is to provide students with a sound knowledge of bio-medical sciences in the context of understanding ocular anomalies and disorders and to be able to prescribe a range of drugs used in the management of eye diseases. The expectation of all commencing students is that they have a working knowledge of the anatomy of the eye, orbit and adnexae and the overall level of knowledge is that of a student that has graduated from the University of Melbourne Bachelor of Optometry course (or equivalent) after January 1995. The topics include:</p> <p>General pathology and immunology: The aim of this section is to outline the general principles of inflammation and wound healing, with particular reference to ocular tissues. In addition, students will understand the process of tissue damage secondary to traumatic or infectious insult, including the different aspects of the immune response.</p> <p>Microbiology: By the end of this section, students will understand the basic principles of microbiology, with special reference to pathogenic micro-organisms implicated in ophthalmic diseases. Particular reference will be based upon the mode of action of ophthalmic medication and mode of microbial resistance.</p> <p>Pharmacology: By the end of this section, students will be able to understand basic pharmacological concepts including the interaction of drugs with the body including routes of administration and metabolism. In addition, fundamental principles involving the action of drugs (pharmacodynamics), with special reference to drugs used in ophthalmic practice and their ocular and/or systemic toxicity.</p> <p>Iritis and diseases of the Uvea: The aims of this section of the course are to provide an understanding of the types of uveitis, their systemic causes, the ordering of laboratory tests and the interpretation of their outcomes, the medical management of these conditions and the identification of those conditions that warrant referral.</p>

	<p>Glaucoma: The aims of this section are to provide an understanding of the types of glaucoma, their pathophysiology, methods that can be used for its early detection, the medical or surgical management of these conditions, the identification of change that warrants an altered drug schedule or protocol, and the identification of change that warrants referral.</p> <p>Disorders of the anterior eye: By the end of this section, students will understand the processes of anterior eye infection, inflammation, allergy response, toxic and traumatic conditions either applicable to or affecting the lids, adnexa, the conjunctiva, the cornea, the lacrimal apparatus and the sclera.</p> <p>Management of cataract: By the end of this section, students will understand the clinical presentations of cataract, their pathogenesis, treatment options and issues related to the postoperative management of patients undergoing cataract surgery. Review of therapeutic agents used in the postoperative care of cataract patients will include discussion of typical medication regimens, potential side effects of commonly used preparations and the appropriate diagnosis and management of these.</p> <p>Refractive surgery - postsurgical management: This section will review current refractive surgery techniques, detailing their risks, benefits and treatment ranges. Discussion of post surgical management of refractive surgery patients will focus on time courses for recovery and review, indicated testing and restrictions on activities during recovery. Potential intra operative and postoperative complications will be detailed, including typical presentations, their diagnosis and appropriate management. The therapeutic preparations commonly used in post surgical care of these patients will be discussed, along with typical medication regimens, potential side effects and the effective diagnosis and management of these. The importance of ongoing communication between the optometrist and the surgeon involved in care of the postoperative patient will be emphasised.</p> <p>Co-ordinated patient management: This section will review the concept of shared (integrated) patient care, and the roles and responsibilities of those practitioners participating in shared care of a patient. Various models of shared care (involving optometrists, medical practitioners and other practitioners) will be discussed, including review of the professional, ethical and legal issues related to the shared care of surgical patients. The importance of formal systems of communication to optimise and streamline patient care will be emphasised, along with the importance of clearly defining the individual's responsibilities for patient care and follow up within a shared care arrangement.</p> <p>Legal and administration: This section will review the legal and administrative requirements associated with the prescription and use of S4 Poisons by endorsed optometrists in the State of Victoria, as well as some of the professional and ethical issues relating to therapeutic patient care.</p>
Learning Outcomes:	.
Assessment:	Two 2-hour written papers.
Prescribed Texts:	None
Recommended Texts:	<ul style="list-style-type: none"> • Bartlett JD & Jaanus, S. Clinical Ocular Pharmacology. 4th Edition (or later) Butterworth-Heinemann, 2001. (ISBN: 978-0750670395 (4th), ISBN: 978-0750675765 (5th)) • Bruce AS & Loughlin, MS. Anterior Eye Disease and Therapeutics A-Z. Oxford: Butterworth-Heinemann, 2003. (ISBN: 978-0750652612) • Forrester J, Dick A, McMenamin P, Lee W, The Eye: basic sciences in practice. 2nd edition (or later). Edinburgh: WB Saunders, 2002. (ISBN: 978-0702025419 (2nd), ISBN: 978-0702028410 (3rd)) • D Y Kunimoto et al, The Wills Eye Manual: Office and Emergency Room Diagnosis and Treatment of Eye Disease. 4th Edition (or later) Lippincott, Williams and Wilkins, 2004. (ISBN: 978-0781742078) <p>Students whose undergraduate qualifications are more than 5-years old are strongly recommended to obtain Forrester. Forrester will provide a broad background to most of the ocular science content in 655-811 (only). All other texts are recommended for both 655-811 & 655-812.</p> <p>There are a number of additional recommended texts listed in the accompanying background notes.</p>

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