OPTM6400

OPTOMETRIC PRECLINICAL PRACTICE

Course Outline

Term 1, 2023

School of Optometry and Vision Science

Faculty of Medicine & Health

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1. Staff

Position	Name	Email	Consultation times and locations	Contact Details
Course Convenor	A/Prof Maria Markoulli	m.markoulli@unsw.edu.au	By appointment	Please contact via Moodle private message, not email

2. Course information

Units of credit: 6

Pre-requisite(s): Enrolment in program 8095 Master of Clinical Optometry or 3182 Bachelor of Vision Science / Master of Clinical Optometry

Teaching times and locations:

Component	HPW	Time	Day	Location
Lectures	*3 (weeks 1-4)* *2 (weeks 5-10)*	*Asynchronous*	*N/A*	*N/A*
Pre-clinical laboratory	*4*	*Synchronous*		
Pre-clinical laboratory 1	*2*	*See my.unsw.edu.au*	*See my.unsw.edu.au*	*Pre-clinic lab, RMB*
Pre-clinical laboratory 2	*2*	*See my.unsw.edu.au*	*See my.unsw.edu.au*	*Pre-clinic lab, RMB*
Moodle discussions	0.5	Prior to lectures		*Moodle*
Moodle quizzes & videos	0.5	Prior to pracs		*Moodle*

2.1 Course summary

This course will build upon your experiences in the BVisSci course and complete your learning of the basic principles of refraction and ocular health assessment. Aspects of primary optometric care relating specifically to the assessment, analysis and management of more complex refractive errors and the integrity of the eye and visual pathways will be presented both theoretically and in practical terms in an integrated fashion and with particular reference to normal anatomy and physiology of the eye. This course will be delivered by lectures, practical classes and self-directed learning. Brief curriculum: communication skills, eliciting presenting concerns, history and symptoms; refraction and the management of refractive errors, the anterior eye and ocular adnexa, ocular media, the normal fundus, and intraocular pressure; introduction to diagnostic drugs; acquisition of technical skills with fundus lenses, gonioscopy, tonometry; introduction to advanced clinical imaging; professionalism and evidence-based practice.

2.2 Course aims

This course aims to introduce students to the theory and practical aspects of the techniques involved in a routine clinical examination.

2.3 Course learning outcomes (CLO)

At the successful completion of this course you (the student) should be able to:

1. Elicit presenting concerns, history and symptoms using empathetic intentional interviewing skills
2. Know why, when and how to examine the general integrity of the central nervous system and aspects of patient anatomy and posture relating to the needs of the visual system
3. Select and apply appropriate tests to determine the spherical, astigmatic and presbyopic components of the refractive status for a range of presentations and perform a cycloplegic examination where appropriate
4. Understand the classes of diagnostic drugs used during an optometric examination, restrictions on their use by students at UNSW, limitations to their use with respect to a particular patient, instillation techniques
5. Know why, when and how to examine the anterior eye and adnexa and be able to differentiate normal from abnormal
6. Know why, when and how to examine the posterior eye with binocular instruments, and be able to differentiate normal from abnormal
7. Know why, when and how to examine the anterior chamber angle using gonioscopy and grade this
8. Know why, when and how to determine intraocular pressure, and be able to differentiate normal from abnormal based upon population statistics as well as within-user and between-user variations on a range of instrument designs
9. Understand the basis of the various visual field tests and be able to accurately interpret the data and develop a likely clinical diagnosis or management strategy
10. Conduct an effective clinical examination by being able to critique a case study and be able to
    a. integrate the findings of clinical tests to produce a valid clinical management plan
    b. keep accurate records of all findings
    c. interpret the results of diagnostic imaging techniques and identify their clinical application

2.4 Relationship between course and program learning outcomes and assessments

Course Learning Outcome (CLO)	LO Statement	Program Learning Outcome (PLO)	Related Tasks & Assessment
CLO 1	Elicit presenting concerns, history and symptoms using empathetic intentional interviewing skills	PLO 1 PLO 2 PLO 3 PLO 4 PLO 5 PLO 6 PLO 7	Lectures Practical classes Mid-term exam Final exam OSCE
CLO 2	Know why, when and how to examine the general integrity of the central nervous system and aspects of patient anatomy and posture relating to the needs of the visual system	PLO 1 PLO 2 PLO 3 PLO 4 PLO 5 PLO 6 PLO 7	

CLO 3	Select and apply appropriate tests to determine the spherical, astigmatic and presbyopic components of the refractive status for a range of presentations and perform a cycloplegic examination where appropriate	PLO 1 PLO 2 PLO 3 PLO 4 PLO 5 PLO 6 PLO 7	
CLO 4	Understand the classes of diagnostic drugs used during an optometric examination, restrictions on their use by students at UNSW, limitations to their use with respect to a particular patient, instillation techniques	PLO 1 PLO 2 PLO 3 PLO 4 PLO 5 PLO 6 PLO 7	
CLO5	Know why, when and how to examine the anterior eye and adnexa and be able to differentiate normal from abnormal	PLO 1 PLO 2 PLO 3 PLO 4 PLO 5 PLO 6 PLO 7	
CLO6	Know why, when and how to examine the posterior eye with binocular instruments, and be able to differentiate normal from abnormal	PLO 1 PLO 2 PLO 3 PLO 4 PLO 5 PLO 6 PLO 7	
CLO7	Know why, when and how to examine the anterior chamber angle using gonioscopy and grade this	PLO 1 PLO 2 PLO 3 PLO 4 PLO 5 PLO 6 PLO 7	
CLO8	Know why, when and how to determine intraocular pressure, and be able to differentiate normal from abnormal based upon population statistics as well as within-user and between-user variations on a range of instrument designs	PLO 1 PLO 2 PLO 3 PLO 4 PLO 5 PLO 6 PLO 7	
CLO9	Understand the basis of the various visual field tests and be able to accurately interpret the data and develop a likely clinical diagnosis or management strategy	PLO 1 PLO 2 PLO 3 PLO 4 PLO 5 PLO 6 PLO 7	
CLO10	Conduct an effective clinical examination by being able to critique a case study and be able to integrate the findings of clinical tests to produce a valid clinical management plan, keep accurate records of all findings and interpret the results of diagnostic imaging techniques and identify their clinical application	PLO 1 PLO 2 PLO 3 PLO 4 PLO 5 PLO 6 PLO 7	

3. Strategies and approaches to learning

3.1 Learning and teaching activities

Students are required to take part in **Moodle discussions prior to each new lecture topic** in order to facilitate lecture preparation and hence greater understanding in the lecture setting. Lectures will provide the necessary background and theory underpinning content covered by this course. It is expected that students will supplement the content provided in lectures with **recommended reading.**

Prior to attending practical classes, students are required to complete a **Moodle quiz** and, where applicable, **watch the related clinical video on Moodle**. The Moodle quiz endeavours to ensure that students have adequately prepared for the upcoming practical class, while the clinical video can be watched prior to, during and after the practical classes as guidance.

Practical classes give students the opportunity to master the techniques introduced in the lecture. Where students do not complete the required task, they are to return in their own time.

Use of simulation: In order to facilitate the learning of practical skills, the following simulation facilities are available to students enrolled in OPTM6400:

1. Binocular Indirect Ophthalmoscope (EyeSys BIO simulator, room 3.019).

RATIONALE

OPTM6400 builds on the knowledge obtained in the undergraduate program and encourages students to take responsibility for their own learning. While many resources are available e.g. clinical videos, lecture notes, recommended readings, Moodle discussions and smaller supervised practical classes, it is the students' responsibility to ensure that they have achieved the learning outcomes for this course. This will prepare students for the life-long learning that is expected from a health care professional.

3.2 Expectations of students

Students are reminded that UNSW recommends that a 6 units-of-credit course should involve about 150 hours of study and learning activities. The formal learning activities total approximately 50 hours throughout the term and students are expected (and strongly recommended) to do at least the same number of hours of additional study.

Expectations of Students	Some components of this course are compulsory, and you are expected to attend. Attendance at compulsory course components will be monitored by taking a roll. The compulsory course components, and the justification for their compulsory nature, are as follows: • Preparation for lectures and practicals is crucial. It is important and assumed that students will keep up with the required readings, complete pre-prac quizzes, watch relevant Moodle videos and participate in Moodle discussions. • All practical classes are compulsory because they act to reinforce theoretical components of the course, while teaching critical practical clinical skills prior to use in the clinic in the final years of the program. Any absences due to illness must be accounted for by a medical certificate presented to A/Prof Markoulli (and may be required to be sent to Student Central pending the number of absences). Attendance will be monitored by taking the roll.

	• There can be no swapping between practical groups, including practicals that involve cycloplegia or dilation. • Punctuality is expected. Lateness for practical classes may be recorded as an absence. Contact the Laboratory Supervisor Dale Larden d.larden@unsw.edu.au if you are running late so your partner can be put to alternate work. The University uses email as an official form of communication for students. All UNSW students have their own email account. The School of Optometry and Vision Science will also make use of this form of communication. It is extremely important that you know how to use your Zmail and ensure that you check it regularly. You are advised to link your official UNSW email address to your habitual email address (e.g. hotmail). You will miss out on vital information from the School and University if you do not check your Zmail. For more information or if you are having connection or access problems, see: **IT Service Centre** https://www.myit.unsw.edu.au/ Telephone: 02 9385 1333 Contact Us: https://www.myit.unsw.edu.au/contact-us

4. Course schedule and structure

Week	Lecture 1	Lecture 2	Lecture 3	Prac 1	Prac 2
Week 1	Intro & Communication skills	History and Symptom-taking	Entrance tests & cranial nerve assessment	Communication skills and History & Symptom taking	Entrance tests & cranial nerve assessment
Week 2	Retinoscopy	Distance refraction	Distance refraction	Retinoscopy	Retinoscopy + distance refraction
Week 3	Near refraction	Special techniques & myopia control	Binocular Vision	Retinoscopy + Distance refraction	Retinoscopy + Distance + Near refraction
Week 4	Mid-term exam	Diagnostic drugs	Clinical slit-lamp	Slit-lamp + tonometry set-up	Tonometry
Week 5	Dry eye assessment	Tonometry		Tonometry	Tonometry
Week 6	Gonioscopy	Mid-term feedback		Gonioscopy	Gonioscopy
Week 7	Fundoscopy	BIO		Fundoscopy / BIO	Fundoscopy / BIO
Week 8	Visual fields	Visual fields		Fundoscopy / BIO	Visual fields
Week 9	Colour Vision	OSCE guidance		Full consult	Full consult
Week 10	Revision	Revision		Free, supervised practice	Free, supervised practice

Exam Period: 28 April – 11 May

4.1 School managed supplementary exams period

FOR TERM 1:

- STAGE 1-4* COURSES: WEDNESDAY, 17 MAY 2023 – FRIDAY, 19 MAY 2023
- THERE WILL BE NO SUPPLEMENTARY EXAMINATIONS FOR STAGE 5 STUDENTS IN TERM 1 2023

Supplementary examinations will be held at the scheduled time only. If students who are granted supplementary examinations do not attend, a failure will be recorded for that course. **Students should not make travel arrangements, or any other commitments, before establishing whether or not they have supplementary examinations. Ignorance of these procedures, interstate, overseas or any other absence will not be accepted as an excuse. But usual Special Consideration still applies.**

If additional assessment is not scheduled, this does NOT indicate whether or not a student has passed or failed the course. Results will be received in the usual way. Please do not contact the School in this regard.
Please note the above applies to OPTM and VISN courses only. Any information on supplementary examinations for servicing courses (e.g. CHEM****) is the responsibility of the School conducting the course.

* Stage 4 includes courses in the first year of the MClinOptom program.

5. 5. Assessment

5.1 Assessment tasks

Task	Knowledge & abilities assessed	Assessment Criteria	% of total mark	Date of		Feedback		
				Release	Submission	WHO	WHEN	HOW
NEED >50% IN THE FINAL EXAM AND THE OSCE TO PASS THE COURSE								
Mid-term exam	This mid-term exam will assess the theory aspects of the first 3 weeks of the course.	Multiple Choice Questions	20%	Week 4, 6th March, 11AM	N/A	A/Prof Maria Markoulli	Week 6, Lecture 2	Marks and answers discussed in Week 6, lecture 2
Final written theory exam	Demonstrate knowledge of the theoretical and practical aspects of the course.	Multiple Choice Questions	40%	During exam period	During exam period	Final marks released on my.unsw.edu.au for the whole course (not the exam separately)		
Prac exam - OSCE	This exam will be held during the exam period and will assess all practical aspects of the course.	Competency (>50% overall) (see Moodle for stations).	40%	During exam period	Final marks released on my.unsw.edu.au for the whole course (not the exam separately). The pass mark for the OSCE will be established by a process known as 'standard setting', in which a panel of experienced academic staff collectively determines the minimum expected level of achievement on the specific set of questions used in an exam. This means that after the examination the students' raw scores (for the whole cohort) may be adjusted, upwards or downwards, depending on where the minimum standard mark is set. This allows the default 50% pass mark to represent a consistent level of minimum standard achievement across exams, subjects and cohorts. Standard setting is a common assessment practice and is used by all medical schools in Australia.		
Weekly quizzes	Demonstrates preparation for the practical class	Multiple Choice Questions. Must be completed prior to coming to prac class	No mark allocated	Prior to each new practical topic	Prior to each new practical topic	A/Prof Maria Markoulli	Immediately after submission	Moodle marks
Weekly Moodle discussions	Demonstrates preparation for the lecture topic	Contribution to the Moodle discussion	No mark allocated	Prior to each new lecture topic	Prior to each new lecture topic	A/Prof Maria Markoulli	During the week leading up to that lecture	Discussion during lecture and via Moodle

Further information

UNSW grading system: https://student.unsw.edu.au/grades

UNSW assessment policy: https://student.unsw.edu.au/assessment

5.2 Submission of assessment tasks

Late Submission

UNSW has standard late submission penalties as outlined in the UNSW Assessment Implementation Procedure, with no permitted variation. All late assignments (unless extension or exemption previously agreed) will be penalised by 5% of the maximum mark per day (including Saturday, Sunday and public holidays). For example, if an assessment task is worth 30 marks, then 1.5 marks will be lost per day (5% of 30) for each day it is late. So, if the grade earnt is 24/30 and the task is two days late the student receives a grade of 24 – 3 marks = 21 marks.

Late submission is capped at 5 days (120 hours). This means that a student cannot submit an assessment more than 5 days (120 hours) after the due date for that assessment.

Special Consideration

If you experience a short-term event beyond your control (exceptional circumstances) that impacts your performance in a particular assessment task, you can apply for Special Considerations.

You must apply for Special Consideration **before** the start of your exam or due date for your assessment, except where your circumstances of illness or misadventure stop you from doing so.

If your circumstances stop you from applying before your exam or assessment due date, you must **apply within 3 working days** of the assessment, or the period covered by your supporting documentation.

More information can be found on the Special Consideration website.

6. Academic integrity, referencing and plagiarism

Referencing is a way of acknowledging the sources of information that you use to research your assignments. You need to provide a reference whenever you draw on someone else's words, ideas or research. Not referencing other people's work can constitute plagiarism.

Further information about referencing styles can be located at https://student.unsw.edu.au/referencing

Academic integrity *is fundamental to success at university. Academic integrity can be defined as a commitment to six fundamental values in academic pursuits: honesty, trust, fairness, respect, responsibility and courage.*[1] *At UNSW, this means that your work must be your own, and others' ideas should be appropriately acknowledged. If you don't follow these rules, plagiarism may be detected in your work.*

Further information about academic integrity and ***plagiarism*** *can be located at:*

- *The Current Students site* https://student.unsw.edu.au/plagiarism*, and*
- *The ELISE training site* https://subjectguides.library.unsw.edu.au/elise

The Conduct and Integrity Unit provides further resources to assist you to understand your conduct obligations as a student: https://student.unsw.edu.au/conduct.

[1] International Center for Academic Integrity, 'The Fundamental Values of Academic Integrity', T. Fishman (ed), Clemson University, 2013.

7. Readings and resources

See Moodle for required reading:

1. A Practical Manual will be available on Moodle – please print a copy and bring with you to every prac class
2. Scheiman and Wick's Clinical Management of Binocular Vision
3. Clinical Procedures in Primary Eye Care by David B. Elliott
4. Primary Care Optometry by Theodore Grosvenor
5. Kiely: Optometric competencies[2]
6. Lian et al.: disinfection procedures[3]
7. Gutteridge and Cole: Perspectives on MIgraines[4]
8. Martonyi, Bahn, Meyer, *Clinical Slit Lamp Biomicroscopy and Photo Slit Lamp Biomicrography*, Time One Ink, Ltd.
9. NSW Health Hand Wash Policy[5]
10. Optometrists' Code of Conduct[6]
11. *Australian guidelines for the prevention and control of infection in healthcare*[7]
12. Moodle videos for each procedure prior to coming to the practical classes
13. Moodle discussion participation
14. Recommended readings will also be included in each set of lecture notes and in a tab on Moodle. Please see Moodle for additional reading requirements.

8. Administrative matters

Student enquiries should be submitted via student portal https://portal.insight.unsw.edu.au/web-forms/

9. Additional support for students

- The Current Students Gateway: https://student.unsw.edu.au/
- Academic Skills and Support: https://student.unsw.edu.au/academic-skills
- *Student Wellbeing and Health* https://www.student.unsw.edu.au/wellbeing
- UNSW IT Service Centre: https://www.myit.unsw.edu.au/services/students
- *UNSW Student Life Hub:* https://student.unsw.edu.au/hub#main-content
- *Student Support and Development:* https://student.unsw.edu.au/support
- *IT, eLearning and Apps:* https://student.unsw.edu.au/elearning
- *Student Support and Success Advisors:* https://student.unsw.edu.au/advisors
- *Equitable Learning Services (Formerly Disability Support Unit)*: https://student.unsw.edu.au/els
- *Transitioning to Online Learning* https://www.covid19studyonline.unsw.edu.au/
- *Guide to Online Study* https://student.unsw.edu.au/online-study

[2] Kiely and Slater, *Clinical and Experimental Optometry*, 98 (1), 65–89, 2015: http://onlinelibrary.wiley.com/doi/10.1111/cxo.12216/abstract
[3] Lian et al. Clin Exp Optom 2017; 100: 341–356
[4] Gutteridge and Cole, *Clinical and Experimental Optometry* 2001; 84: 2: 56-70
[5] http://www0.health.nsw.gov.au/policies/pd/2010/pdf/PD2010_058.pdf
[6] www.**optometry**board.gov.au/documents/default.aspx?record...AP.
[7] http://www.nhmrc.gov.au/_files_nhmrc/publications/attachments/cd33_complete.pdf