FACULTY OF SCIENCE

SCHOOL OF OPTOMETRY AND VISION SCIENCE

OPTM2133

The Clinical Environment

TERM 3 2019

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Faculty of Science - Course Outline

1. Information about the Course

NB: Some of this information is available on the UNSW Handbook[1]

Year of Delivery	2019
Course Code	OPTM2133
Course Name	The Clinical Environment
Academic Unit	School of Optometry and Vision Science
Level of Course	Level 2 UG
Units of Credit	6UOC
Session(s) Offered	Term 3
Assumed Knowledge, Prerequisites or Co-requisites	Prerequisites: VISN1111 Geometrical and Physical Optics (UG); VISN1221 Visual Optics (UG) VISN1101 - Seeing the World: Perspectives from Vision Science (UG) Pre/Co-requisite: VISN2111 (Anatomy and Physiology of the Eye) Assumed knowledge: Everything and anything from Year 1 courses
Hours per Week	Average of 6.6 contact hours per week
Number of Weeks	10
Commencement Date	**12 Noon Monday September 16, 2019**

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

Component	HPW	Time	Day	Location
Lecture 1 (weeks 2-8 only)	1	11.00am	Monday	CLB6
Lecture 2 (weeks 1-8 only)	1	3.00pm	Monday	Webster A
Lecture 3 (weeks 1-9 only)	1	2.00pm	Thursday	ChemSc M18
Lecture 4 (weeks 1-7 only)	1	9.00am	Friday	ChemSc M18
Online video lecture (weeks 1-8 only)	1	Managed by the student		Moodle
Laboratory (weeks 1-10)	2	Various, depending on group		Pre-Clinic Lab
Tutorials (weeks 1-9)	1	Various, depending on group		GoldG02
Practical Skills Assessment	Approx 40mins	Week 10 As per roster released in Week 9		Various
TOTAL	66hrs for T3			

Special Details

- Groups may need to be reassigned once final numbers are known due to unequal numbers
- No swapping of pracs or tutorials is permitted without prior approval from the Course Convenor. Requests must be submitted by email from the student's UNSW email address.
- Attendance at Pracs and Tutorial is compulsory. Any absence due to illness must be supported by a Medical certificate, submitted online to the Course Convenor via the student's UNSW email address. (This is **not** the same as 'Special Consideration' - see page 11)

2. Staff Involved in the Course

Staff	Role	Name	Contact Details	Consultation Times
Course Convenor		Assoc. Prof. Junghans	b.junghans@unsw.edu.au	By email for an appointment
Additional Teaching Staff	Lecturers/ Facilitators	Assoc. Prof. Junghans	b.junghans@unsw.edu.au	By email for an appointment
		Dr Kolanu	s.kolanu@unsw.edu.au	By email and Moodle only

[1] UNSW Online Handbook: http://www.handbook.unsw.edu.au

		Dr Yoshioka	n.yoshioka@unsw.edu.au	By email for an appointment
		Dr Honson	v.honson@unsw.edu.au	By email for an appointment
		Dr Oberstein	s.oberstein@unsw.edu.au	By email for an appointment
	Tutors & Demonstrators	Various	Class Times only	N/A
	Technical & Lab Staff	Various	Class Times only	N/A
	Pre-Clinic Lab Manager	Dr D Larden	d.larden@unsw.edu.au	N/A

3. Course Details

Course Description[2] (Handbook Entry)	This course will demand that you extend and apply the basic optics and visual optics studied thus far into real world scenarios. This will be achieved through hands-on experiences as well as further theoretical studies. As its name implies, 'The Clinical Environment' will introduce you to the key players in the consulting room and the interrelationships that drive successful clinical outcomes. You will be challenged to recognise the range of people seeking eye care, including those with vision impairment, and the effects that your personal communications skills and reflective practice have upon their welfare. You will be confronted with commonly used tools that evaluate oculo-visual status and learn how these can be used strategically to enhance our understanding of the patient and how they operate within their home/work environment. At the same time, the course is designed to augment your studies in Ocular Anatomy and Physiology. Spectacles are a common outcome of an eye examination: you will learn the impact of this need upon the person and how lack of access to spectacles places an enormous burden on an individual and their community, particularly in developing countries. During this course your preparedness to take on social responsibility and global citizenship will be piqued. Most importantly, your capability to self-audit, to solve problems and to work either independently or as part of a team will be developed.
Course Aims	The focus of this course is the dynamics of the consulting room that emerge from the three key elements therein: the patient, the practitioner, and the tools/instruments that interface between the two during patient assessment. Thus, this course will introduce students to the ophthalmic consulting room in the widest sense. The course will draw intensely on knowledge gained through the pre-requisite courses Geometrical and Physical Optics, Visual Optics, and Seeing the World. In addition, the course will draw on and provide direct support to the co-requisite course Ocular Anatomy and Physiology of the Visual System. As a consequence, students will able to recognize and evaluate the inter-relationships between the design of instruments and charts and the measurement of light and colour per se, versus, the strategic use of those tools to assess the eye itself and establish the patient's vision. The student will be confronted with a range of persons who present for eye care and the challenges that many individuals experience on a daily basis. Furthermore, the student will be challenged to recognise their own knowledge base pertaining to the eye/vision understand how personal communication skills with the patient and others in the eye care team affect outcomes. In particular, the course will build upon the foundations laid in Year 1 to produce a graduate who is keen to learn more, who likes to solve problems, who can work well with others, who can manage themselves and reflect on their place in the world, and, who has a sense of social responsibility.
Student Learning Outcomes	By the end of the course you will be able to: **1** Apply the basic principles of optics to the construction of ophthalmic equipment used daily in ophthalmic eye care **2** Apply the principals of radiometry, photometry and colourimetry to the measurement of light and colour in situations found in everyday life or with relevance to the field of colour vision impairment **3** Demonstrate, via a written report using advanced information literacy and citation skills, an understanding of the impact of refractive errors on the individual and subsequently on the various public health systems around the world. Included in this understanding should also be a recognition of the commonalities or otherwise of the impacts for those with low vision or colour vision impairment **4** Demonstrate an understanding of the classifications and related epidemiology for those with colour vision impairment and low vision **5** Demonstrate an understanding of the design principles of charts and their appropriate use along with lens changes to subjectively establish a person's visual status and spherical equivalent

[2] UNSW Handbook: http://www.handbook.unsw.edu.au

	refractive error, for both persons with normal best corrected vision and those with vision impairment, versus when to use appropriate objective techniques **6.** Demonstrate an understanding of the design principles of colour vision tests and their appropriate use to assess a person's type and severity of colour vision impairment. **7** Demonstrate, using standard consulting room equipment, the clinical procedures that establish visual acuity, the curvature and surface features of the cornea, the normality or otherwise of the anterior eye and crystalline lens, the normality or otherwise of the posterior eye and retina, and the assessment of the type and severity of colour vision impairment. **8** Demonstrate professionalism and effective communication skills in dealing with peers as patients, plus the ability to self-audit performance and personal development throughout the course in light of the course content and interactions with peers as patients.

Graduate Attributes Developed in this Course[3]

Science Graduate Attributes[5]	**Select the level of FOCUS** *0 = NO FOCUS* *1 = MINIMAL* *2 = MINOR* *3 = MAJOR*	**Activities / Assessment**
Research, inquiry and analytical thinking abilities	3	Practical skills tasks, written assignments, lectures, tutorials, theory examinations, online activities, readings and quizzes
Capability and motivation for intellectual development	3	Practical skills tasks, written assignments, lectures, tutorials, theory examinations, online activities, readings and quizzes
Ethical, social and professional understanding	3	Practical skills tasks, written assignment, lectures, tutorials, and online activities
Communication	3	All practical classes, practical assessments and written assignments
Teamwork, collaborative and management skills	2	Practical classes, tutorials and written assignments
Information literacy	2	Practical class tasks and written assignments and readings
Other	For the students in the BOptom program: Accreditation for our School meets the Optometrists Association Australia Universal Competency (Entry-level) and Therapeutic Standards 2014 (see Kiely and Slater. Optometry Australia Entry-level Competency Standards for Optometry 2014. *Clin Exp Optom* 2015; 98: 65–89. Specifically: • Professional responsibilities (Items **1**.1.1, 1.1.2, 1.2, 1.4.1, 1.4.2, 1.4.4, 1.4.5, 1.6.1, 1.7.2, 1.7.3, 1.8, 1.9.3, 1.11, 1.12) • Patient history (Items 1.5.1, **2**.1, 2.2) • Patient examination (Items **3**.2, 3.3, 3.4.1, 3.4.3, 3.5.1) • Recording of clinical data (Items **5**.1.1) • Low vision (**4**.8.1).	

Major Topics (Syllabus Outline)	**Clinical Optics**: Projector optics, illumination and observation systems of the direct and indirect ophthalmoscopes, the retinoscope, the biomicroscope; stereoscopes, autorefractor and other refraction systems; keratometers, the radiuscope, tonometers, goniolenses: glimpses of advanced optical instruments that image the eye. **Radiometry, Photometry and Colorimetry**: Optical radiation, radiometry, the eye as a photodetector, reflection and transmission of light, standard illuminants, illuminants and sources,

[3] Contextualised Science Graduate Attributes: https://www.science.unsw.edu.au/our-faculty/science-graduate-attributes

	colourimetry, geometrical representation of colour stimuli, derivation of tri-stimulus values, the CIE system, uniform colour spaces and colour-difference formulae, some CIE methods and indices, colour order systems, methods of colour measurement. **Primary Care**: Communication skills, aetiology and epidemiology of ametropia, consequences of ametropia upon the individual and the community and the differences against persons having low vision or colour vision impairment, vision charts and visual acuity, objective versus subjective refraction, external eye observations, the anterior eye and slitlamp biomicroscopy, the posterior eye and direct ophthalmoscopy. **Colour Vision:** Aetiology and epidemiology of CV, the basis of construction of a range of CV tests used in clinical and research domains, comparative strengths and weaknesses of tests, how to administer the various CV tests, interpretation of test results, clinical record keeping. **Low Vision**: Aetiology and epidemiology of LV, classifications used for LV, the impact of LV on the person and those around them, letter charts for those with LV, aspects of communicating with the LV patient.
Relationship to Other Courses within the Program	Understanding the ametropias, the assessment of vision and the eye and the use of related instrumentation demands a basic understanding of optics and visual optics, physics, maths, biology, chemistry/biochemistry, ocular anatomy, vision science, pathology and some neuroscience. This course will dovetail naturally with the remaining Optometry and Vision Science courses, plus pharmacology, physiology, ocular disease.

4. Rationale and Strategies Underpinning the Course

Teaching Strategies	This course is largely designed around experiential learning using a constructivist approach (combining observations, experience in learning and reflection) in a simulated ophthalmic workplace environment. That is, this course builds upon what has already been learnt from earlier courses and extends that knowledge into an environment physically like the modern ophthalmic clinical practice. A variety of methods will be used to deliver information to stimulate effective learning pathways: including conferring responsibility for learning onto the student and providing opportunities for students to understand the effectiveness or otherwise of learning strategies they have previously adopted. Practical classes will provide an extension of material presented in lectures with a hands-on approach to the use of clinical equipment to consolidate theoretical aspects of optical equipment design. These practical classes will concurrently provide the opportunity for close-up visualisation of details of the anterior and posterior eye as described during the Ocular Anatomy and Physiology course. Tutorial exercises will be used to engage students in real world scenarios that utilise the course content provided thus far with the primary purpose of developing critical thinking and encouraging an evidence-based approach to learning the material in this course. A major written assignment will demand self-directed learning and advancement of information literacy skills to expose the breadth of the impact of refractive errors, colour vision and low vision impairment at the level of the individual, the nation and the world. This assignment is supported using guest lecturers. Assessments derive directly from the goals of the course and the desired graduate attributes: the ability to read/listen/observe/reflect and derive meaning and practical competency will be expected.
Rationale for learning and teaching in this course[7]	This course is largely designed around 'experiential learning' in an authentic environment using a constructivist approach, i.e. building upon what you already know from your earlier courses. You will be learning cooperatively and drawing on the diversity of your class to aid you in understanding the range of content that you will be exposed to, and the range of impacts of common visual tasks upon different persons. The lectures in this course are closely aligned with relevant and engaging practicals using your colleagues as patients to reinforce and clarify what has been presented in the lectures. There are many opportunities for review and reflection. You will have much direct informal contact with your lecturers – make the most of it! All assessment tasks are directly related to the final learning outcomes. You should learn from participating in and completing these tasks whether they are worth marks or not! This includes pre-reading assigned materials and/or videos before lectures and familiarising yourself with the practical class procedures before attending that class.

5. Course Schedule

OPTM2133 THE CLINICAL ENVIRONMENT 2019									
WEEK	**DATE** Week starting	**Lecture Mon 11-12 am** CLB6	**Lecture Mon 3-4pm** WebsterA	**Lecture Thurs 2-3pm** ChemSc M18	**Lecture Fri 9-10am** ChemSc M18	**Online video for home viewing**	**Tutorial 1 hour** Gp**A** Mon12pm GoldG02 Gp**B** Mon1pm GoldG02 Gp**C** Mon4pm GoldG02 Gp**D** Mon5pm GoldG02 Gp**E** Tue 2pm GoldG02 Gp**F** Tue 3pm GoldG02	**PRAC 2 hour** Gp**1** Tues 9am Gp**2** Wed 1pm Gp**3** Thu 9am Gp**4** Thur 11am Gp**5** Thur 4pm Gp**6** Fri 10am Gp**7** Fri 12noon	**WEEK**
1	Mon Sept 16		PC1: Course Intro, General Communication,	PC2: Clinical Comms Letter charts	PC3: Visual Acuity and its assessment	Overview, projector optics *(view before prac)*	How to peer review/reflect	Communications	**1**
2	Mon Sept 23	PC4: Intro to refractive errors, Symptoms, Pt types, Tools	PC5: Best vision sphere	PC6: Development and epidemiology of refractive errors	PC7: Consequences of refractive errors [Dr Judith Stern]	The retinoscope *(view before prac)*	Ametropia and presbyopia	Lab Intro, charts, VA, lens changes	**2**
3	Mon Sept 30	PC8: Objective vs. Subjective refraction	PC9: External eye & Slit Lamp (1)	PC10: Slit Lamp (2)	RPC 1	Autorefractors & other refraction systems *(view before prac and tutorial)*	Optics of Instruments (1)	Best vision sphere and lens manipulations, retinoscopes	**3**
4	Mon Oct 7	*Public Holiday*	*Public Holiday*	**Midterm Part A Exam** (All lectures/pracs to end of Week 3)	RPC 2	Keratometers, the radiuscope *(view before prac)*	*Public Holiday Monday* [no Tutes all Groups]	Keratometry & autorefractors	**4**
5	Mon Oct 14	RPC 3	PC11: The normal fundus & Ophthal. (1)	PC12: Ophthalmoscopy (2)	RPC 4	Biomicroscope, stereoscopes *(view before prac)*	RPC 1	External Eye, Slit Lamp (1)	**5**
6	Mon Oct 21	RPC 5	RPC 6	What is Low Vision (LV1)	CV 1	Ophthalmoscopes *(view before prac)*	Slit Lamp & Ophthal Slide Show	Slit Lamp (2)	**6**
7	Mon Oct 28	CV 2	CV 3	Epidemiology of low vision (LV2)	Mid term Part A Exam Review	Gonio lenses & tonometers	RPC 2	Slit Lamp (3) / Intro Posterior eye	**7**
8	Mon Nov 4	CV 4	CV 5	**Midterm Part B Exam** (all lectures/pracs Wk4 to end Wk7)		Advanced Optical instruments	Optics of Instruments (2)	Direct Ophthalmoscopy	**8**
9	Mon Nov 11			Mid term Part B Exam Review			Low Vision	CV 1	**9**
10	Mon Nov 18	PRAC EXAMS? See roster in Week 9	PRAC EXAMS? See roster in Week 9	PRAC EXAMS? See roster in Week 9	PRAC EXAMS? See roster in Week 9		PRAC EXAMS? See roster in Week 9	CV2	**10**

Some of this information is available on the Online Handbook[4] and the UNSW Timetable[5].

[4] UNSW Virtual Handbook: http://www.handbook.unsw.edu.au
[5] UNSW Timetable: http://www.timetable.unsw.edu.au/

6. Assessment Tasks and Feedback

Task	Knowledge & abilities assessed	Assessment Criteria	% of total	Date of		Feedback		
				Release	Submission	WHO	WHEN	HOW
SUMMATIVE								
Practical Skills e-Portfolio	Understanding of consulting room processes; ability to perform clinical tests, incl, communicating with the patient; ability to reflect on targeted personal growth this Term	8 prac** in-class quizzes and ONH drawing (total 5%), practical skill proficiency in an objective-structured-clinical-exam (15%), coverage and demonstration of ability to self-audit in relation to relevant graduate attributes (5%)	*25%	Various dates, Prac exams in Week 10.	Various. e-Portfolio due Friday 22nd Nov 11.59pm	Various	Various	Final Mark
Essay	Understanding of the impact that refractive error has on an individual, their community and nation, contrasted with the experiences of individuals with LV and CV impairment.	Coverage of the elements as outlined in the Essay Brief, overt and inferred; demonstrated advanced information literacy search and citation skills; a writing style appropriate to Stage 2 university.	15%	Week 2	For peer review Thurs 24th Oct 11.59pm. Final submission Thurs 31st Oct 11.59pm.	Dr Junghans	2 weeks after final submission	On Moodle with feedback
Midterm Written Theory Exam: Part A	Understanding of all lecture/tutorial/practical classes up to end of Week 3	Accuracy of responses to MCQ, short answer questions and graphical optics questions	10%	Week 4 Thurs 2-3pm	N/A	Dr Junghans	Week 7	In Lecture Fri 9am
Midterm Written Theory Exam: Part B	Understanding of all lecture/tutorial/practical classes for Weeks 4 to 7 inclusive	Accuracy of responses to MCQ, short answer questions and graphical optics questions	10%	Week 8 Thurs 2-3pm	N/A	Dr Junghans	Week 9	In Lecture Thurs 2pm
Final Written Theory Exam	Understanding of content for whole Term's lecture/ tutorial/ practical classes (unless otherwise specified by lecturer)	Accuracy of responses to MCQ, short answer questions and graphical optics questions	40%	As timetabled in Exam Period	N/A	Dr Junghans	N/A	Final Course Mark
FORMATIVE								
Entrance Test	Understanding of Vision, Optics and Visual Optics from Year 1	Accuracy of MCQ responses	0%	On Moodle by Week 1 with immediate online feedback				
Suzuki Mental Cutting Test	A personal measure of ability to interpret 3-D from 2-D information	Accuracy of MCQ responses	0%	On Moodle by Week 2 with immediate online feedback				
Written problems	Understanding of the course materials	Accuracy and comprehensiveness of responses	0%	Ongoing release. Feedback from consultation with peers (personally or via Moodle), or in lab or tutorial class, or by appointment with the relevant lecturer.				

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** Note that attendance at all Clinical Lab Practicals is compulsory as this is where you will be trained in essential equipment-based hands-on and communication skills. Attendance *per se* is not graded, however a quiz that covers your preparation for the Lab will be undertaken between 5 past and 10 minutes past the hour, which will be graded.

Assessment Tasks

1. Midterm Written Exam (20%)

This held in two parts to help you pace your study wisely. You will be grateful! Part A (10%): This 45 minute exam in Week 4 will draw on all material in lectures, tutorials and practical classes during Weeks 1, 2 and 3. A lecture will be devoted to providing students with the rationale behind each question and showing how the answer has been reached. Part B (10%). This 45 minute exam in Week 8 will draw on all material in lectures, tutorials and practical classes during Weeks 4, 5, 6 and 7. A lecture will be devoted to providing students with the rationale behind each question and showing how the answer has been reached. Note: these Exam Reviews will not be available on Echo 360.

Learning objectives that apply: 1, 2, 4, 5.

2. Essay (15%)

Detailed instructions for this Assessment Task will be posted separately on Moodle. Repeating students have the option to use last year's mark or improve their mark.

In summary: Students will submit a mind-map of the refractive errors domain (3%) plus a 1,200 word essay describing the process and epidemiology of emmetropisation (4%) and analysing the breadth of impact that refractive error has on an individual and on their community (4%). In this essay, students will also indicate how impacts experienced by individuals with Low Vision and Colour Vision defects compare (2%). Students will be expected to add a short note expressing how writing this essay has impacted upon themselves (2%). A draft of the essay submitted to Turn It In by 11.59pm Thursday 24th Oct will be peer-reviewed anonymously by 2 randomly allocated classmates to enable bi-directional formative feedback before final submission by 11.59pm Thursday 31st Oct.

Learning objectives that apply: 3, 4, 7.

3. Final Examination (40%)

The final 2 hour examination during the Timetabled Exam Period will draw on all material covered during the entire course in every strand. Students will be required to apply the knowledge to real world scenarios that may use practitioner and/or patient input. This exam is a **hurdle**: A mark of ≥ 50% must be achieved.

Learning objectives that apply: 1, 2, 4, 5.

4. Practical Skills e-Portfolio (25%)

Detailed instructions for this set of Portfolio Tasks will be posted separately on Moodle. Due Friday 22nd Nov 11.59pm.

In summary: (i) 8x practical class quizzes Weeks 2-9 inclusive (0.5% each) plus an optic nerve head drawing (1%) for a total 5%. (ii) Week 10 practical skill proficiency objective-structured-clinical-exam on: VA measurement (5%) and Keratometry (3%) as compulsory tests plus a random assignment of one of either assessing Colour Vision or Slitlamp techniques (7%). (iii) A reflective piece demonstrating an ability to self-audit the term's interactions/learning/performance, particularly in relation to relevant graduate attributes (5%). Note, VA assessment and Keratometry are **hurdles** and if either are failed on the first attempt, they must be repeated until performance is satisfactory (but without any increase in marks). In addition, the VA and Keratometry prac stations must both be passed to receive any marks for the hurdle items.

Learning objectives that apply: 6, 7.

What must I do to pass the course?

In order to pass the course you must have attended all practical classes **AND** attained a final overall mark of ≥50%, **AND** you must have satisfied the hurdle requirements within the e-Portfolio* **AND** you must have met the hurdle of ≥50% in the Final Theory Paper.

Additional assessment:

No one is automatically entitled to additional (supplementary) assessment.
The School Examinations Committee will decide at the end of the exam period who is entitled to additional assessment.

Please read carefully the pages below for important information including the compulsory dates regarding supplementary examination; read the new SOVS supplementary assessment policy; and read the UNSW 'Fit to Sit' rule as per the links below:

https://www.optometry.unsw.edu.au/files/supplementary_assessment_guidelines_v_3_sovs_2019_03_14.pdf
https://www.optometry.unsw.edu.au/files/supplementary_examination_information_2019_final_14_03_19.pdf
https://student.unsw.edu.au/special-consideration.pdf

7. Additional Resources and Support

Text Books	*"Bennett & Rabbetts Clinical Visual Optics"* 4th Ed. Butterworth Heinemann Elsevier Available – UNSW bookshop, UNSW library Note: this text is also useful for all courses covering Primary Care Optometry in Years 3, 4, 5. *"The Measurement and Specification of Optical Radiation".* Ed S. Dain. Only available online via Moodle. *"Clinical Procedures for Primary Eye Care*." Elliott D. (4th Ed) Elsevier [Includes additional online resources] Available – UNSW Bookshop, UNSW library High Use Collection. Note: this text has limited use for non-optometry students BUT it is a major resource for optometry students during Years 3, 4, 5. *"Optometry: Science, Techniques and Clinical Management"* Rosenfield & Logan. 2nd Ed. Elsevier. Available – UNSW Bookshop, UNSW library High Use Collection. Note: this text has limited use for non-optometry students BUT has several chapters as prescribed reading for the major essay. It is also a major resource for optometry students during Years 3, 4, 5.
Course Manual	A Lab Manual will be uploaded to Moodle to be printed and brought to class by you each week. Details of each prac class are assessable during the first 5 minutes of each class (not Wk10).
Required Readings	Carol Lakkis et al "*Infection control guidelines for optometrists*" Clin Exp Optom 2007; 90: 6: 434–444. https://onlinelibrary.wiley.com/doi/full/10.1111/j.1444-0938.2007.00192.x Readings as assigned in the Essay Assessment Task posted separately on Moodle.
Additional Readings	Those articles as advised by your lecturers and links uploaded to Moodle. The following texts provide excellent support for this course, but are not 'required' reading. Martonyi, Bahn, Meyer *Slit Lamp: Examination and Photography* Available direct online from Twin Chimney Publishing. Digre & Corbett *Practical Viewing of the Optic Disc*. Butterworth Heinemann. Available in the High Use Collection in UNSW library. Jennifer Birch *Diagnosis of Defective Colour Vision* Available in the High Use Collection in UNSW library. Richmond Products *Colour vision deficiency: a concise tutorial for optometry and ophthalmology* https://pdfs.semanticscholar.org/06bf/712526f7e621e7bc7a09e7f9604c5bae6899.pdf Clin Exp Optom *The handicap of defective colour vision* [virtual issue] https://doi.org/10.1111/j.1444-0938.1972.tb06271.x and see also https://onlinelibrary.wiley.com/page/journal/14440938/homepage/virtual_issue__handicap_of_abnormal_vision.htm
Societies	• OPTOMSOC – for Optometry Students http://www.optomsoc.com • Optometry Giving Sight World Sight Day International Student Challenge • Students are encouraged to become involved in professional societies and organizations as relevant to their career pursuits. Optometry Australia encourages student enquiries.
Computer Labs/ Study Spaces	The Optometry Computer Lab - Old Main Building (OMB LG21) The UNSW Library

8. Required Equipment, Training and Enabling Skills

Equipment REQUIRED	Device capable of completing online activities in real time during tutorials and lectures.
Enabling Skills Training Required to Complete this Course	• Work Health and Safety. You must undertake and pass the WH&S quiz online as instructed in Moodle before being allowed to participate in any practical classes in Week 2. • Information literacy skills beyond the basic online (ELISE) level are expected. Go to UNSW Library/Online and finish the complete series of information literacy tutorials. • Endnote bibliographic software or equivalent. Useful tool for all essays. Free at https://www.it.unsw.edu.au/students/software/index.html Tutorials online via the Library.

	• English language skills. The Learning Centre (now next to Student Central). **NOTE**: Communications skills are assessable at all practical exams.

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	2019	OPTM2133 was conducted for the first time in 2018 and a major review has led to significant revisions to the assessment tasks for 2019.
MyExperience[11]		The strain on resources in the PreClinical Lab in 2018 and the delivery of support during lab classes has seen a major reorganization of how to best capture the status of a student's Practical Skills set at the end of term. Hence, there has been a reorganization of course assessments. Student feedback has been taken into account.

[11] **myExperience process:** https://teaching.unsw.edu.au/myexperience

10. Administration Matters

Expectations of Students	Attendance is compulsory for the following components and will be monitored by taking a roll: • All Tutorials. These tutorials provide a particularly effective and critical learning experience to help you to contextualise important subject matter presented elsewhere in the course. • 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 relevant to optometry or employment in the ophthalmic domain. However, it should be noted that attendance at lectures typically yields better grades for those students who make the effort; the lecture comes before the prac, attention is not split with the TV or family in the background, commitment is stronger, procrastination does not delay i-viewing material for a first time, etc. Note: Attempts to falsify the central register or attendance registers will be managed under UNSW Student Misconduct Procedures: https://www.gs.unsw.edu.au/policy/documents/studentmisconductprocedures.pdf The University uses **email as an official form of communication** for students. All UNSW students have their own UNSW 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.** Unfortunately, it has become necessary for me to remind you that members of staff are human beings who work much of the time, but do have an outside-of-work life as well. Therefore, while you are free to email us at any time, you are not free to expect an answer outside of working hours; nor should you expect an immediate answer during working hours. If staff are working in the clinic at a time not scheduled for this course, you may not under any circumstances approach them at that time. For more information or if you are having connection or access problems, see: IT Service Centre www.it.unsw.edu.au/ Telephone: 02 9385 1333 Email: itservicecentre@unsw.edu.au
Assignment Submissions	Assignments should be submitted via Moodle (electronic submission). 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: https://www.optometry.unsw.edu.au/current/policies-and-procedures

Work Health and Safety[12]	*Work Health and Safety. You must undertake and pass the WH&S quiz online as instructed in Moodle before being allowed to participate in any practical classes in Week 2.* *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*
Assessment Procedures ***UNSW Assessment Policy***[13]	**SCHOOL OF OPTOMETRY AND VISION SCIENCE, UNSW** **SUPPLEMENTARY EXAMINATION INFORMATION, 2019** **SPECIAL CONSIDERATION** 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. **CHRONIC ISSUES AND PRE-EXISTING CONDITIONS** 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 https://student.unsw.edu.au/disability-registration 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. **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. SUPPLEMENTARY EXAMINATIONS FOR T3 OPTM/VISN Courses 2019 WILL BE HELD AS FOLLOWS: **STAGE 1-4 UNDERGRAD COURSES: THURSDAY 19th DECEMBER, FRIDAY, 20th DECEMBER 2019, and SATURDAY 21th 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, so 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. **School of Optometry and Vision Science, UNSW, 21 August 2019**

[12] UNSW OHS Home page
[13] UNSW Assessment Policy
[14] Student Complaint Procedure

Equity and Diversity	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/). 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.		
Student Complaint Procedure[14]	***School Contact***	***Faculty Contact***	***University Contact***
	Prof. Helen Swarbrick *h.swarbrick@unsw.edu.au* *Tel: 9385 4373*	*Professor Simon Killcross, Acting Deputy Dean (Education)* s.killcross@unsw.edu.au Tel: 9385 3034 *Or* *Dr Gavin Edwards* *Associate Dean (Academic Programs)* *g.edwards@unsw.edu.au* *Tel: 9385 4652*	*Student Integrity Unit (SIU)* *Telephone 02 9385 8515, email studentcomplaints @unsw.edu.au*

University Counselling and Psychological Services[15]	Information on Counselling and Psychological Services [CAPS] is available at: https://www.counselling.unsw.edu.au/ Tel: 9385 5418

11. NSW 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:

[15] University Counselling and Psychological Services

- 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