OPTM6400
OPTOMETRIC PRECLINICAL PRACTICE

Course Outline
Term 1, 2023

School of Optometry and Vision Science
Faculty of Medicine & Health
# Table of Contents

1. **Staff** .................................................................................................................. 3

2. **Course information** ............................................................................................ 3
   2.1 Course summary .................................................................................................. 3
   2.2 Course aims ........................................................................................................ 3
   2.3 Course learning outcomes (CLO) ....................................................................... 3
   2.4 Relationship between course and program learning outcomes and assessments ........................................................................................................... 4

3. **Strategies and approaches to learning** ............................................................... 6
   3.1 Learning and teaching activities ......................................................................... 6
   3.2 Expectations of students ..................................................................................... 6

4. **Course schedule and structure** .......................................................................... 8
   4.1 School managed supplementary exams period .................................................. 9

5. **Assessment** ......................................................................................................... 10
   5.1 Assessment tasks ............................................................................................... 10
   5.2 Submission of assessment tasks ......................................................................... 11

6. **Academic integrity, referencing and plagiarism** .............................................. 11

7. **Readings and resources** .................................................................................... 12

8. **Administrative matters** ..................................................................................... 12

9. **Additional support for students** ........................................................................ 12
1. **Staff**

<table>
<thead>
<tr>
<th>Position</th>
<th>Name</th>
<th>Email</th>
<th>Consultation times and locations</th>
<th>Contact Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course Convenor</td>
<td>A/Prof Maria Markoulli</td>
<td><a href="mailto:m.markoulli@unsw.edu.au">m.markoulli@unsw.edu.au</a></td>
<td>By appointment</td>
<td>Please contact via Moodle private message, not email</td>
</tr>
</tbody>
</table>

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:

<table>
<thead>
<tr>
<th>Component</th>
<th>HPW</th>
<th>Time</th>
<th>Day</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lectures</td>
<td>3 (weeks 1-4) 2 (weeks 5-10)</td>
<td>Asynchronous</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Pre-clinical laboratory</td>
<td>4</td>
<td>Synchronous</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-clinical laboratory 1</td>
<td>2</td>
<td>See my.unsw.edu.au</td>
<td>See my.unsw.edu.au</td>
<td>Pre-clinic lab, RMB</td>
</tr>
<tr>
<td>Pre-clinical laboratory 2</td>
<td>2</td>
<td>See my.unsw.edu.au</td>
<td>See my.unsw.edu.au</td>
<td>Pre-clinic lab, RMB</td>
</tr>
<tr>
<td>Moodle discussions</td>
<td>0.5</td>
<td>Prior to lectures</td>
<td></td>
<td>Moodle</td>
</tr>
<tr>
<td>Moodle quizzes &amp; videos</td>
<td>0.5</td>
<td>Prior to prac</td>
<td></td>
<td>Moodle</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Course Learning Outcome (CLO)</th>
<th>LO Statement</th>
<th>Program Learning Outcome (PLO)</th>
<th>Related Tasks &amp; Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLO 1</td>
<td>Elicit presenting concerns, history and symptoms using empathetic intentional interviewing skills</td>
<td>PLO 1 PLO 2 PLO 3 PLO 4 PLO 5 PLO 6 PLO 7</td>
<td>Lectures Practical classes Mid-term exam Final exam OSCE</td>
</tr>
<tr>
<td>CLO 2</td>
<td>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</td>
<td>PLO 1 PLO 2 PLO 3 PLO 4 PLO 5 PLO 6 PLO 7</td>
<td></td>
</tr>
</tbody>
</table>
| 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 |
| CLO 5 | 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 |
| CLO 6 | 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 |
| CLO 7 | 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 |
| CLO 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 | PLO 1  
PLO 2  
PLO 3  
PLO 4  
PLO 5  
PLO 6  
PLO 7 |
| CLO 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 | PLO 1  
PLO 2  
PLO 3  
PLO 4  
PLO 5  
PLO 6  
PLO 7 |
| CLO 10 | 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.

<table>
<thead>
<tr>
<th>Expectations of Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>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:</td>
</tr>
<tr>
<td>• 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.</td>
</tr>
<tr>
<td>• 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.</td>
</tr>
</tbody>
</table>
• 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
# Course schedule and structure

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

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

<table>
<thead>
<tr>
<th>Task</th>
<th>Knowledge &amp; abilities assessed</th>
<th>Assessment Criteria</th>
<th>% of total mark</th>
<th>Date of Release</th>
<th>Submission</th>
<th>WHO</th>
<th>WHEN</th>
<th>HOW</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mid-term exam</td>
<td>This mid-term exam will assess the theory aspects of the first 3 weeks of the course.</td>
<td>Multiple Choice Questions</td>
<td>20%</td>
<td>Week 4, 6th March, 11AM</td>
<td>N/A</td>
<td>A/Prof Maria Markoulli</td>
<td>Week 6, Lecture 2</td>
<td>N/A</td>
</tr>
<tr>
<td>Final written theory exam</td>
<td>Demonstrate knowledge of the theoretical and practical aspects of the course.</td>
<td>Multiple Choice Questions</td>
<td>40%</td>
<td>During exam period</td>
<td>During exam period</td>
<td>Final marks released on my.unsw.edu.au for the whole course (not the exam separately)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prac exam - OSCE</td>
<td>This exam will be held during the exam period and will assess all practical aspects of the course.</td>
<td>Competency (&gt;50% overall) (see Moodle for stations)</td>
<td>40%</td>
<td>During exam period</td>
<td>Final marks released on my.unsw.edu.au for the whole course (not the exam separately)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weekly quizzes</td>
<td>Demonstrates preparation for the practical class</td>
<td>Multiple Choice Questions. Must be completed prior to coming to prac class</td>
<td>No mark allocated</td>
<td>Prior to each new practical topic</td>
<td>A/Prof Maria Markoulli</td>
<td>Immediately after submission</td>
<td>Moodle marks</td>
<td></td>
</tr>
<tr>
<td>Weekly Moodle discussions</td>
<td>Demonstrates preparation for the lecture topic discussion</td>
<td>Contribution to the Moodle discussion. No mark allocated</td>
<td>Prior to each new lecture topic</td>
<td>Prior to each new lecture topic</td>
<td>A/Prof Maria Markoulli</td>
<td>During the week leading up to that lecture</td>
<td>Discussion during lecture and via Moodle</td>
<td></td>
</tr>
</tbody>
</table>

NEED >50% IN THE FINAL EXAM AND THE OSCE TO PASS THE COURSE

Further information

UNSW grading system: [https://student.unsw.edu.au/grades](https://student.unsw.edu.au/grades)
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 earned is 24/30 and the task is two days late the student receives a grade of $24 - 3 = 21$ 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.

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
6. Lian et al.: disinfection procedures
7. Gutteridge and Cole: Perspectives on Migraines
9. NSW Health Hand Wash Policy
10. Optometrists’ Code of Conduct
11. Australian guidelines for the prevention and control of infection in healthcare
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
- IT, eLearning and Apps: https://student.unsw.edu.au/elearning
- Student Support and Development: https://student.unsw.edu.au/support
- 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

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4 Gutteridge and Cole, *Clinical and Experimental Optometry* 2001; 84: 2: 56-70