



Course Outline

OPTM3133

VISION SCIENCE IN THE CONSULTING ROOM

Optometry and Vision Science

Faculty of Science

Term 2, 2019

1. Staff

Position	Name	Email	Consultation times and locations	Contact Details
Course Convenor	Dr Maria Markoulli	m.markoulli@unsw.edu.au	By appointment	m.markoulli@unsw.edu.au
Lecturer – binocular vision	Dr Lisa Asper	l.asper@unsw.edu.au	By appointment	l.asper@unsw.edu.au

2. Course information

Units of credit: 6

Pre-requisite(s): OPTM2133: The Clinical Environment

Teaching times and locations: Please refer to Moodle and my.unsw.edu.au

2.1 Course summary

This course introduces the vision science in the consulting room. Students will be taught how to assess cranial nerves, perform objective refraction and basic refraction activities. Students will also learn how to investigate accommodation and conduct binocular vision testing procedures. This course will ensure that students are ready for the Stage 4 pre-clinical courses.

2.2 Course aims

The introduction of the new Term 2 Stage 3 course 'Vision Science in the Consulting Room' aims to provide topics suited to the BSc Vis Sci major program as well as those that will progress to the Master of Clinical Optometry program. This course covers a wide spread of topics without the depth offered in the Master of Clinical Optometry program. Topics to be covered include cranial nerve assessment, retinoscopy, basic refraction activities and investigating accommodation and binocular vision. This course will ensure that students are ready for the Stage 4 pre-clinical courses.

2.3 Course learning outcomes (CLO)

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

1. 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
2. Select and apply appropriate tests to determine the spherical refractive status of the eye
3. Examine the binocular vision status including accommodation, vergence, stereopsis and fixation disparity and understand the relationships of the findings
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

2.4 Relationship between course and program learning outcomes and assessments

The program learning outcome (PLO) for 3181 – Vision Science – can be found on the UNSW Handbook: <http://www.handbook.unsw.edu.au/undergraduate/programs/2018/3182.html>

Course Learning Outcome (CLO)	LO Statement	Program Learning Outcome (PLO)	Related Tasks & Assessment
CLO 1	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.	PLO1 PLO2 PLO6 PLO7	Lectures and Pracs Mid-sem exam, prac exam and final exam
CLO 2	Select and apply appropriate tests to determine the spherical refractive status of the eye	PLO1 PLO2 PLO6 PLO7	Lectures and Pracs Mid-sem exam, prac exam and final exam
CLO 3	Examine the binocular vision status including accommodation, vergence, stereopsis and fixation disparity	PLO1 PLO2 PLO6 PLO7	Lectures and Pracs Prac exam and final exam
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	PLO1 PLO2 PLO6 PLO7	Lectures and Pracs Mid-sem exam, prac exam and final exam

3. Strategies and approaches to learning

3.1 Learning and teaching activities

This course will be delivered via lectures and practical classes. Prior to attending the lectures, students are required to discuss the content on Moodle. Prior to attending the practical classes, students are required to watch clinical videos on the technique and complete a Moodle quiz on the content.

OPTM3133 builds on the knowledge obtained in the first and second year 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 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

Expectations of Students	<p>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.</p> <p>The compulsory course components, and the justification for their compulsory nature, are as follows:</p> <ul style="list-style-type: none">• 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 Dr 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 (9385 4623) if you are running late so your partner can be put to alternate work. <p>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.</p> <p>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.</p> <p>For more information or if you are having connection or access problems, see:</p> <p>IT Service Centre www.it.unsw.edu.au/ Telephone: 02 9385 1333 Email: itservicecentre@unsw.edu.au</p>
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4. Course schedule and structure

Week	Date	Lecture 1 hr	Lecture 1 hr	2 hr Practical	2 hr Practical
	Week starting	Tuesday, 2-3PM	Friday, 11AM-12PM	see my.unsw.edu.au	see my.unsw.edu.au
1	3 June	Course intro & Cranial Nerve Assessment & Entrance tests Dr Maria Markoulli & online lecture	Retinoscopy Dr Patricia Arthur	Self-directed practice – the lab is available to you in your scheduled time	Cranial nerve assessment and entrance tests
2	10 June	Distance refraction – BVS, fan and block Dr Maria Markoulli	Distance refraction – BVS, fan and block Dr Maria Markoulli	PUBLIC HOLIDAY – NO PRACS	Retinoscopy
3	17 June	Special techniques & cycloplegic refraction Dr Maria Markoulli	Clinical Slit-lamp biomicroscopy Dr Maria Markoulli	Retinoscopy	Distance Refraction
4	24 June	Tonometry (non-contact) Dr Maria Markoulli	Mid-semester exam Dr Maria Markoulli	Distance Refraction	Distance Refraction
5	1 July	Feedback & Vision Science careers Dr Maria Markoulli & Guests	Introduction to BV; Overview of deviations; Ocular motility testing Dr Lisa Asper	Cycloplegic Refraction (NO CONTACT LENS WEAR) – same partners as previous prac	Cycloplegic Refraction (NO CONTACT LENS WEAR) – same partners as previous prac
6	8 July	Stereopsis and stereoacuity; Accommodation Dr Lisa Asper	Accommodation Dr Lisa Asper	Slit-lamp biomicroscopy	Tonometry
7	15 July	Accommodation continued; Vergence Dr Lisa Asper	Vergence; Measurement of deviations Dr Lisa Asper	PRAC ASSESSMENT (NO CONTACT LENS WEAR)	Ocular motility & ocular deviations; Stereopsis and testing of stereoacuity
8	22 July	Measurement of deviations; vergence lectures Dr Lisa Asper	Finish vergence lectures; fixation disparity Dr Lisa Asper	Accommodation testing	Vergence testing - includes phorias
9	29 July	Fixation disparity; accom/vergence interaction Dr Lisa Asper	A/C interactions, adaptation, control systems Dr Lisa Asper	Vergence testing - includes phorias	Fixation disparity and PRAC ASSESSMENT (NO CONTACT LENS WEAR)
10	5 August	Revision Dr Lisa Asper	Revision Dr Maria Markoulli	Revision	Revision – same partner as previous prac

5. Assessment

5.1 Assessment tasks

Task	Knowledge & abilities assessed	Assessment Criteria	% of total mark	Date of		Feedback		
				Release	Submission	WHO	WHEN	HOW
Mid-semester exam	Demonstrate knowledge of the theoretical and practical aspects of refraction techniques	Multiple Choice Questions and short answer exam	10%	Week 4, lecture 2	N/A	Dr Maria Markoulli	Week 5, Lecture 1	Marks and answers discussed in class
Weekly quizzes	Demonstrates preparation for the practical class	Multiple Choice Questions. Must be completed prior to accessing that week's videos and coming to prac class	Formative assessment only	Prior to each new practical topic	Prior to each new practical topic	Dr Maria Markoulli	Immediately after submission	Moodle marks
Weekly Moodle discussions	Demonstrates preparation for the lecture topic	Contribution to the Moodle discussion	Formative assessment only	Prior to each new lecture topic	Prior to each new lecture topic	Dr Maria Markoulli	During the week leading up to that lecture	Discussion during lecture and via Moodle
Final written theory exam: Need >65% to pass OPTM3133	Demonstrate knowledge of the theoretical and practical aspects of refraction and ocular health	Multiple Choice Questions, short answer exam and essay responses	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: Need >50% in each component listed in knowledge and abilities in order to pass OPTM3133.	Entrance tests Cranial nerves Refraction Binocular Vision	Competency in each technique.	1. Prac assessment 1 (10%) 2. Prac assessment 2 (10%) 3. OSCE (30%)	1. Week 7, prac 1 2. Week 9, prac 2 3. During exam period	Final marks released on my.unsw.edu.au for the whole course (not the exam separately)			

Further information

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

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

<p>Assessment Procedures</p> <p>UNSW Assessment Policy¹</p>	<p>SCHOOL OF OPTOMETRY AND VISION SCIENCE, UNSW</p> <p>SUPPLEMENTARY EXAMINATION INFORMATION, 2019</p> <p>SPECIAL CONSIDERATION</p> <p>On some occasions, sickness, misadventure or other circumstances beyond your control may prevent you from completing a course requirement, such as attending a formal end of semester examination. In these cases you may apply for Special Consideration. UNSW operates under a Fit to Sit/ Submit rule for all assessments. If a student wishes to submit an application for special consideration for an exam or assessment, the application must be submitted prior to the start of the exam or before an assessment is submitted. If a student sits the exam/ submits an assignment, they are declaring themselves well enough to do so. The application must be made via Online Services in myUNSW. Log into myUNSW and go to My Student Profile tab > My Student Services > Online Services > Special Consideration. Submit the application (including supporting documentation) to UNSW Student Central.</p> <p>CHRONIC ISSUES AND PRE-EXISTING CONDITIONS</p> <p>If you have chronic issues and pre-existing conditions, we recommend you apply for Educational adjustments for disability support through Disability Services.</p> <p>Register for Disability Services at https://student.unsw.edu.au/disability-registration</p> <p>Absence from a final examination is a serious matter, normally resulting in a Fail (FL) grade. If you are medically unfit to attend an examination, YOU MUST CONTACT THE SCHOOL DIRECTLY ON THE DAY OF THE EXAMINATION TO ADVISE OF THIS (telephone 02 9385 4639, email: optometry@unsw.edu.au). You must also submit a Request for Special Consideration application as detailed on the UNSW website: https://student.unsw.edu.au/special-consideration.</p> <p>It is the responsibility of the student to consult the web site or noticeboard to ascertain whether they have supplementary examinations. This information WILL NOT be conveyed in ANY other manner. Interstate, overseas or any other absence cannot be used as an excuse. This information will be available on the School web site at http://www.optometry.unsw.edu.au (do not confuse the School website with the myUNSW website) and posted on the notice board on Level 3. This information will be available as soon as possible after the School Examination Committee meeting.</p> <p>SUPPLEMENTARY EXAMINATIONS FOR 2019 WILL BE HELD AS FOLLOWS:</p> <p>FOR TERM 1:</p> <ul style="list-style-type: none"> • STAGE 1-4* COURSES: FRIDAY, 24 MAY 2019 – SATURDAY, 25 MAY 2019 • THERE WILL BE NO SUPPLEMENTARY EXAMINATIONS FOR STAGE 5 STUDENTS IN TERM 1 2019
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FOR TERM 2:

- **STAGE 1-3 COURSES: FRIDAY, 6 SEPTEMBER 2019 - SATURDAY, 7 SEPTEMBER 2019**
- STAGE 4* COURSES: FRIDAY, 6 SEPTEMBER 2019
- THERE WILL BE NO SUPPLEMENTARY EXAMINATIONS FOR STAGE 5 STUDENTS IN TERM 2 2019

FOR TERM 3:

- STAGE 5 COURSES ONLY: DURING THE WEEK OF MONDAY, 9 DECEMBER 2019 – FRIDAY, 13 DECEMBER 2019.
- STAGE 1-4* COURSES: FRIDAY, 20 DECEMBER 2019, SATURDAY. 21 DECEMBER AND MONDAY, 23 DECEMBER 2019.

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.

School of Optometry and Vision Science, UNSW, 14 March 2019

¹[UNSW Assessment Policy](#)

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 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.² 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 student.unsw.edu.au/plagiarism, and
- The *ELISE* training site 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: student.unsw.edu.au/conduct.

²International Center for Academic Integrity, 'The Fundamental Values of Academic Integrity', T. Fishman (ed), Clemson University, 2013.

7. Readings and resources

1. A Practical Manual will be available on Moodle.
2. Scheiman and Wick's Clinical Management of Binocular Vision
3. Kiely: Optometric competencies¹
4. Lian et al.: disinfection procedures²
5. Gutteridge and Cole: Perspectives on Mlgraines³
6. Martonyi, Bahn, Meyer, *Clinical Slit Lamp Biomicroscopy and Photo Slit Lamp Biomicrography*, Time One Ink, Ltd.
7. NSW Health Hand Wash Policy⁴
8. Optometrists' Code of Conduct⁵
9. *Australian guidelines for the prevention and control of infection in healthcare*⁶
10. Moodle videos for each procedure prior to coming to the practical classes
11. Moodle discussion participation
12. Recommended readings will also be included in each set of lecture notes

8. Administrative matters

Required Equipment, Training and Enabling Skills

Equipment Required	
	<ul style="list-style-type: none"> ▪ This will be listed under each prac
	<ul style="list-style-type: none"> ▪ Revision of clinical videos prior to taking part in practical classes ▪ Completion of quiz prior to taking part in practical classes ▪ Moodle discussions prior to attending lectures

¹ Kiely and Slater, *Clinical and Experimental Optometry*, 98 (1), 65–89, 2015: <http://onlinelibrary.wiley.com/doi/10.1111/cxo.12216/abstract>

² Lian et al. *Clin Exp Optom* 2017; 100: 341–356

³ Gutteridge and Cole, *Clinical and Experimental Optometry* 2001; 84: 2: 56-70

⁴ http://www0.health.nsw.gov.au/policies/pd/2010/pdf/PD2010_058.pdf

⁵ www.optometryboard.gov.au/documents/default.aspx?record...AP.

⁶ http://www.nhmrc.gov.au/_files_nhmrc/publications/attachments/cd33_complete.pdf

Enabling Skills Training Required to Complete this Course	<ul style="list-style-type: none"> ▪ Use of Virtual Refractor ▪ Students are expected to be computer and information literate at this stage of the program. Students should have completed the ELISE course (see UNSW library website) or similar information literacy courses offered by UNSW (eg LILT or BIOS). <p>Students need to also aware that some procedures, involve direct contact with the eye. All Health and Safety (HS) rules apply and must be adhered to.</p>
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Course Evaluation and Development

Student feedback is gathered periodically by various means. Such feedback is considered carefully with a view to acting on it constructively wherever possible. This course outline conveys how feedback has helped to shape and develop this course.

Mechanisms of Review	Last Review Date	Comments or Changes Resulting from Reviews
Major Course Review	<i>To be reviewed</i>	The move from a BSc/BOptom to a BVis Sci/MClinOpt resulted in the creation of this course, which has not been run before. It covers the basics of refraction and binocular vision without covering diagnosis. In order to adapt to the new 10-week term, students are expected to self-direct their learning to a greater extent than previously. More online notes, videos of clinical techniques and self-assessment (such as study questions and Moodle quizzes) have been incorporated into the course.

Work Health and Safety⁴	<p>Information on relevant Occupational Health and Safety policies and expectations both at UNSW and if there are any school specific requirements.</p> <p>Information on relevant policies and expectations is provided during General Safety Induction training. A copy of the Induction booklet distributed at this training is available from the School of Optometry and Vision Science office (RMB3.003) and the School website at: https://www.optometry.unsw.edu.au/whs/work-health-and-safety</p>		
Equity and Diversity	<p>Those students who have a disability or are dealing with personal circumstances that affect their study that requires some adjustment in their teaching or learning environment are encouraged to discuss their study needs with the course Convenor prior to, or at the commencement of, their course, or with the Equity Officer (Disability) in the Equity and Diversity Unit (9385 4734 or http://www.studentequity.unsw.edu.au/).</p> <p>Issues to be discussed may include access to materials, signers or note-takers, the provision of services and additional exam and assessment arrangements. Early notification is essential to enable any necessary adjustments to be made.</p>		
Student Complaint Procedure⁴	School Contact	Faculty Contact	University Contact
	Prof. Helen Swarbrick h.swarbrick@unsw.edu.au	A/Prof Janelle Wheat Deputy Dean (Education)	Student Integrity Unit (SIU) Telephone 02 9385 8515, email

	Tel: 9385 4373	j.wheat@unsw.edu.au Tel: 9385 0752 Or Dr Gavin Edwards Associate Dean (Academic Programs) g.edwards@unsw.edu.au Tel: 9385 4652	studentcomplaints@unsw.edu.au
University Counselling and Psychological Services⁵	Information on Counselling and Psychological Services [CAPS] is available at: https://www.counselling.unsw.edu.au/ Tel: 9385 5418		

³myExperience process: <https://teaching.unsw.edu.au/myexperience>

⁴[UNSW OHS Home page](#)

⁵[Student Complaint Procedure](#)

⁶[University Counselling and Psychological Services](#)

9. Additional support for students

- The *Current Students* Gateway: student.unsw.edu.au
- Academic Skills and Support: student.unsw.edu.au/skills
- Student Wellbeing, Health and Safety: student.unsw.edu.au/wellbeing
- Disability Support Services: student.unsw.edu.au/disability
- UNSW IT Service Centre: www.it.unsw.edu.au/students