

OPTM6421

Binocular Vision, Paediatrics and Low Vision

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
Course Convenor	Dr Pauline Kang	p.kang@unsw.edu.au	By appointment
Lecturer	Dr Sharon Oberstein	s.oberstein@unsw.edu.au	By appointment
Lecture	Dr Jerome Ozkan	j.ozkan@unsw.edu.au	By appointment
Associate Lecturer	Dr Ngozi Chidi-Egboka	n.chidi-egboka@unsw.edu.au	By appointment
Associate Lecturer	Ms Rebecca Dang	r.dang@unsw.edu.au	By appointment
Technical & laboratory manager	Dr Dale Larden	d.larden@unsw.edu.au	By appointment

2. Course information

Units of credit: 6

Pre-requisite(s): OPTM6400

Teaching times and locations:

Lectures: Monday 11am – 1pm, Weeks 1 – 10

Tutorials/webinars: Thursday 3pm – 5pm, Weeks 4 – 10

Practicals: Weeks 2 – 10

- *Group 1: Wednesday 9am – 11am*
- *Group 2: Wednesday 3pm – 5pm*
- *Group 3: Thursday 9 am to 11am*
- *Group 4: Thursday 1pm – 3pm*

For more information, please go to <http://timetable.unsw.edu.au/2022/OPTM6421.html>

2.1 Course summary

OPTM6421 will further develop the integration of student knowledge of the basic sciences with clinical competency in the areas of binocular vision, low vision and paediatrics. Students will be introduced to the care and assessment of paediatric patients and patients with strabismus, amblyopia, nystagmus, and/or low vision or severe visual impairment. Students will need to apply knowledge from earlier courses such as ocular disease, physiology and optics in order to prescribe visual aids which best alleviate the detrimental effects of visual deficits. The course will be delivered using lectures, tutorials, practical classes and self-directed learning.

Brief Curriculum:

- Binocular vision – amblyopia, comitant and noncomitant strabismus.
- Children's vision – examining children, vision therapy, near point stress, optometric management of learning difficulties, special needs patients, child abuse.
- Low vision – low vision assessment, low vision aids, adaptive technology, the multidisciplinary mode of practice/rehabilitation.

2.2 Course aims

To produce a student with a professional attitude and good communication skills who has the ability to integrate scientific and clinical aspects of optometry and make well-reasoned decisions.

To advance student knowledge and to stimulate students' interest in optometric subspecialties such as low vision, binocular vision and paediatrics.

2.3 Course learning outcomes (CLO)

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

1. Demonstrate a thorough understanding of strabismus and related sensory anomalies
2. Choose appropriate testing to obtain an accurate diagnosis
3. Choose appropriate therapy for a patient with strabismus and/or amblyopia
4. Identify and correctly manage strabismus that may indicate pathology
5. Identify and appropriately manage a variety of ocular motility disorders
6. Demonstrate a thorough knowledge of visual disability
7. Accurately interpret clinical data to develop a valid clinical management plan
8. Demonstrate awareness of the range of low vision aids and services designed to maximise independence and quality of life of people with visual disability
9. Identify the elements of a comprehensive management plan which may include the prescription of spectacles or other visual aids, vision therapy, referral to another appropriate professional
10. Formulate and implement a comprehensive optometric examination plan with appropriate consideration to age, developmental status and intellectual ability
11. Assess developmental visual information processing skills
12. Identify the elements of a comprehensive management plan which may include the prescription of spectacles or other visual aids, vision therapy, and/or referral to another appropriate professional

2.4 Relationship between course and program learning outcomes and assessments

PLOs for programs 3182 and 8095 are identical but numbering differs. Numbering for program 8095 is used in this table. Further details PLOs for program 8095 can be found here:

<https://www.handbook.unsw.edu.au/postgraduate/programs/2022/8095>

Course Learning Outcome (CLO)	CLO Statement	Related Tasks & Assessment
CLO 1	Demonstrate a thorough understanding of strabismus and related sensory anomalies	Final theory exam Binocular vision video assignment
CLO 2	Choose appropriate testing to obtain an accurate diagnosis	Final theory exam Binocular vision video assignment
CLO 3	Choose appropriate therapy for a patient with strabismus and/or amblyopia	Final theory exam Binocular vision video assignment
CLO 4	Identify and correctly manage strabismus that may indicate pathology	Final theory exam Binocular vision video assignment
CLO 5	Identify and appropriately manage a variety of ocular motility disorders	Final theory exam Binocular vision video assignment
CLO 6	Demonstrate a thorough knowledge of visual disability	Final theory exam Practical examination
CLO 7	Accurately interpret clinical data to develop a valid clinical management plan	Final theory exam Practical examination
CLO 8	Demonstrate awareness of the range of low vision aids and services designed to maximise independence and quality of life of people with visual disability	Final theory exam Practical examination
CLO 9	Identify the elements of a comprehensive management plan which may include the prescription of spectacles or other visual aids, vision therapy, referral to another appropriate professional	Final theory exam Practical examination
CLO 10	Formulate and implement a comprehensive optometric examination plan with appropriate consideration to age, developmental status and intellectual ability	Practical examination
CLO 11	Assess developmental visual information processing skills	Practical examination
CLO 12	Identify the elements of a comprehensive management plan which may include the prescription of spectacles or other visual aids, vision therapy, and/or referral to another appropriate professional	Final theory exam Practical examination

The following competency standards are also addressed in part in this course:

Competency standards for entry-level to the Profession of Optometry 2014

Unit 1: Professional responsibilities

- 1.1 Maintains, develops and audits optometric knowledge, clinical expertise and skills.
- 1.2 Adopts an evidence-based practice approach as the foundation for making clinical decisions
- 1.4 Acts in accordance with the standards of ethical behaviour of the profession.
- 1.5 Communicates appropriate advice and information.
- 1.9 Provides for the care of patients with a diverse range of requirements and needs.

Unit 2: Communication and patient history

- 2.1 Communicates with the patient
- 2.2 Makes general observations of the patient
- 2.3 Obtains the case history

Unit 3: Patient examination

- 3.1 Formulates an examination plan
- 3.6 Assesses oculomotor and binocular function.
- 3.7 Assesses visual information processing

Unit 4: Diagnosis and management

- 4.1 Establishes a diagnosis or diagnoses
- 4.2 Evaluates the expected prognosis of the condition
- 4.4 Designs a management plan in consultation with the patient and implements the agreed plan
- 4.8 Prescribes low vision devices
- 4.10 Manages patients requiring vision therapy

Note that at this point you will NOT be prescribing low vision devices or implementing plans without the supervision of a registered optometrist.

3. Strategies and approaches to learning

3.1 Learning and teaching activities

Learning and teaching in OPTM6421 will build upon your prior experience and knowledge obtained throughout your life, including prior visual science and clinical optometry courses. A linear model of education is followed in that the subject matter generally starts with knowledge and facts and builds towards the application of your knowledge in the broader context of patient care. You are encouraged to take responsibility for your own learning, as this will prepare you for the life-long learning that is expected from a health care professional. The following learning strategies will be used in this course:

- Lectures to provide the necessary background and theory underpinning the study of topics included in this course.
- Authentic learning in webinar tutorials and practical classes to develop basic skills and personal experience in a variety of procedures and skills and in case analysis. Some may be replaced by online activities (demonstrations, guest presenters (part of the multidisciplinary low vision rehabilitation model), Moodle quizzes and discussion forums) due to COVID19.
- Class exercises, study questions, reading and assignments - self-directed learning is used to (1) reinforce and extend theoretical principles learned in lectures and (2) introduce new material

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.

Some components of this course are compulsory, and you are expected to attend and participate fully. Attendance at compulsory course components will be monitored by taking a roll. You are also expected to prepare for practicals and tutorials if you are given preparatory activities. The compulsory course components, and the justification for their compulsory nature, are as follows:

- All live online tutorial/webinar classes, including those given by guest presenters. Attendance at these classes is compulsory because of the special expertise of the presenters, which will provide information not accessible from other sources.
- All practical classes. The practical classes reinforce theoretical components of the course and teach critical practical clinical skills prior to use in the clinic.

Attempts to falsify any attendance registers or record 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 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 student 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. gmail). You will miss out on vital information from the School and University if you do not check your student Zmail.

For more information or if you are having connection or access problems, please reach out to the UNSW IT at <https://www.myit.unsw.edu.au/>

4. Course schedule and structure

This course consists of approximately 5 hours of class contact hours per week. You are expected to take an additional 10-15 hours per week of non-class contact hours to complete assessments, readings and exam preparation.

Week [Date/Session]	Lecture topic	Prac	Webinar
Week 1 30 th May	<ul style="list-style-type: none"> Welcome to course Introduction to strabismus Infantile and incomitant strabismus 	-	-
Week 2 6 th June	<ul style="list-style-type: none"> Evaluation of strabismus 	Deviations and cover test Eccentric fixation Anomalous correspondence	-
Week 3 13 th June*	<ul style="list-style-type: none"> Management of strabismus, paediatric refractive error and amblyopia 	Review	-
Week 4 20 th June	<ul style="list-style-type: none"> Introduction to paediatrics Examining children and clinical techniques 		Management of traumatic brain injury
Week 5 27 th June	<ul style="list-style-type: none"> Near point stress Management of amblyopia 	Practical examination Part A: Binocular vision	Management of childhood strabismus
Week 6 4 th July	<ul style="list-style-type: none"> Special populations Inter-professional cooperation 	Paediatric prescribing – clinical techniques Developmental visual information processing	Paediatric prescribing
Week 7 11 th July	<ul style="list-style-type: none"> Management of myopia 		DVIP
Week 8 18 th July	<ul style="list-style-type: none"> Low vision assessment with an eye on rehabilitation Prescribing LV aides – magnification 	LV aids Review	Vision related QoL and low vision rehabilitation
Week 9 25 th July	<ul style="list-style-type: none"> Non visual aids/mobility LV management and glare reduction 		
Week 10 1 st August	<ul style="list-style-type: none"> Advanced low vision management 	Practical examination Part B: Paediatrics and Low Vision	Low vision case studies

*13th June is a public holiday

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	Description	Weight	Due date and time
Assessment 1: Binocular vision video assignment	This assignment involves developing a video on a topic related to binocular vision. The assignment is split into 4 parts due throughout the term. There are both individual and group contributions for this assessment.	20%	Between Weeks 3-9
Assessment 2: Practical examination Part A: Binocular vision Part B: Pediatrics and Low Vision	The practical exam will be split into 2 parts. The first exam will assess your binocular vision clinical assessment skills. The second exam will assess your low vision and paediatric clinical skills. This is a hurdle assessment - you must pass both practical exams to pass the course.	30%	Part A: (15%) during Week 5 Part B: (15%) during Week 10
Assessment 3: Final theory exam	The final exam will consist of MCQs, extended matching or short answer questions. It will run for 1-2 hours and will cover material related to both the theory and practical components of this course.	50%	UNSW exam period

Further information

UNSW grading system: <https://student.unsw.edu.au/grades>

UNSW assessment policy: <https://student.unsw.edu.au/assessment>

5.2 Assessment criteria and standards

Your future patients, the general public, clinic supervisors and the profession of Optometry expect that you will be able to accurately perform and record the procedures taught in this course, interpret and relate findings to other aspects of patient care, and establish a diagnosis and treatment plan for your patient. The assessment components of this subject are designed to ensure that you will be able to meet these expectations. You must pass the prac and final exams to pass the course. If you fail any of these assessments, you will fail the course, even if your numerical aggregate mark is >50. The grade you receive will be "UF" which indicates that you failed an essential component of the course

5.3 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](#).

5.4. Feedback on assessment

You will be provided with written or verbal feedback for all components for the binocular video assignment (assessment 1) within 2 weeks of submission of individual assignment components.

You will also be provided with written or verbal feedback on your performance in the prac exams (Assessment 2) within 2 weeks of the assessment.

6. Academic integrity, referencing and plagiarism

Referencing is a way of acknowledging the sources of information that you use to research your assignments. You need to provide a reference whenever you draw on someone else's words, ideas or research. Not referencing other people's work can constitute plagiarism.

Further information about referencing styles can be located at

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

Academic integrity is fundamental to success at university. Academic integrity can be defined as a commitment to six fundamental values in academic pursuits: honesty, trust, fairness, respect, responsibility and courage.¹ At UNSW, this means that your work must be your own, and others' ideas

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

should be appropriately acknowledged. If you don't follow these rules, plagiarism may be detected in your work.

Further information about academic integrity and **plagiarism** can be located at:

- The Current Students site <https://student.unsw.edu.au/plagiarism>, and
- The ELISE training site <https://subjectguides.library.unsw.edu.au/elise>

The Conduct and Integrity Unit provides further resources to assist you to understand your conduct obligations as a student: <https://student.unsw.edu.au/conduct>.

7. Readings and resources

Readings relevant to the course are available through links in Moodle. Here are some additional resources:

1. Vision Australia (<https://www.visionaustralia.org/>)
2. Guide Dogs NSW ACT (<https://guidedogs.com.au/>)
3. Societies – you are encouraged to become involved in professional societies and organisations
 - a. Vision Australia
 - b. Guide Dogs NSW/ACT
 - c. Retina Australia
 - d. Macular Degeneration Foundation
 - e. Fred Hollows Foundation
 - f. ICEE

8. Administrative matters

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

9. Additional support for students

- The Current Students Gateway: <https://student.unsw.edu.au/>
- Academic Skills and Support: <https://student.unsw.edu.au/academic-skills>
- Student Wellbeing and Health <https://www.student.unsw.edu.au/wellbeing>
- UNSW IT Service Centre: <https://www.myit.unsw.edu.au/services/students>
- UNSW Student Life Hub: <https://student.unsw.edu.au/hub#main-content>
- 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>