



**UNSW**  
SYDNEY

FACULTY OF SCIENCE  
SCHOOL OF OPTOMETRY AND VISION SCIENCE

**VISN1111**  
**GEOMETRIC AND PHYSICAL OPTICS**

TERM 2, 2019

# Table of Contents

1. Information about the Course.....	2
2. Staff Involved in the Course .....	3
3. Course Details.....	4
4. Rationale and Strategies Underpinning the Course.....	6
5. Course Schedule.....	8
6. Assessment Tasks and Feedback .....	9
7. Additional Resources and Support.....	11
8. Required Equipment, Training and Enabling Skills.....	12
9. Course Evaluation and Development.....	13
10. Administration Matters.....	14
11. UNSW Academic Honesty and Plagiarism .....	16

# Faculty of Science - Course Outline

## 1. Information about the Course

NB: Some of this information is available on the [UNSW Handbook](#)<sup>1</sup>

<b>Year of Delivery</b>	2019
<b>Course Code</b>	VISN1111
<b>Course Name</b>	Geometrical and Physical Optics
<b>Academic Unit</b>	School of Optometry and Vision Science
<b>Level of Course</b>	1 <sup>st</sup> year Undergraduate Core for Optometry and Vision Science Majors.
<b>Units of Credit</b>	6UOC
<b>Term(s) Offered</b>	Term 2
<b>Assumed Knowledge, Prerequisites or Co-requisites</b>	For students intending to take this course as a core component of an Optometry or Vision Science major, HSC Mathematics and Physics is highly recommended.
<b>Hours per Week</b>	6 hours per week (face to face)
<b>Number of Weeks</b>	10 weeks
<b>Commencement Date</b>	Week 1, 3 <sup>rd</sup> June 2019

### Summary of Course Structure (for details see 'Course Schedule')

Component	HPW	Time	Day	Location
<b>Lectures</b>	<b>4</b>			
<b>Lecture 1</b>	2	11am - 1pm	Monday	Webster Theatre A (K-G15-190)
<b>Lecture 2</b>	2	11am - 1pm	Wednesday	Webster Theatre B (K-G15-290)
<b>Tutorials</b>	<b>1</b>			
<b>Tutorial – Group 1</b>	1	12 - 1pm	Tuesday	Mathews 103 (K-F23-103)
<b>Tutorial – Group 2</b>	1	1 - 2 pm	Tuesday	Mathews 103 (K-F23-103)
<b>Laboratory</b>	<b>1</b>			
<b>Lab – Group 1</b>	1	10 -11 am	Thursday	Optometry Optics Laboratory (K-M15-3.049)
<b>Lab – Group 2</b>	1	11 - 12 noon	Thursday	Optometry Optics Laboratory (K-M15-3.049)
<b>Lab – Group 3</b>	1	12 - 1 pm	Thursday	Optometry Optics Laboratory (K-M15-3.049)
<b>Lab – Group 4</b>	1	2- 3 pm	Thursday	Optometry Optics Laboratory (K-M15-3.049)
<b>Lab – Group 5</b>	1	3 - 4 pm	Thursday	Optometry Optics Laboratory (K-M15-3.049)
<b>Lab – Group 6</b>	1	4 - 5 pm	Thursday	Optometry Optics Laboratory (K-M15-3.049)
<b>Lab – Group 7</b>	1	9 - 10 am	Thursday	Optometry Optics Laboratory (K-M15-3.049)
<b>Online</b>	TBC	Various, depending on group		Various
<b>TOTAL</b>	<b>6</b>			

<b>Special Details</b>	<ul style="list-style-type: none"><li>• It is expected that students will attend all components of this course, including lectures, tutorials and practical classes. All practical &amp; tutorial classes are compulsory. Marks may be deducted for non-attendance.</li><li>• Groups may need to be reassigned once final numbers are known due to unequal numbers.</li></ul>
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<sup>1</sup> UNSW Online Handbook: <http://www.handbook.unsw.edu.au>

- No swapping of tutorials or practicals is permitted without prior approval from the Course Convenor. Requests must be submitted by email from the student's UNSW email address.
- Punctuality is expected. Lateness for practical classes may be recorded as an absence for that lab, particularly when the formal introduction has been missed.
- The lectures may be recorded and saved on Moodle, but sometimes this facility is not available. This resource should be used as a supplement to the lectures, not a substitute.
- **Personal communications to and from students are only permitted using UNSW Student email account.**

## 2. Staff Involved in the Course

Staff	Role	Name	Contact Details	Consultation Times
<b>Course Convenor</b>		<b>Dr Maitreyee Roy</b>	<a href="mailto:m.roy@unsw.edu.au">m.roy@unsw.edu.au</a>	During lectures or arrange appointment via email
<b>Additional Teaching Staff</b>	Lecturer	Dr Maitreyee Roy	<a href="mailto:m.roy@unsw.edu.au">m.roy@unsw.edu.au</a>	During lectures or arrange appointment via email
	Tutors & Demonstrators	Dr Sailesh Kolanu, Demonstrators: TBC	<a href="mailto:s.kolanu@unsw.edu.au">s.kolanu@unsw.edu.au</a>	By appointment only
	Technical & Laboratory Staff	Dr Dale Larden	<a href="mailto:d.larden@unsw.edu.au">d.larden@unsw.edu.au</a>	Arrange appointment via email

### 3. Course Details

<p><b>Course Description<sup>2</sup></b> (Handbook Entry)</p>	<p><b>Objectives:</b> This course provides an understanding of geometric and physical optics. It is the first optics course in the Vision Science/Clinical Optometry program. This course will be delivered by lectures, laboratory classes and tutorial exercises designed to present, with least complexity, concepts in optics relevant to optometry &amp; vision science.</p> <p><b>Brief curriculum:</b>  <b>Geometrical optics:</b> Basics of light and light propagation, rectilinear propagation of light, refraction and reflection at the plane and spherical surfaces, prisms, thin lenses, thick lenses, optical systems with multiple surfaces, simple magnifiers, compound magnifiers, telescopes, microscopes, stops, pupils and windows.</p> <p><b>Physical optics:</b> The wave nature of light, superposition of waves, interference, diffraction, and polarisation.</p>
<p><b>Course Aims<sup>3</sup></b></p>	<p>The course aims to help students acquire understanding and a great deal of familiarity with geometrical and physical optics principles with reference to the optics instrumentation, eye and vision. Relevant skills needed for the practice of Optometry and Vision Science rely on optics background. Learning optics to a good standard will enable them to appreciate and learn the subsequent courses with confidence and considerable ease.</p>
<p><b>Student Learning Outcomes<sup>4</sup></b></p>	<p>At the successful completion of this course, you will be able to:</p> <ul style="list-style-type: none"> <li>• Gain an understanding of the basics of light, the rules for its propagation and transmission through optical surfaces and components.</li> <li>• To apply the law of refraction and reflection to find the image location in an optical system and be able to describe image formation using optical ray tracing method.</li> <li>• Describe the optical principles of simple optical systems that include simple magnifiers, microscope and telescopes and be able to understand the concept of magnification.</li> <li>• Use the principles of wave phenomena and superposition of waves to describe the optics of interference, diffraction and polarisation.</li> <li>• Solve a range of problems in geometric and physical optics by selecting the appropriate formulae and performing numerical calculations.</li> <li>• Develop team working skills to be able to work with others effectively.</li> <li>• Demonstrate the essential optics knowledge that is required for building a career in optometry/vision science.</li> </ul>

**Graduate Attributes Developed in this Course<sup>5</sup>**

<sup>2</sup> UNSW Handbook: <http://www.handbook.unsw.edu.au>

<sup>3</sup> [Learning and Teaching Unit: Course Outlines](#)

<sup>4</sup> [Learning and Teaching Unit: Learning Outcomes](#)

<sup>5</sup> Contextualised Science Graduate Attributes: <https://www.science.unsw.edu.au/our-faculty/science-graduate-attributes>

<b>Science Graduate Attributes<sup>5</sup></b> <i>(maybe replaced or augmented by UNSW, School or professional attributes)</i>	<b>Select the level of FOCUS</b> <i>0 = NO FOCUS  1 = MINIMAL  2 = MINOR  3 = MAJOR</i>	<b>Activities / Assessment</b>
<b>Research, inquiry and analytical thinking abilities</b>	3	Lecturers and practical are carefully designed so real life optics problems that put the student's understanding to test. Much of the class test, tutorial problems and final exam questions are heavily based on testing the student's understanding and thinking abilities in the subject. Analytical thinking is developed through the derivations of relevant formulae. Successful learning of optics heavily relies on problem-solving skills, and it is an excellent opportunity for students to build it.
<b>Capability and motivation for intellectual development</b>	3	<p>The interactive lectures and tutorial activities are designed to develop the capabilities of students as well as to motivate them to learn with greater interest. Attempting to solve the tutorial problems beforehand each week will promote the intellectual development of the student. Students are encouraged to answer critical questions based on the lab activities at the end of each lab through the lab report form.</p> <p>Three Moodle quizzes are designed to encourage students to test their knowledge and understanding presented in the course and also provides them with an opportunity to revise the material before the class test and the final exam. Students will be tested with a class test that is worth 15% marks. This will encourage student learning and also help them to keep up to date with their class work.</p>
<b>Ethical, social and professional understanding</b>	2	Whenever possible the class exercises, lab exercises and tutorials are made up of real-life/practical situations to encourage students to develop a professional understanding.
<b>Communication</b>	2	<p>Students are encouraged to work in a team for the tutorials, and laboratory activities for which students are required to communicate with each other and the lab instructors effectively.</p> <p>Written communication is also required in as part of the tutorials and practical. The class test and final exam will have some questions that expect students to give descriptive answers.</p>
<b>Teamwork, collaborative and management skills</b>	3	<p>Teamwork is an essential skill required in both optometry, the research world, and as a university student. The group learning activities such as problem-based tutorial discussions will facilitate good teamwork, time management and student collaboration.</p> <p>Lab classes are carried out in small groups which allow students to engage in teamwork. The lab classes are intense and for one-hour duration only. Students need to come well prepared and manage their time efficiently with each other in order to complete the tasks in the given time.</p>
<b>Information literacy</b>	2	Students get almost all the information they need from the prescribed text and the lecture notes. Through this material, they learn to define, to

		understand concepts, to describe phenomena, and to derive formulae. This course would prepare the students to approach the literature more meaningfully to further develop their information literacy skills by finding out the information needed for quizzes and group lab work. A comprehensive guide to Information Literacy has been designed for you by the UNSW library and is available on the eLearning site [see "Internet Resources"]
<b>Major Topics (Syllabus Outline)</b>	<p>The main topics covered in this course are:</p> <ul style="list-style-type: none"> <li>• Basic of light and light propagation,</li> <li>• Refraction at plane surfaces (Rectangular surface, Thick and thin prisms)</li> <li>• Refraction at spherical surfaces (Thin lenses, thick lenses)</li> <li>• Mirrors</li> <li>• Optical systems with multiple surfaces</li> <li>• Simple magnifiers, compound magnifiers (Telescopes and Microscopes)</li> <li>• Stops, pupils and windows</li> <li>• Wave nature of light, interference, diffraction and polarisation</li> </ul>	
<b>Relationship to Other Courses within the Program</b>	<p><b>Course</b> VISN1221 Visual Optics OPTM2910 Optometry 2A</p>	<p><b>Pre-requisite</b> VISN1111 VISN1221</p>

#### 4. Rationale and Strategies Underpinning the Course

<b>Teaching Strategies</b>	<p>The course VISN1111 Geometric and Physical Optics is delivered internally through lectures, laboratory work, tutorial exercises and self-directed online learning, to present with least complexity, concepts in optics relevant to the Optometry and Vision Science using various problem-solving approach.</p> <p>Students will find this course elementary, interesting and relevant if they follow the lectures closely and study consistently and adequately from the outset. It is the sole purpose of the guidelines and requirements set out below to encourage that approach. Students who choose not to cooperate will find the course difficult, onerous and incomprehensible.</p> <p>The prescribed text and the lecture notes are the primary resources. Students are encouraged to read the prescribed and additional reading and the lecture notes in order to increase their learning as well as develop their learning skills. Students should study them and clarify any doubts they may have. Students are to regard the lecture period as quality time. Students are urged to revise material covered in previous lectures and to the greatest possible extent be attentive and comprehend the material as it is presented in class.</p> <p>Students are expected to attempt the tutorial problems of each week beforehand and identify difficult problems. The difficult problems will be worked out by the tutor at the tutorial. In the tutorial, students should attempt to understand the working and ask questions if they have any. Half the learning of optics is in problem-solving.</p> <p><u>Students should study the laboratory notes and attempt to understand the experiment and visualise the procedure before the lab class.</u></p> <p>For <u>all classes</u>, students are advised to prepare adequately beforehand, revise previous work, complete prescribed reading and exercises and bring relevant notes to scheduled tutorials and laboratories. Students should maintain personal up-to-date written class notes including diagrams. Students are encouraged to question the lecturer freely. Only when the mind is freely questioning can true learning take place.</p> <p>Students are encouraged to discuss with each other to enhance their understanding and solve these problems. Knowledge acquired week after week and the ability to apply the acquired knowledge will be tested through these problems. It is an opportunity to improve problem-solving skills.</p> <p>In the lab experiment, each week students will observe, record measurements and perform calculations in a report form provided in the lab notes. The form also includes a set of questions at the end that probe student's understanding of the lab, their observation skills and the results obtained.</p> <p>Students are required to submit completed lab report forms for each lab via Moodle within the submission time.</p>
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	<p>Moodle component of the course provides access to course notes, online quizzes, compulsory and optional readings and useful online resources.</p>
<p><b>Rationale for learning and teaching in this course<sup>6,7</sup></b></p>	<p>The VISN1111 course is intended to facilitate knowledge and understanding of geometric and physical optics relevant to optometry and vision science students.</p> <p>The optics course comprises of lectures, laboratory classes and tutorial exercises is designed carefully by using suitable ray diagrams, derivations of formulae and experiments to provide students with the required background, familiarity and problem-solving skills in optics. Their purpose is to illustrate strategies for analysing optical phenomena using formulae, to build concepts and develop problem-solving skills.</p> <p>Understanding the course is greatly facilitated by learning the language of optics. This applies as much to the construction of diagrams as it does to written symbols.</p> <p>Students are to regard the lecture period as quality time. Students are urged to revise material covered in previous lectures and to the greatest possible extent be attentive and comprehend the material as it is presented in class. Laboratory and tutorial sessions are aimed for team-based learning to enhance student engagement and the quality of learning. These sessions are combined with problem-solving related to the concept and hands-on related optics experiment.</p>

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<sup>6</sup>[Reflecting on your teaching](#)

## 5. Course Schedule

Some of this information is available on the [Online Handbook](#)<sup>7</sup> and the [UNSW Timetable](#)<sup>8</sup>.

Week	Lecture Topics		Tutorials (Tuesday, 1 Hour) Topics Mathews 103 (K-F23-103)	Practical (Day TBC, 1 Hour) Topics Optometry Optics Laboratory (K-M15-3.049)	Assignment and Submission dates (see also 'Assessment Tasks & Feedback')
	Lecture 1 (Monday, 2 Hours) Webster Theatre A (K-G15-190)	Lecture 2 (Wednesday, 2 Hours) Webster Theatre B (K-G15- 290)			
<b>Week 1</b> 3 <sup>rd</sup> June –7 <sup>th</sup> June	Course introduction & Basics of light and propagation	Refraction at plane surfaces, prism (part 1)	Basics of light and light propagation and Refraction at plane surfaces, thick prism	Reflection and refraction at a plane surface: Prism	
<b>Week 2</b> 10 <sup>th</sup> June –14 <sup>th</sup> June	Public holiday- no lecture	Refraction at plane surfaces, prism (part 2)	Refraction at plane surfaces, thin prism	Refraction at curved surfaces (Part 1) Estimation of lens power: Method based on lens form (Part 2)	<b>Moodle Quiz1</b>
<b>Week 3</b> 17 <sup>th</sup> June–21 <sup>st</sup> June	Refraction at spherical surfaces (part 1)	Refraction at spherical surfaces (part 2)	Refraction at spherical surfaces	Estimation of lens power: A method based on imaging techniques	
<b>Week 4</b> 24 <sup>th</sup> June–28 <sup>th</sup> June	Thin lenses	Lens systems	Thin lenses & lens system	Estimation of the equivalent power of the lens system/ thick lens	
<b>Week 5</b> 1 <sup>st</sup> July –5 <sup>th</sup> July	Thick lenses	Mirrors	Thick lenses	Simple magnifiers	<b>Moodle Quiz2</b>
<b>Week 6</b> 8 <sup>th</sup> July–12 <sup>th</sup> July	Mid-semester exam	Visual instruments: simple magnifiers	Mirrors & Simple magnifiers	Telescopes	Mid-semester exam
<b>Week 7</b> 15 <sup>th</sup> July–19 <sup>th</sup> July	Telescopes	Microscopes	Telescopes & Microscopes	Microscopes	
<b>Week 8</b> 22 <sup>nd</sup> July–26 <sup>th</sup> July	Mid-semester feedback	Aperture stops, Field stops, pupils and windows	Aperture stops, Field stops, pupils and windows	Interference	
<b>Week 9</b> 29 <sup>th</sup> July–2 <sup>nd</sup> August	Wave nature of light & superposition	Interference	Wave nature of light & superposition & Interference	Diffraction	<b>Moodle Quiz 3</b>
<b>Week 10</b> 5 <sup>th</sup> August –9 <sup>th</sup> August	Diffraction	Polarisation	Diffraction & Polarisation	Polarisation	

\*NB: As stated in the UNSW Assessment Policy: 'one or more tasks should be set, submitted, marked and returned to students by the mid-point of a course, and a formative assessment no later than the Census Date for the term at end of Week 4 of a 10-week session'

<sup>7</sup> UNSW Virtual Handbook: <http://www.handbook.unsw.edu.au>

<sup>8</sup>UNSW Timetable: <http://www.timetable.unsw.edu.au/>

## 6. Assessment Tasks and Feedback

Task	Knowledge & abilities assessed	Assessment Criteria	% of total mark	Date of		Feedback		
				Release	Submission	WHO	WHEN	HOW
<b>Group Work</b>								
<b>Group work: Lab Reports</b> Students are encouraged to work in groups and equally participate in the lab reports. Completed group <b>lab report forms for each lab should be submitted on Moodle</b> before the subsequent lab.	In each group lab report form, students will record measurements and make calculations. The form also includes a set of questions at the end that probe student's understanding of the lab, their observation skills and the results obtained.	Incomplete calculations, incomplete answers, lack of neatness in presentation and late submissions and absence from labs will result in loss of marks.	<b>15%</b>  (Lab reports: 10%, Tutorials:5%)	Week 2-10	Before 11.55 pm Thursday, the subsequent lab.	M. Roy	2 Weeks later	Written and informal feedback
<b>Group work: Tutorials</b> Students will be asked to work in groups and solve a given problem at the end of tutorial session.	Knowledge and understanding of the topics covered in the lectures and tutorials. Ability to illustrate strategies for solving optical problems using appropriate formulae.	Groups will be randomly chosen at the end of the tutorial session. Assessment will be based on the ability of the group to critically think and approach the problem. The proactive nature of the group will also be considered in the assessment.		Week 2-9	On the day of the tutorial session.	M. Roy S. Kolanu	Same day	Informal feedback
<b>Online &amp; Class Test</b>								
<b>Online tests: Moodle Quizzes</b> Three online Quizzes will be conducted to monitor student learning and progress during the course.	Knowledge of the topics covered in the lectures, labs and tutorials of the previous weeks and ability to work out problems similar to the class exercises will be assessed. Learning involves knowing and remembering key definitions, formulae, underlying concepts and methods to solve problems. It is an opportunity to revise materials presented during the course.	The student must complete the quiz within the given time period.	<b>15%</b>  (QUIZ1 Quiz2 & QUIZ3 5% Each)	Week 2 (Quiz 1)	Week 3 (Quiz1)	M. Roy	Automated feedback after submission	Moodle
				Week 5 (Quiz 2)	Week 6 (Quiz 2)			
				Week 9 (Quiz 3)	Week 10 (Quiz 3)			
<b>Class Test: Mid-Session</b> The test will be conducted to monitor student learning and progress. It will be a 50 min written class test.	Knowledge and understanding of the topics covered till Week 5 will be tested. Ability to write definitions, derive formulae, draw ray diagrams, and solve problems such as those worked out in class will be tested.	The approach used to solve the problem, working shown, the correctness of answers and the ability to define/describe clearly.	<b>15%</b>	Week 6 Monday, 08/07/2019	Week 6 Monday, 08/07/2019	M. Roy	2 Weeks later	Marks and answers discussed in the class

Final Exam								
<b>Final Exam (2 hours duration)</b>	An end of session examination will be held to test the knowledge and skills gained by the student through lectures, tutorials and lab experiments conducted through the session (Weeks 2-13), excluding journal article presentations.	Multiple Choice Questions and short answer responses. The approach used to solve the problem, working shown, the correctness of answers and the ability to define/describe clearly.	55%	Exam period (During exam period)	Exam period	M. Roy	Final Marks	Final Marks

<sup>10</sup> Approaches to assessment: <https://teaching.unsw.edu.au/assessment>

## 7. Additional Resources and Support

<b>Text Books</b>	<p><b>Prescribed Textbook:</b> Tunnacliffe AH and Hirst JG, Optics, Published by the Association of British Dispensing Opticians (ABDO), (Reprinted 2003).</p> <p>Available at the UNSW bookshop and in the Library.</p>
<b>Course Manual</b>	<p>Lecture notes and other course information will be made available via Moodle throughout the course.</p> <p>Students will be provided with a Laboratory Manual both hard and soft copy.</p> <p>Tutorial sheets will be posted on Moodle every week.</p>
<b>Required Readings</b>	<p>Prescribed textbook, lecture notes and laboratory notes.</p> <p>Moodle announcements for VISN1111 should be checked every day or two. This includes any scheduling changes, last minutes updates, etc.</p> <p>In addition, the school website will hold important information including timetables, staff contact details, and information on supplementary examinations. (<a href="http://www.optometry.unsw.edu.au">http://www.optometry.unsw.edu.au</a>)</p>
<b>Additional Readings</b>	<p>Compulsory and optional readings as specified by the lecturers throughout the session will be made available on Moodle when not accessible online through the UNSW library.</p>
<b>Recommended Internet Sites</b>	<p>Moodle will be used for:</p> <ul style="list-style-type: none"> <li>• Lectures: pdf files of PowerPoint presentations</li> <li>• Tutorial materials including the journal articles</li> <li>• Announcements of anything relating to this course that is not mentioned in lectures</li> <li>• Course info/latest timetable: any course administration handouts - in .pdf format.</li> </ul> <p>Interesting links: URL links for sites connected with course topics will be provided during lectures.</p>
<b>Societies</b>	<p>The UNSW Optometry Student Society (<a href="http://www.optomsoc.com/">http://www.optomsoc.com/</a>) representatives will be organising a number of social events and functions this session which you are all encouraged to attend.</p> <p>There are many Facebook groups which you can also join including:</p> <ul style="list-style-type: none"> <li>• UNSW Optometry Student Society (<a href="https://www.facebook.com/UNSWOptomsoc/">https://www.facebook.com/UNSWOptomsoc/</a>)</li> <li>• UNSW Optometry and Vision Science (<a href="https://www.facebook.com/UNSWOptom/?fref=ts">https://www.facebook.com/UNSWOptom/?fref=ts</a>)</li> </ul> <p>UNSW Optometry Clinic (<a href="https://www.facebook.com/UNSWoptometryclinic/">https://www.facebook.com/UNSWoptometryclinic/</a>)</p>
<b>Computer Laboratories or Study Spaces</b>	<p>The School of Optometry and Vision Science is fortunate to have its own student computer laboratory located in the OMBLG21. Room availability is usually stated on a weekly schedule posted on the door of the room.</p> <p>If these spaces are occupied or unavailable, the UNSW Library contains vast study and computing spaces that are open for longer hours than those in the school. Consult the UNSW Library website (<a href="http://info.library.unsw.edu.au/">http://info.library.unsw.edu.au/</a>) for opening hours – hours are often longer at exam time.</p> <p>If you are concerned getting to/from the library at night, you can contact UNSW Security (<a href="http://www.security.unsw.edu.au/">http://www.security.unsw.edu.au/</a> or 9315 6000) for personal escort services around the UNSW campus.</p>

## 8. Required Equipment, Training and Enabling Skills

<b>Equipment Required</b>	Calculator, ruler, pencil, colour pencils/pens will be useful all the time. Students should have the weekly lecture notes/tutorial sheet with them for the lecture/tutorial classes. Students must bring the lab notes to the lab classes. Students are advised to wear closed shoes to the optics laboratory.
<b>Enabling Skills Training Required to Complete this Course</b>	<p>The UNSW Current Student site (<a href="https://student.unsw.edu.au/support">https://student.unsw.edu.au/support</a>) has helpful resources on a variety of topics including time management, examination preparation, and oral presentations.</p> <p>The Learning Centre also offers academic skills support to all students enrolled at UNSW (<a href="http://www.lc.unsw.edu.au">http://www.lc.unsw.edu.au</a>).</p> <p>All commencing UNSW undergraduate students are expected to have completed the ELISE quiz accessible via Moodle. More information on ELISE is available on <a href="http://subjectguides.library.unsw.edu.au/elise/home">http://subjectguides.library.unsw.edu.au/elise/home</a></p>

## 9. 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	June 2012	<p>This course replaces the earlier course VISN1231-Optics which was offered from 2006-2012 in S2.</p> <p>This course redesigned in 2015 to suit the academic requirement of the School. Some significant changes in the course structure have been made by introducing interactive lectures in the classroom, tutorial problems related to concept and theory and Moodle online quizzes for immediate feedback.</p>

myExperience <sup>11</sup>		<p>It was the third time this course was conducted in its current form. Based on the myExperience response, the ratings for this course were excellent. Majority of the students indicated that they were extremely satisfied with the quality of the course and the structure of the course.</p> <p>The best aspects of the course that were highlighted by most of the students were: the interactive lecture notes &amp; encouraging learning environment, clear and concise lectures, learning about optics, lots of support and motivation, test feedbacks, explanations (concepts, formulae &amp; problem solving), critical thinking quizzes, enjoyable lab experiments and tutorial questions, encouraging and helpful teaching supporting staffs.</p> <p>In 2016, many students suggested, "no early lectures" (Friday 9 am). In 2017, all the Friday lecture times were changed from 9 am to 10 am. However, in 2018, all the Friday lectures are scheduled to 9 am as this is the only option available. Some students commented on improving the better sound system for lecture recording, better proofreading of quiz questions, and uploading the tutorial questions in advance, more practice questions, more frequent feedback on quizzes and lab reports. A few numbers of students found some parts of the course specially formulae and derivations are challenging.</p> <p>Planned improvements for 2018: revising the material to keep up-to-date with the latest trends and knowledge and using the student's feedback to improve their learning needs. Adding more tutorial questions incorporating quiz questions and practise questions after revising the material content based on student learning requirement and uploading those couple of days before the class. Quiz marks will be released only after the completion of attempts and lab reports feedback will be provided fortnightly verbally/written in the class. The course will be reviewed again through myExperience in 2019.</p>
Other		

<sup>11</sup> myExperience process: <https://teaching.unsw.edu.au/myexperience>



## 10. Administration Matters

<p><b>Expectations of Students</b></p>	<p><b><u>Attendance</u></b> It is expected that students will attend all components of this course, including lectures, tutorials and practical classes.</p> <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> <p>Tutorials run in Weeks 1 to 10. These tutorials provide a particularly effective and critical learning experience to help you to contextualise important subject matter presented elsewhere in the course.</p> <p>All practical classes in this course must be attended 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 year of the program.</p> <p><b><u>Attendance registers:</u></b> In courses where signature on an attendance register is used to monitor attendance, all enrolled students must provide a specimen signature on a central School register by the end of the first week of semester. The central register will be overseen by Dr Dale Larden/Paul Zytnik. Please bring your student card with you when providing your specimen signature. Only one variant of your signature may be used on the central register and on all attendance registers.</p> <p>If your signature does not appear on an attendance register for a compulsory course component, or if the signature on the attendance register does not match the signature on the central register, it will be assumed that you were absent from the compulsory course component.</p> <p>Attempts to falsify the central register or attendance registers will be managed under UNSW Student Misconduct Procedures: <a href="https://www.gs.unsw.edu.au/policy/documents/studentmisconductprocedures.pdf">https://www.gs.unsw.edu.au/policy/documents/studentmisconductprocedures.pdf</a></p> <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><b>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.</b></p> <p>For more information or if you are having connection or access problems, see: IT Service Centre <a href="http://www.it.unsw.edu.au/">www.it.unsw.edu.au/</a></p> <p>Telephone: 02 9385 1333 Email: <a href="mailto:itservicecentre@unsw.edu.au">itservicecentre@unsw.edu.au</a></p>
<p><b>Assignment Submissions</b></p>	<p>Assignments should be submitted via Moodle (electronic submission). This includes completed laboratory reports and logs which should be scanned/photographed and submitted via Moodle.</p> <p>Marked assignments can be collected from the:</p> <ul style="list-style-type: none"> <li>• School Enquiry office <b>during counter opening hours</b>. You must show a valid student card to do this.</li> </ul> <p>The School Policy on Submission of Assignments (including penalties for late assignments) and the Assignment Attachment Sheet are available from the School office (RMB3.003) and the School website at: <a href="http://www.optometry.unsw.edu.au/current/policies-and-procedures">http://www.optometry.unsw.edu.au/current/policies-and-procedures</a></p>

<p><b>Work Health and Safety<sup>12</sup></b></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: <a href="http://www.optometry.unsw.edu.au/whs/work-health-and-safety">http://www.optometry.unsw.edu.au/whs/work-health-and-safety</a></p>
<p><b>Assessment Procedures</b></p> <p><b>UNSW Assessment Policy<sup>13</sup></b></p>	<p style="text-align: center;"><b>SCHOOL OF OPTOMETRY AND VISION SCIENCE, UNSW SUPPLEMENTARY EXAMINATION INFORMATION, 2019</b></p> <p><b>SPECIAL CONSIDERATION</b> 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. <b>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.</b> The application must be made via Online Services in myUNSW. Log into myUNSW and go to My Student Profile tab &gt; My Student Services &gt; Online Services &gt; Special Consideration. Submit the application (including supporting documentation) to UNSW Student Central.</p> <p><b>CHRONIC ISSUES AND PRE-EXISTING CONDITIONS</b></p> <p>If you have chronic issues and pre-existing conditions, we recommend you apply for Educational adjustments for disability support through Disability Services. Register for Disability Services at <a href="https://student.unsw.edu.au/disability-registration">https://student.unsw.edu.au/disability-registration</a></p> <p>Absence from a final examination is a serious matter, normally resulting in a Fail (FL) grade. <b>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</b> (telephone 02 9385 4639, email: <a href="mailto:optometry@unsw.edu.au">optometry@unsw.edu.au</a>). You must also submit a Request for Special Consideration application as detailed on the UNSW website: <a href="https://student.unsw.edu.au/special-consideration">https://student.unsw.edu.au/special-consideration</a>.</p> <p><b><u>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.</u></b></p> <p>This information will be available on the School web site at <a href="http://www.optometry.unsw.edu.au">http://www.optometry.unsw.edu.au</a> (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><b><u>SUPPLEMENTARY EXAMINATIONS FOR 2019 WILL BE HELD AS FOLLOWS:</u></b></p> <p><b>FOR TERM 1:</b></p> <ul style="list-style-type: none"> <li>• <b>STAGE 1-4* COURSES: FRIDAY, 24 MAY 2019 – SATURDAY, 25 MAY 2019</b></li> <li>• <b>THERE WILL BE NO SUPPLEMENTARY EXAMINATIONS FOR STAGE 5 STUDENTS IN TERM 1 2019</b></li> </ul> <p><b>FOR TERM 2:</b></p> <ul style="list-style-type: none"> <li>• <b>STAGE 1-3 COURSES: FRIDAY, 6 SEPTEMBER 2019 - SATURDAY, 7 SEPTEMBER 2019</b></li> <li>• <b>STAGE 4* COURSES: FRIDAY, 6 SEPTEMBER 2019</b></li> <li>• <b>THERE WILL BE NO SUPPLEMENTARY EXAMINATIONS FOR STAGE 5 STUDENTS IN TERM 2 2019</b></li> </ul> <p><b>FOR TERM 3:</b></p> <ul style="list-style-type: none"> <li>• <b>STAGE 5 COURSES ONLY: DURING THE WEEK OF MONDAY, 9 DECEMBER 2019 – FRIDAY, 13 DECEMBER 2019.</b></li> <li>• <b>STAGE 1-4* COURSES: FRIDAY, 20 DECEMBER 2019, SATURDAY, 21 DECEMBER AND MONDAY, 23 DECEMBER 2019.</b></li> </ul> <p>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. <b>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.</b></p>

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**

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<sup>12</sup> [UNSW OHS Home page](#)

<sup>13</sup> [UNSW Assessment Policy](#)

<sup>14</sup> [Student Complaint Procedure](#)

<b>Equity and Diversity</b>	<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 <a href="http://www.studentequity.unsw.edu.au/">http://www.studentequity.unsw.edu.au/</a> ).</p> <p>Issues to be discussed may include access to materials, signers or note-takers, the provision of services and an additional exam and assessment arrangements. Early notification is essential to enable any necessary adjustments to be made.</p>		
<b>Student Complaint Procedure<sup>14</sup></b>	<b>School Contact</b>	<b>Faculty Contact</b>	<b>University Contact</b>
	Prof. Helen Swarbrick <a href="mailto:h.swarbrick@unsw.edu.au">h.swarbrick@unsw.edu.au</a> Tel: 9385 4373	A/Prof Janelle Wheat Deputy Dean (Education) <a href="mailto:j.wheat@unsw.edu.au">j.wheat@unsw.edu.au</a> Tel: 9385 0752  Or  Dr Gavin Edwards Associate Dean (Academic Programs) <a href="mailto:g.edwards@unsw.edu.au">g.edwards@unsw.edu.au</a> Tel: 9385 4652	Student Integrity Unit (SIU)  Telephone 02 9385 8515, email <a href="mailto:studentcomplaints@unsw.edu.au">studentcomplaints@unsw.edu.au</a>
<b>University Counselling and Psychological Services<sup>15</sup></b>	Information on Counselling and Psychological Services [CAPS] is available at: <a href="https://www.counselling.unsw.edu.au/">https://www.counselling.unsw.edu.au/</a> Tel: 9385 5418		

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<sup>15</sup> [University Counselling and Psychological Services](https://www.counselling.unsw.edu.au/)

## 11. UNSW Academic Honesty and Plagiarism

### What is Plagiarism?

Plagiarism is the presentation of the thoughts or work of another as one's own.

\*Examples include:

- direct duplication of the thoughts or work of another, including by copying material, ideas or concepts from a book, article, report or other written document (whether published or unpublished), composition, artwork, design, drawing, circuitry, computer program or software, web site, Internet, other electronic resource, or another person's assignment without appropriate acknowledgement;
- paraphrasing another person's work with very minor changes keeping the meaning, form and/or progression of ideas of the original;
- piecing together sections of the work of others into a new whole;
- presenting an assessment item as independent work when it has been produced in whole or part in collusion with other people, for example, another student or a tutor; and
- claiming credit for a proportion a work contributed to a group assessment item that is greater than that actually contributed.†

For the purposes of this policy, submitting an assessment item that has already been submitted for academic credit elsewhere may be considered plagiarism.

Knowingly permitting your work to be copied by another student may also be considered to be plagiarism.

Note that an assessment item produced in oral, not written, form, or involving live presentation, may similarly contain plagiarised material.

The inclusion of the thoughts or work of another with attribution appropriate to the academic discipline does *not* amount to plagiarism.

The Learning Centre website is main repository for resources for staff and students on plagiarism and academic honesty. These resources can be located via:

<https://student.unsw.edu.au/plagiarism>

The Learning Centre also provides substantial educational written materials, workshops, and tutorials to aid students, for example, in:

- correct referencing practices;
- paraphrasing, summarising, essay writing, and time management;
- appropriate use of, and attribution for, a range of materials including text, images, formulae and concepts.

Individual assistance is available on request from The Learning Centre.

Students are also reminded that careful time management is an important part of study and one of the identified causes of plagiarism is poor time management. Students should allow sufficient time for research, drafting, and the proper referencing of sources in preparing all assessment items.

\* Based on that proposed to the University of Newcastle by the St James Ethics Centre. Used with kind permission from the University of Newcastle

† Adapted with kind permission from the University of Melbourne