

# **OPTM6411**

## **Contact Lenses**

Course Outline  
**Term 2, 2022**

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/ Lecturer	Dr Vinod Maseedupally	<a href="mailto:vinodm@unsw.edu.au">vinodm@unsw.edu.au</a>	By appointment	By email only
Practical demonstrators	Dr Donna La Hood Ms Fatima Iqbal Ms Rene Cheung Mr Adam Samuels	Contact via course convenor	During prac classes	
Other teaching staff	Dr Nicole Carnt	<a href="mailto:n.carnt@unsw.edu.au">n.carnt@unsw.edu.au</a>	By appointment	By email only
	Dr Fiona Stapleton Dr Eric Papas Dr Alex Hui Ms Lily Ho	Contact via course convenor and during webinars		

## 2. Course information

**Units of credit:** 6

**Pre-requisite(s):** OPTM6400 and OPTM6413, or completion of OPTM3211, OPTM3231, PHAR3306, and VISN3211

**Co-requisite:** OPTM6412

**Teaching times and locations:**

<http://timetable.unsw.edu.au/2022/OPTM6411.html#S2S>

Component/Weeks	Hours per week (approximate)	Time	Day	Location
<b>LECTURES</b>				
Weeks 1 -2	3 HPW	-	-	Moodle
Weeks 3 - 4	4 HPW	-	-	Moodle
Weeks 5 - 6	3 HPW	-	-	Moodle
Weeks 7 - 8	2 HPW	-	-	Moodle
Week 9	3 HPW	-	-	Moodle
<b>WEBINARS</b>				
Weeks	2 HPW			
<b>PRACTICALS/LAB WORK</b>				
Group 1	3 hours	9 AM to 12 PM	Tuesdays	Rupert Myer Building (North Wing) Room 2.009, Pre-clinical lab
Group 2	3 hours	2 PM to 5 PM	Tuesdays	
Group 3	3 hours	11 AM to 2 PM	Fridays	
Group 4	3 hours	2 PM to 5 PM	Fridays	

## 2.1 Course summary

This course will extend your knowledge and interest in contact lenses by developing your theoretical and practical understanding of the design of rigid and soft spherical and toric lenses, contact lens fitting principles, and the clinical assessment and optimisation of contact lens fittings. It builds on the Bachelor of Vision Science, and OPTM6400 Optometric Preclinical Practice, and will extend primary care consulting room technical skills into the optometric specialty of contact lenses. There will be a strong emphasis on the acquisition of specific contact lens-related clinical skills, together with problem solving and clinical decision making in the fitting of both rigid and soft contact lenses. Specific complications of contact lens wear will be discussed, along with strategies to manage and avoid adverse effects. The course will include lectures, practical classes, assignments, and self-directed learning.

## 2.2 Course aims

The course aims to introduce contact lens theory and clinical skills through a series of lectures and practical classes. Specific aims are to develop and instil:

- knowledge about the designs and parameters of rigid and soft contact lenses, and the forces that govern their performance on the eye;
- appreciation of patient-related factors in contact lens fitting;
- competence in handling rigid and soft contact lenses, including insertion and removal;
- a strong theoretical understanding of the underlying fitting principles for rigid and soft spherical and toric contact lenses;
- practical skills in assessing and optimising rigid and soft spherical contact lens fittings;
- appreciation of the important material properties of rigid and soft lenses and how they are measured;
- adverse effects of rigid and soft contact lenses, their etiology, diagnosis and management.

## 2.3 Course learning outcomes (CLO)

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

1. Select appropriate contact lenses based on patient needs, lifestyle and their eye and systemic health statuses
2. Evaluate the effect of contact lens wear on convergence demand, accommodation demand and image magnification
3. Assess anterior eye shape and health to evaluate suitability for contact lens wear
4. Demonstrate appropriate handling, insertion and removal of rigid and soft contact lenses
5. Identify the differences between rigid and soft lens fitting characteristics and philosophies
6. Evaluate rigid and soft lens fittings and optimise lens fitting by manipulating lens parameters
7. Describe appropriate contact lens care and maintenance to a prospective lens wearer and be able to assess compliance (contact lens adherence)
8. Identify, diagnose and appropriately manage the effects of soft and rigid contact lens wear on anterior eye including contact lens related complications

## 2.4 Relationship between course and program learning outcomes and assessments

Course Learning Outcome (CLO)	LO Statement	Related Tasks & Assessment
CLO 1	Select appropriate contact lenses based on patient needs, lifestyle and their eye and systemic health statuses	Optics assignment Theory examination Report on patient suitability Discussion forum
CLO 2	Evaluate the effect of contact lens wear on convergence demand, accommodation demand and image magnification	Optics assignment Theory examination Report on patient suitability Discussion forum
CLO 3	Assess anterior eye shape and health to evaluate suitability for contact lens wear	Report on patient suitability Discussion forum Theory examination
CLO 4	Demonstrate appropriate handling, insertion and removal of rigid and soft contact lenses	Theory examination Report on patient suitability Discussion forum
CLO 5	Identify the differences between rigid and soft lens fitting characteristics and philosophies.	Theory examination Discussion forum
CLO 6	Evaluate rigid and soft lens fittings and optimise lens fitting by manipulating lens parameters	Theory examination Discussion forum
CLO 7	Describe appropriate contact lens care and maintenance to a prospective lens wearer and be able to assess compliance (contact lens adherence)	Theory examination Discussion forum
CLO 8	Identify, diagnose and appropriately manage the effects of soft and rigid contact lens wear on anterior eye including contact lens related complications	Theory examination Discussion forum

## 3. Strategies and approaches to learning

### 3.1 Learning and teaching activities

The course is delivered as a series of lectures on theoretical aspects of contact lenses. Which runs in parallel with a series of practical classes\* that will introduce the clinical techniques and skills associated with contact lens practice. The schedule of topics covered in the lectures is designed to coordinate and interleave with practical class topics to provide an overall integrated structure to the course. Assignments are used to reinforce specific topics presented in lectures and/or practical classes. In a separate series of lectures, adverse effects of contact lenses will be presented.

Theoretical knowledge of contact lenses is delivered using many practical and real-world illustrations to reinforce the theoretical principles being taught. Minor assignments allow the students to work through real-world examples to embed the concepts covered in lectures. Students are encouraged in the practical classes to face and overcome their natural disinclination to insert contact lenses in their own and other students' eyes through the establishment of a trusting, supportive and interactive environment. Past experience has proven that these teaching strategies successfully instill the required knowledge and skills while encouraging engagement, participation and interest in the topic area.

### 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.

- It is an expectation that the students have a digital device and reasonably strong internet connection to the device in order to access announcements, attend online webinars and other digital content posted through the learning management system (e.g. Moodle)
- It is an expectation that students will attend all components of this course, including webinars and practical classes. \* A roll will be taken at all practical classes. Students are strongly encouraged to attend all lectures (if relevant) and practical classes in order to ensure that they cover all relevant course material and gain the maximum benefit from the learning experiences offered in this course.
- Students are also strongly encouraged to attend all webinars as they act to reinforce theoretical components learnt through the recorded lectures and may have content that may have missed in the original lecture recordings.
- Preparation for webinars is crucial. It is an expectation that students listen to/watch online recorded lectures and further watch/study/complete relevant video(s)/material(s)/activity (or activities) on Moodle prior to attending the online webinars/practical classes.
- Students must observe [UNSW Student Code of Conduct](#) at all times, including practical classes, discussion forums, webinars etc.
- All practical classes in this course must be attended, with full participation, because they act to reinforce theoretical components of the course, while teaching critical practical clinical skills prior to use in the clinic. During practical classes, students will generally work in pairs. Both rigid and soft contact lenses will be inserted on all students, unless there are compelling reasons to avoid this due to health risks. We expect you to notify us at the beginning of this course if you believe that it would be inappropriate or unsafe for you to be fitted with contact lenses during this course. Students are also expected to not wear their contact lenses when attending practical classes and carry their prescription eyeglasses at all practical classes.

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

[This course consists of 5 hours of class contact hours each week. You are expected to take additional hours of non-class contact hours to complete assessments, readings and exam preparation.]

Week#/ Starting Monday	Lecture Blocks	Webinars (Mondays 2 to 4 PM)	Practicals <sup>†</sup>	Assessments
Week 1/ 30 May	<b>I. Basics and Foundations in Contact Lenses</b> <ol style="list-style-type: none"> <li>1. Preliminary Evaluation and Ocular Measurements</li> <li>2. Corneal Topography</li> <li>3. Optical considerations of Contact Lenses</li> <li>4. Physical effects of Contact Lenses (CL) (2 parts)</li> </ol>	<b>WEBINAR 0:</b> Course Introduction – Dr V Maseedupally	History taking, questionnaires and Slit lamp routine for contact lenses	
Week 2/ 06 June			Slit lamp examination (contd...) and Tear Film Assessment	<b>Assessment 3</b> Discussion Forum ((1/4) submission due <b>Saturday 11<sup>th</sup> June, 11:55 PM</b>
Week 3/ 13 June <sup>δ</sup>	<b>II. Contact Lens Fitting</b> <ol style="list-style-type: none"> <li>5. Basic approaches to rigid lens fitting</li> <li>6. Rigid lens fitting: Fluorescein patterns</li> <li>7. Soft lens fitting – Spherical</li> <li>8. Fitting the astigmat &amp; Soft Toric lens fitting</li> <li>9. Rigid Torics</li> </ol>	<b>WEBINAR I:</b> Basics and Foundations in Contact Lenses – Dr V Maseedupally  (On Thursday 16 June 2022, 3 to 5 PM <sup>δ</sup> Monday 13 June is a holiday.)	Rigid lens insertion and removal, white light assessment 1	<b>Assessment 1</b> Optics Assignment submission due <b>Saturday 18<sup>th</sup> June, 11:55 PM</b>
Week 4/ 20 June		<b>WEBINAR IIa:</b> Contact Lens Fitting - Dr V Maseedupally	Rigid Lens Fitting (Steep vs Flat) vs Optimal - 1	<b>Assessment 3</b> Discussion Forum ((2/4) submission due <b>Saturday 25<sup>th</sup> June, 11:55 PM</b>

<b>Week 5/</b> 27 June	<b>III. Effects of CLs on cornea and CL complications</b> 10. Corneal Metabolism 11. Effects of oxygen on the cornea 12. CL related vascular and infiltrative events (2 parts) 13. CL Papillary conjunctivitis 14. Corneal infection in CL wear (2 parts)	<b>WEBINAR IIb:</b> Rigid Toric lens fitting -Dr A Hui	Rigid Lens Fitting (Steep vs Flat) vs Optimal - 2	<b>Assessment 2</b> Report on patient suitability submission due <b>Saturday 2<sup>nd</sup> July, 11:55 PM</b>
<b>Week 6/</b> 04 July		<b>WEBINAR IIIa:</b> Corneal Oxygenation – Dr E Papas	Varying total and optic zone diameters - 1	<b>Assessment 3</b> Discussion Forum (( <b>3/4</b> ) submission due <b>Saturday 9<sup>th</sup> July, 11:55 PM</b>
<b>Week 7/</b> 11 July	<b>IV. CL Care Maintenance &amp; Compliance, Management of CL complications and Special topics</b> 15. Lens care and maintenance (2 parts) 16. CL aftercare 17. Regular replacement and compliance (2 parts) 18. Therapeutic Management of CL complications (2 parts) 19. Special Clinical Topics	<b>WEBINAR IIIb:</b> Effects of CLs on cornea and CL complications - Dr N Carnt	Varying total and optic zone diameters - 2	
<b>Week 8/</b> 18 July			Soft lens fit assessment - Hydrogel vs SiHy	<b>Assessment 3</b> Discussion Forum (( <b>4/4</b> ) submission due <b>Saturday 23<sup>rd</sup> July, 11:55 PM</b>
<b>Week 9/</b> 25 July		<b>WEBINAR IVa:</b> CL Care Maintenance & Compliance - Dr N Carnt	SCL Fitting - Toric CLs	
<b>Week 10/</b> 01 Aug		<b>WEBINAR IVb:</b> Management of CL complications and Special topics – Ms L Ho <b>(Date to be finalised)</b>	Tutorial on Rigid and Soft Lens fitting (review of cases)	<b>Assessment 4</b> Theory examination - final written exam. Details of the exam will be released on the Moodle.

<sup>†</sup> Practical classes are 3 hours in duration. There are no make-up pracs. Tasks set in most prac classes can be completed in 2 hours. Students must use additional time practicing or to catch-up on missed prac.

Exam Period: 12 August – 25 August

Supplementary Exams for 2022 will be held as follows:

FOR TERM 1:

- STAGE 1-4\* COURSES: WEDNESDAY, 18 MAY 2022 – FRIDAY, 20 MAY 2022
- THERE WILL BE NO SUPPLEMENTARY EXAMINATIONS FOR STAGE 5 STUDENTS IN TERM 1 2022

FOR TERM 2:

- STAGE 1-4 COURSES: WEDNESDAY, 31 AUGUST 2022 - FRIDAY, 2 SEPTEMBER 2022
- THERE WILL BE NO SUPPLEMENTARY EXAMINATIONS FOR STAGE 5 STUDENTS IN TERM 2 2022

FOR TERM 3:

- STAGE 5 COURSES ONLY: DURING THE WEEK OF MONDAY, 12 DECEMBER 2022 – FRIDAY, 16 DECEMBER 2022
- STAGE 1-4\* COURSES: WEDNESDAY, 14 DECEMBER 2022 - FRIDAY, 16 DECEMBER 2022

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. Assessment

### 5.1 Assessment tasks

Assessment task	Length	Weight	Marks	Release	Due date and time	Feedback
<p><b>Assessment 1: Optics assignment:</b> This assignment will assess students' ability to determine contact lens powers from spectacle prescriptions and evaluate the effect of contact lenses on wearer's accommodation and convergence demands. Student's will also be assessed on their ability to calculate, critically evaluate and compare the difference in the magnification effects from spectacles and contact lenses to recommend and justify the correct optical correction for the prospective wearer.</p>	NA	20%	55	In Week 1	Submission due Saturday 18th June, 11:55 PM	Written feedback will be provided within 2 weeks of assignment submission.
<p><b>Assessment 2: Report on patient suitability:</b> This assignment will assess students familiarity with use of relevant clinical instrumentation, understanding of criteria for determining patient suitability for contact lens wear. Assessment criteria: Students prepare 8-page report based on their observations made in the practical classes. The report will be marked on the appropriateness of recording patient details and slit lamp findings; correct interpretation of history, questionnaires, slit lamp findings and advising a suitable contact lens based on these observations.</p>	8-page report	24%	100	In Week 1	Submission due Saturday 2 <sup>nd</sup> July July, 11:55 PM	Feedback will be provided through written comments on Moodle within 2 weeks of submission.

<p><b>Assessment 3: Discussion forum:</b> Participation in discussion forum assess students' ability to understand, critically analyze and evaluate the concepts from the theory content delivered through online lectures. Students need to contribute to discussion forums by posting one discussion topic in each of the <b>four discussion forums</b>. Discussion forums will be opened in the Learning Management System (e.g. Moodle) typically every two weeks starting in Week 1. Submissions to these forums are due at the end of two-week period.</p>	500 words	16% (Each discussion forum 4%)	Each discussion forum marked out of 40	NA	During Webinars	Overall verbal feedback will be provided through webinars scheduled the week following the discussion session.
<p><b>Assessment 4: Theory examination:</b> In this exam students must demonstrate a competent understanding of all the course material delivered through lectures, practicals and online tutorials. The exam may consist of multiple choice, extended matching or short answer questions. Feedback will be provided through the final course mark. The final written (theory) exam must be passed, and if it isn't, the final grade "UF" will be given even if the overall aggregate mark is greater than 50%.</p>	NA	40%	The exam, date, format (online/face-to-face) and the location (on-campus or off-campus) will be announced via Moodle by the course convenor.		Through final mark	

### 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

Late submissions will be penalized at 5% per day capped at five days (120 hours). Students will not be permitted to submit their assessments after this date.

### 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.

*Please use Vancouver or APA referencing style for this course. Change to referencing style used in your course*

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.<sup>1</sup> 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. Administrative matters

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

## 8. Additional support for students

- The Current Students Gateway: <https://student.unsw.edu.au/>
- Academic Skills and Support: <https://student.unsw.edu.au/academic-skills>

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<sup>1</sup> International Center for Academic Integrity, 'The Fundamental Values of Academic Integrity', T. Fishman (ed), Clemson University, 2013.

- *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>