UNSW SYDNEY

Course Outline

VISN3111

DEVELOPMENT AND AGING OF THE VISUAL SYSTEM

Optometry and Vision Science

Faculty of Science

Term 1, 2020

1. Staff

Position	Name	Email	Consultation times and locations	Contact Details
Course Convenor	Dr Mei Ying Boon** **IMPORTANT NOTE Dr Boon will be on Sabbatical until Week 3 of the course. Questions that would normally directed to the course convenor should be directed to Praveen Bandela or Dr Lisa Asper up until the start of Week 3.	m.boon@unsw.edu.au	Available before or after lectures from Week 3 onwards. Otherwise, email to set up a meeting or ask questions. Prior to Week 3, contact Praveen Bandela or Dr Lisa Asper	m.boon@unsw.edu.au RMB3.007
Lecturer	Praveen Bandela	p.bandela@unsw.edu.au	Online discussion board available for questions and lecturers may be emailed questions or for consultation times.	
Lecturer	Associate Professor Barbara Junghans	b.junghans@unsw.edu.au	Online discussion board available for questions and lecturers may be emailed questions or for consultation times.	
Lecturer	Associate Professor Sieu Khuu	s.khuu@unsw.edu.au	Online discussion board available for questions and lecturers may be emailed questions or for consultation times.	
Lecturer	Associate Professor Philip Anderton	p.anderton@unsw.edu.au	Online discussion board available for questions and lecturers may be emailed questions or for consultation times.	
Technical and Laboratory Staff	Dr Dale Larden	d.larden@unsw.edu.au	By appointment	

2. Course information

Units of credit: 6
Pre-requisite(s): VISN2211
Teaching times and locations:

Summary of Course Structure (for details see 'Course Schedule')				
Component	HPW	Time	Day	Location
Lecture 1 and 2	2	10 am – 12 noon	Monday	Webster Theatre A
Lecture 3 and 4	2	10 am – 12 noon	Thursday	Webster Theatre A
Tutorial/Laboratory share the same time slots	1, not every week, refer to schedule (Wks 3-8, 10)	Grp 1 Mon 2-3 pm Grp 2 Mon 3-4 pm Grp 3 Mon 4-5 pm Grp 4 Tues 10-11 am	See left	Wk 3 and 4 – in subgroups as announced on Moodle

		Grp 5 Tues 11am-12noon Grp 6 Tues 2-3 pm		Wk 4-8, 10 AOP seminar room
Other	1, not every week, refer to schedule. Each discussion team (see allocation on Moodle) must attend one small group tutorial with their tutor as announced on Moodle.	Grp 1 Thurs 1-2 pm Grp 2 Thurs 2-3 pm Grp 3 Thurs 3-4 pm Grp 4 Fri 10-11 am Grp 5 Fri 11am-12noon Grp 6 Fri 12-1 pm	See left	OMBLG25 Optometry and Vision Science Computer Laboratory
TOTAL	5 to 6			
Special Details	Students are required to have access to a computer and a speedy internet connection. Students will note that during the Other sessions, the Optometry and Vision Science Computer Laboratory is booked for you. When the schedule states "Independent Study", this means that the room is available only to students in that enrolled group at that time to conduct research and meet with their group discussion/presentation colleagues. Attendance for "Independent Study" classes is not monitored except for when you are required to meet with your tutor face-to-face for a small grouop discussion on your approved paper; this is a compulsory activity for those students. Other students in the group are also permitted in the room but must keep their voices low. *Note that sometimes timetabling has resulted in clashes for the teaching staff, so it is possible that your tutor will request to arrange an alternative time, date and room in that week, or may even request a Skype (video conferencing) meeting. If that is the case, please work with your tutors to find a mutually suitable time*. Students are encouraged to consult with the lecturers or tutors who taught that material if students have any questions about the course materials. A bulletin board for questions and suggestions is also available in Moodle. Most lecturers will be able to respond within 2 days. The practical classes are conducted in smaller groups due to small room size. For those classes, you should attend at the required time. One of the practical classes will be conducted at the Centre for Eye Health. Patients who attend the centre are patients of a vision impairment prevention service called Guide Dogs NSW/ACT. The Centre for Eye Health has been very kind to allow us the use of their visual electrophysiology room and have rescheduled their patients to accommodate us so that we can run the practical class. Please return the favour. When scheduled for that class, students should wear business attire, sign in to the student visitor register at reception, and be sensitive to the fact that the centre sees patients who have been referred as they are likely to have a sight-threatening eye condition and may be easily upset. It is important to behave professionally and facilitate the flow of patients and staff through the clinic.			

2.1 Course summary

Objectives: An understanding of the development and aging of the visual system. The effect of disease on the visual system is briefly discussed. Brief curriculum: Development of the visual system: embryology of the eye and brain, axon pathfinding, receptive field development, development of the visual cortex, critical periods, plasticity, reorganisation of cortical inputs; Development of vision: spatial vision, colour vision, motion perception, shape perception, binocularity; Ageing: physiology of aging, effect of age on brain function, effect of age on the visual system, effect of age on vision; Effect of disease: the effects of brain injury, retinal disease, refractive error, amblyopia and drugs on visual perception are briefly covered.

2.2 Course aims

The aim of this course is to develop understanding of how the human visual system undergoes normal and abnormal age-related changes and the perceptual and functional consequences.

2.3 Course learning outcomes (CLO)

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

1. Explain why vision is poor in the first few years of life and how we know this, how and why vision may not develop normally if impeded during early life, and how and why vision deteriorates in later life.
2. Demonstrate developed communication skills important to participate in scientific discourse, such as in the peer reviewed literature, online forums or conferences, about current, developing, future developments and clinical applications of vision science knowledge relating to the development of the visual system. Skills include verbal, written and listening skills
3. Demonstrate developed skills in critiquing and interpreting the literature on a particular topic relevant to the course topics

2.4 Relationship between course and program learning outcomes and assessments

Course Learning Outcome (CLO)	LO Statement	Program Learning Outcome (PLO)	Related Tasks & Assessment
CLO 1	Explain why vision is poor in the first few years of life and how we know this, how and why vision may not develop normally if impeded during early life, and how and why vision deteriorates in later life.	PLO 1 Effectively communicate information in both oral and written formats. PLO 2 Work effectively with others PLO 3 Articulate advanced and integrated understanding of a complex body of knowledge in Vision Science and Optometry, and their areas of professional practice. PLO 4 Demonstrate an awareness of national and international issues within the disciplines of Vision Science and Optometry, and the	Practicals, Lectures Weeks 1-10 Midsession examination Final examination Group discussion

		impact they may have on the delivery of eye care to the community. PLO 5 Articulate broad and coherent disciplinary theoretical and technical knowledge in Vision Science and Optometry and their areas of practice PLO 6 Use expert, specialised cognitive and technical skills in Optometry to independently and critically analyse and synthesise complex information, problems, concepts and theories. PLO 7 Understand the scientific research process and ability to undertake independent research in Vision Science and Optometry. Apply established theories and concepts to a body of knowledge, and the interpretation and communication of knowledge and ideas to specialist and non-specialist audiences. And PLO 7 Use enquiry-based learning and demonstrate analytical skills in the review, consolidation and synthesis of knowledge in Vision Science and Optometry	
CLO 2	Demonstrate developed communication skills important to participate in scientific discourse, such as in the peer reviewed literature, online forums or conferences, about current, developing, future developments and clinical applications of vision science knowledge relating to the development of the visual system. Skills include verbal, written and listening skills	PLO 1 Effectively communicate information in both oral and written formats. PLO 2 Work effectively with others PLO 3 Articulate advanced and integrated understanding of a complex body of knowledge in Vision Science and Optometry, and their areas of professional practice. PLO 7 Understand the scientific research process and ability to undertake independent research in Vision Science and Optometry. Apply established theories and concepts to a body of knowledge, and the interpretation and communication of knowledge and ideas to specialist and non-specialist audiences.	Group discussion Written assignment
CLO 3	Demonstrate developed skills in critiquing and interpreting the literature on a particular topic relevant to the course topics	PLO 4 Apply enquiry-based learning and analytical skills to adapt knowledge and skills in Vision Science and Optometry. PLO 7 Understand the scientific research process and ability to undertake independent research in Vision Science and Optometry. Apply established theories and concepts to a body of knowledge, and the interpretation and communication of knowledge and ideas to specialist and non-specialist audiences. And PLO 7 Use enquiry-based learning and demonstrate analytical skills in the review, consolidation and synthesis of knowledge in Vision Science and Optometry.	Group discussion Written assignment

3. Strategies and approaches to learning

3.1 Learning and teaching activities

- Teaching strategies include the following: lectures, readings, practical classes, group discussion and tutorials, and a written assignment.
- Face-to-face lectures are important as this is where thinking skills are modelled, and students can ask questions of their lecturers in real time. Lecturers will also pose questions at suitable intervals, where students may respond to check their understanding of the lecture materials. You should be guided by your lecturers as to the level of depth of knowledge you should learn the materials. It is intended that as you study, you also draw on your learning from other courses, such as anatomy and physiology, cell biology, genetics and vision science courses as those courses were will support your learning in this course.
- Readings are an essential part of the course. A number of these readings cover methods used in the research of visual development, that have not been covered in previous courses, or support other lecture materials. These articles are examinable.
- As part of the course, in groups, students will select a recent research article around a discussion topic for critical analysis. If students are unable to select a reading in a timely manner, the tutor in charge of that topic will assign an article. Hence, in addition to the lecturer assigned readings, there will be 5 student-assigned readings. The student selected articles will only be approved if they meet the stated criteria, including supporting understanding of the topics covered in the curriculum and the student learning outcomes. These readings are not examinable but the quality of your responses to these articles contribute to your group discussion mark.
- The practical classes are designed to demonstrate key principles of research methods used in understanding development of the visual system. Due to time constraints, the lecture materials will be presented as an online lecture recording which must be watched prior to the practical classes.
- There is a mid-session exam which is intended to assist you to keep up with the materials in preparation for the final examination. There is a one hour scheduled lecture during which you will be provided with general feedback about the examination. At the end of term, there will be a self-test online quiz to aid you in your revision and check your understanding of the materials. The self-test quiz is not worth any marks but is intended to be a formative assessment.
- This course is part of a suite of Vision Science courses. This course gives you the opportunity to delve more deeply into different aspects of the ageing and developing visual system, requiring a greater level of independence in learning than previous years

- The group discussion activities are designed to both consolidate your knowledge, think about how to apply this knowledge and foster the development of graduate attributes e.g. communication skills, teamwork and collaborative skills, ethics and professional understanding. The group discussion comprises both preparing the discussion, with the support of your lecturers and tutors, as well as participating in discussions (both online and face-to-face) about your own assigned topic, as well as the topics of other groups within your class.

- The written assignment is an opportunity for each student to develop scientific writing skills by coming to a position regarding the conclusions of the research article that they selected for class discussion, and to receive feedback

- The group discussion and written assignments are supported through a small group tutorial (maximum 5 students per group) during the scheduled Other class session. This is a compulsory class and students should be prepared to make the most of this time.

- There is an emphasis on communication skills in this course as it is through communication that 1) the community can understand what we learn, 2) new discoveries are conveyed by scientists to the public and peers for comment, and 3) research / discoveries are enabled to be translated by policy makers or stakeholders in industry into real life outcomes.

3.2 Expectations of students

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. You may lose marks from your final course mark for non-participation in classes, unless you submit an application for special consideration and provide appropriate documentation.

The compulsory course components, and the justification for their compulsory nature, are as follows:

- 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.
- All tutorial classes in this course must be attended as you will be developing your critical thinking, research study design and discussion skills during these classes.
- You are scheduled for one OTHER class (which may be conducted at a mutually suitable time if the tutor is experiencing timetable clashes) which are compulsory. In one class, you will be with your 4-5 fellow discussion group members where you will discuss your article with your tutor. In another class, you will analyse the data generated from your practical classes together with the tutor.

<u>Attendance registers:</u>
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.

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.

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 email account. The School of Optometry and Vision Science will also make use of this form of communication.

It is extremely important that you know how to use your Zmail and ensure that you check it regularly. You are advised to link your official UNSW email address to your habitual email address (e.g. hotmail). You will miss out on vital information from the School and University if you do not check your Zmail.

For more information or if you are having connection or access problems, see:
IT Service Centre
www.it.unsw.edu.au/
Telephone: 02 9385 1333
Email: itservicecentre@unsw.edu.au

4. Course schedule and structure

Some of this information is available on the *Online Handbook*[1] *and the UNSW Timetable*[2].

Week	Lecture 1 and 2	Lecture 3 and 4	Practical	Other	Tutorial	Assessments
Week 1	L1 Introduction to the course (MB – online lecture) L2 Lifespan view 1 (PB)	L3 Lifespan view 2 (PB) L4 Lifespan view 3 (PB)	None	None	None	Eye Development Group, start article approval process
Week 2	L1 Eye development 1 (PB) L2 Eye development 2 (PB)	L3 Eye development 3 (PB) L4 Normal and abnormal refractive development 1 (BJ) Online video lecture recording Electrophysiological and psychophysical methods of visual function assessment (MB)	None	None	None	Refractive Development Group, start article approval process
Week 3	L1 Normal and abnormal refractive development 2 (BJ) L2 Normal and abnormal refractive development 3 (BJ)	L3 Normal and abnormal visual pathway molecular development 1 (PA) L4 Normal and abnormal visual pathway molecular development 2 (PA)	Measuring infant visual function (ZT, PA, MB)	Other (PB and MB) and Online Forum opens – eye development	None	Synapses/visual pathway development group, start article approval process Online Forum – eye development opens Monday
Week 4	L1 Normal and abnormal visual pathway molecular development 3 (PA) L2 Normal and abnormal visual pathway molecular development 4 (PA)	L3 Normal visual development 1 (MB) L4 Normal visual development 2 (MB)	Measuring infant visual function (ZT, PA, MB)	Other (BJ) and Online Forum opens - refractive development	None	Amblyopia group, start article approval process Online Forum – refractive development opens Monday Online Forum – eye development closes Friday

Week 5	L1 Midsession exam L2 Midsession exam	L3 Normal visual development 3 (MB) L4 Abnormal visual development 1 (MB)	None	Other (PA) and Online Forum opens - Synapses/visual pathway development	Eye development (MB and PB)	Ageing visual system group, start article approval process Online Forum – synapses/visual pathway development opens Monday Online Forum – refractive development closes Friday Eye development written assignment due Friday Midsession exam
Week 6	L1 Abnormal visual development 2 (MB) L2 Abnormal visual development 3 (MB)	L3 Amblyopia 1 (SK) L4 Amblyopia 2 (SK)	None	Other (SK) and Online Forum – Amblyopia	Refractive development (BJ and MB)	Refractive development written assignment due Friday Online Forum – amblyopia opens Monday Online Forum – synapses/visual pathway development closes Friday

Week 7	L1 Amblyopia 3 (amblyopic deficit) (SK) L2 Amblyopia 4 (science of amblyopia treatment) (MB)	L3 Amblyopia 5 (science of amblyopia treatment) (MB) L4 Midsession examination feedback (MB)	None	Other (MB/LNS) and Online Forum – Ageing visual system	Synapses/visual pathway development (PA)	Synapses/Visual pathway written assignment due Friday Online Forum – Ageing visual system opens Monday Online Forum – amblyopia closes Friday
Week 8	L1 Ageing eye 1 (MB) L2 Ageing eye 2 (MB)	L3 Ageing eye 3 (MB) L4 Ageing eye visual system 1 (MB)	None		Amblyopia (SK)	Amblyopia written assignment due Friday Online Forum – Ageing visual system closes Friday
Week 9	None	None	None	Independent study	None	None
Week 10	L1 Ageing visual system 2 (MB) L2 Ageing and vision impairment (MB)	Ageing visual system (MB)	None	Independent study - Self-test online quiz	Ageing visual system (MB)	Ageing visual system written assignment due Friday

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

5. Assessment

5.1 Assessment tasks

Task	Length	Weight	Due Date
Assessment 1:	Final theory examination - 2 hour written examination - Examines all theoretical and practical knowledge in the course. - Assessment criteria – accuracy of answers	45%#	During the final examination period
Assessment 2:	Midsession exam - 1 hour written examination - Examines all theoretical and practical knowledge in the course in Weeks 1-4 inclusive - Assessment criteria – accuracy of answers	20%	Week 5 during L1 and L2 timeslots
Assessment 3:	Written assignment (2 hours) - A written assignment on a matter related to visual development. (1000 words +/- 10%) - Assessment criteria Analysis and appraisal of the research article Discussion of the topic of the research study Written communication skills (see Marking rubric in the Course Manual)	20%	As per schedule
Assessment 4:	Group Discussion - Critical analysis of research articles with your peers in a group discussion setting - Assessment criteria Contribution to small group discussion on the group research article *during meeting with own team mates and tutor* Contribution to *online discussion forum on other groups' research articles* *In-class presentation* of assigned section(s) of the research article to the class Facilitation of *online class discussion* on the research article and topic of the research study– marked as group work according to plan provided to the tutor during the small group discussion meeting with the tutor Facilitation of *class discussion during the break-out discussion and summary* on the research article and topic of the research study (see Marking rubric in the Course Manual)	15%	As per schedule

hurdle indicates that this exam must be passed in order to pass the course. Failure to achieve 50% in the final exam will result in a grade of Unsatisfactory Failure (UF) because an essential component of the course has been failed. Note: a UF requires you to repeat the course regardless of the mark, and will prevent you from undertaking subsequent courses for which VISN3111 is a pre-requisite.;[10] Approaches to assessment: https://teaching.unsw.edu.au/assessment

Further information
UNSW grading system: student.unsw.edu.au/grades
UNSW assessment policy: student.unsw.edu.au/assessment

5.2 Assessment criteria and standards

Final exam and Mid-session exam

The final exam is designed to test all theoretical and practical knowledge in the course and the Mid-session exam is designed to test all theoretical and practical knowledge covered in the first 4 weeks. Both exams are of the same format, having 3 parts. Part 1 consists of MCQs, the correct answers of which are randomly allocated. Please note if guess work is evident and confirmed, this part will not be marked; and you will receive 0 marks. Part 2 consists of Short Answer questions where you will be required to provide a word or a phrase of no more than 5 words to complete a chart, a diagram, a sentence or an answer to a question. Part 3 consists of open-ended questions where you will need to provide extended answers.

For each exam, you will be provided with an exam booklet of questions and answer sheet where you record all your answers. Please note you will not be given extra time to transfer your answers should you decide to use draft, so please ensure you complete your answer sheet in the given time to get the best mark.

Group Discussion and Written Assignment Assessment Tasks

The two assessment tasks address the following course learning outcomes
1. Explain why vision is poor in the first few years of life and how we know this, how and why vision may not develop normally if impeded during early life, and how and why vision deteriorates in later life.
2. Demonstrate developed communication skills important to participate in scientific discourse, such as in the peer reviewed literature, online forums or conferences, about current, developing, future developments and clinical applications of vision science knowledge relating to the development of the visual system. Skills include verbal, written and listening skills.
3. Demonstrate developed skills in critiquing and interpreting the literature on a particular topic relevant to the course topics.

Assessment details

These 2 assessment tasks are derived from a group research project. At the start of the term, you will be assigned into groups of no more than 5 students to work on one of five given topics relating to the development and aging of the visual system. (Note that allocation of groups has been announced on a separate document in Moodle). The discussion groups are colour coded.

- Yellow: Eye development (Dr. Boon and Mr Praveen Bandela)
- Green: Refractive development (A/Prof. Junghans)
- Blue: Synapses/Visual pathway development (Dr Anderton)
- Pink: Amblyopia (Dr Khuu)
- Grey: Ageing eye and visual system (Dr Boon)

As a group, you will be required to formulate a research question relating to the topic assigned to your group. Based on the research question, you will perform a library search to locate a suitable research article. The article must be:

- directly relevant to the discussion topic and the course materials
- recent (within 5 years of publication)
- an original experimental study or discussion i.e. not a review article where a number of research studies are reviewed.
- from a peer-reviewed journal.

To ensure the selected article meets these criteria, you will be required to submit the article for approval at least 1 week before your group meets the tutor, by emailing a copy (pdf) to your tutor. Once your selected article is approved on time, you will have 1 week, if submission of the selected article was on time, to review the article and prepare for the small group discussion with your tutor. The purpose of the small group discussion is for you to learn to critically appraise the research article, and to come to a shared understanding of how trustworthy (validity and reliability) and useful (relevance and significance) the conclusions of the study are.

Note that you are also required to open an online discussion on the article to the entire class in the Moodle site online forum of the course for 2 weeks leading to your group's scheduled Group Discussion tutorial session. To initiate the class discussion in the online forum, as a group, you should provide the citation of the research article, a link to an electronic copy of the article and some brief background as to how your group located and selected your research article.

On the Group Discussion tutorial session, firstly you will be required to take turns to talk about the article. This presentation should only take 10 minutes (about 2 minutes per team member if there are 5 team members) and cover the following:

1. Reintroduce the research question, discuss the significance of the question (the importance of this research question and its relationship with the course materials) and how the selected research article addresses your group's research question
2. Briefly summarise the aims of the research article, method (if the article is a research study), and key findings. Highlight those aspects that may be unfamiliar or confusing to your audience. Online forum comments may show you which aspects are trickier for your class to understand.

After the presentation, the audience will break out in small groups (of approximately 4 students) and each of you will engage one group in a discussion of the article and the topic discussed in the article. The purpose of this discussion is to bring your group to a shared understanding of the trustworthiness of the findings and their implications for optometry, vision science and the eye health of the general community. This break-out small group discussion will take approximately 10 minutes and may include any of the following:

- Controversial elements in the article
- Strengths in the experimental design
- Weaknesses in the experimental design
- Ethical issues or conflicts of interest
- Hot topics from the online forum (if any)
- Appropriateness of the interpretation

For the next 10 minutes, each of you will report back to the class as a whole on the content of your break-out small group discussion and highlight how the findings (taking into account their validity) may impact on the future of optometry, vision science and the ocular or visual health of the general community (2 minutes each member).

In the final 5-10 minutes of your Group Discussion tutorial session, your tutor(s) will ask each of you in your group at least one question about any aspect of the selected article and/or ask you to provide a general comment on the article findings, if not covered earlier during the Group Discussion tutorial session.

Timeline	Activities	Associated Assessment tasks
Week 1	Allocation of group, assignment of topics and schedule for group meetings with tutor and group presentations	None
2 weeks before the group's scheduled meeting with tutor	Locating a suitable research article, submitting for approval and reviewing the article. Must be approved on the Monday of the week before meeting with your tutor.	Group discussion: Contribution to own group discussion – preparation
Meeting with tutor	Appraising and discussing the research article	Other Small Group discussion: Contribution to own group discussion – discussion and submission of Written materials (Course Manual pages 9-13)
Leading to the group's scheduled presentation	Initiating and facilitating the class discussion on the research article in the online discussion forum	Group discussion: Facilitation of class discussion in the online forum
Group discussion tutorial session	Presenting on the research article (10 minutes in total, 2 minutes each member) Facilitating break-out small group discussion (10 minutes) Summarising discussion back to the class (10 minutes in total, 2	Group discussion: Presentation of assigned aspects of the research article to the class; Facilitation and report of break-out group discussion

	minutes each member)	
Friday of the Group Discussion Tutorial Week	Preparing and submitting the commentary on the research article	Written assignment Commentary on the article and its contribution to the discipline knowledge of the topic area
Throughout term	Contributing to the class discussions run by other groups and your own group	Group discussion: Contribution to the class discussions facilitated by other groups

Further, as individuals you will be asked to draw on insights from the group and class (online and verbal), and your own further wider research, to write a commentary for assessment. This written assignment will consist of an analysis and appraisal of the research article and how it informs our growing knowledge of the overall topic. For example, if you select an article on the effect of night lights on myopia development, you would write a commentary that consists of a critical appraisal of the article followed by an explanation of its key contributions to the topic area of refractive development as you understand it. You will need to read more widely in order to understand how this research article fits into the context of current knowledge. You have a maximum of 1100 words (+/- 10%) to write your commentary and must include a minimum of 5 references in support of your commentary.

In addition to work associated with your group research project, you will also be required to participate actively in the class discussions run by other groups; both online and in the break out small groups. These online postings will be of a minimum of 100 words and maximum of 250 words and will be nominated by you. If you post more than once on any one topic, only one of your posts (which you must nominate) will be marked for assessment.

The following table summarises key details and timelines of the 2 assessment tasks: Written assignment and Group discussion.

To assist yourself in meeting all deadlines, fill in the following:

Discussion Topic:	
Tutor name(s):	
Article must be approved by (due date):	
Other class date:	
Online forum announcement and closure (due date):	
Group discussion tutorial session (due date):	
Written assignment due (due date):	

5.3 Submission of assessment tasks

	Assignments should be submitted via Moodle (electronic submission). This includes completed laboratory reports and logs which should be scanned/photographed and submitted via Moodle. If your assignment requires submission of a pair of glasses/contact lenses, these may be

Assignment Submissions	submitted via the Assignment submission box at the Student Enquiry office (North Wing, Rupert Myers Building, Room 3.003), however the accompanying report should be submitted via Moodle. Marked assignments can be collected from the: • School Enquiry office **during counter opening hours**. You must show a valid student card to do this. 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/study/undergraduate-degrees/important-information-and-policies

Assessment Procedures **UNSW Assessment Policy[1]**	**SCHOOL OF OPTOMETRY AND VISION SCIENCE, UNSW** **SUPPLEMENTARY EXAMINATION INFORMATION, 2020** **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 and attach student's supporting documentation (such as a medical certificate). **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 Equitable Learning Support (formerly Disability Support Services) at https://student.unsw.edu.au/els/register 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

	https://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 2020 WILL BE HELD AS FOLLOWS: FOR TERM 1:** • **STAGE 1-4* COURSES: THURSDAY, 21 MAY 2020 – SATURDAY, 23 MAY 2020** • **THERE WILL BE NO SUPPLEMENTARY EXAMINATIONS FOR STAGE 5 STUDENTS IN TERM 1 2020** **FOR TERM 2:** • **STAGE 1-3 COURSES: THURSDAY, 3 SEPTEMBER 2020 - SATURDAY, 5 SEPTEMBER 2020** • **STAGE 4* COURSES: THURSDAY, 3 SEPTEMBER 2020 AND FRIDAY, 4 SEPTEMBER 2020** • **THERE WILL BE NO SUPPLEMENTARY EXAMINATIONS FOR STAGE 5 STUDENTS IN TERM 2 2020** **FOR TERM 3:** • **STAGE 5 COURSES ONLY: DURING THE WEEK OF MONDAY, 14 DECEMBER 2020 – FRIDAY, 18 DECEMBER 2020** • **STAGE 1-4* COURSES: THURSDAY, 17 DECEMBER 2020, FRIDAY, 18 DECEMBER AND SATURDAY, 19 DECEMBER 2020** Supplementary examinations will be held at the scheduled time only. If students who are granted supplementary examinations do not attend, a failure will be recorded for that course. **Students should not make travel arrangements, or any other commitments, before establishing whether or not they have supplementary examinations. Ignorance of these procedures, interstate, overseas or any other absence will not be accepted as an excuse. But usual Special Consideration still applies.** If additional assessment is not scheduled, this does NOT indicate whether or not a student has passed or failed the course. Results will be received in the usual way. Please do not contact the School in this regard. Please note the above applies to OPTM and VISN courses only. Any information on supplementary examinations for servicing courses (e.g. CHEM****) is the responsibility of the School conducting the course. * Stage 4 includes courses in the first year of the MClinOptom program. **School of Optometry and Vision Science, UNSW, 15 November 2019**

[1]UNSW Assessment Policy

5.4. Feedback on assessment

Task	Feedback		
	WHO	WHEN	HOW

Final theory examination	Course Convenor	When final marks are released	Final mark
Midsession exam	Course Convenor	Week 7	Mark through Moodle, and general class feedback on strengths and weaknesses
Written assignment	Instructors	During exam period	Mark, marking rubric, and general class feedback on strengths and weaknesses through Moodle
Group Discussion	Instructors	During exam period	Mark, marking rubric, and general class feedback on strengths and weaknesses through Moodle

6. Academic integrity, referencing and plagiarism

Referencing is a way of acknowledging the sources of information that you use to research your assignments. You need to provide a reference whenever you draw on someone else's words, ideas or research. Not referencing other people's work can constitute plagiarism.
Further information about referencing styles can be located at student.unsw.edu.au/referencing
Academic integrity is fundamental to success at university. Academic integrity can be defined as a commitment to six fundamental values in academic pursuits**:** honesty, trust, fairness, respect, responsibility and courage.[2] At UNSW, this means that your work must be your own, and others' ideas should be appropriately acknowledged. If you don't follow these rules, plagiarism may be detected in your work.
Further information about academic integrity and **plagiarism** can be located at:

- The *Current Students* site student.unsw.edu.au/plagiarism**,** and
- The *ELISE* training site subjectguides.library.unsw.edu.au/elise

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

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

7. Readings and resources

1. Course Manual - A Course manual that covers practicals, tutorials and preparation for assignments will be made available for download. It will assist you in organising your time so that you do not miss deadlines, particularly in relation to group work
2. Recommended internet website - https://www.babycenter.com/pregnancy is an excellent resource starting from embryology, as you can track what else is developing along-side the eye and visual system.
3. Computer Laboratories or Spaces - Room OMB LG21 is available to you for one hour each week for independent learning sessions, for your formal meetings with your tutor for assistance in interpreting your discussion article findings and to help you to work with your partner(s) on your discussion topic. The computers in the room can be used to research the topic you will be discussing. If you prefer, you may work on this research elsewhere. Attendance is only compulsory for your allocated group time and the Week 8 tutorial.
4. Societies - http://www.optomsoc.com
5. Required readings - Required readings, which may comprise chapters from textbooks or key articles, will be indicated clearly as assessable during class. Students must download the requisite readings from the UNSW library using the literature search skills taught in VISN1101.

6. Additional readings - These are readings which elaborate on concepts taught in task. Students will be directed to those which are essential reading, although not assessable in its entirety. They should be downloaded from the UNSW library using the literature search skills taught in VISN1101

Required Equipment, Training and Enabling Skills

Equipment Required	None
Enabling Skills Training Required to Complete this Course	Some resources should be accessed. These will be available in the Course Manual and in the Moodle Administration section. These include links to UNSW resources about group work skills, discussion skills, writing skills, endnote skills, videos to watch regarding procedures.

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	2018	The learning outcomes and assessments were revised and approved by the university in late 2018.
myExperience[2]	2019	Previous students have told us that they would like to the discussion forums to be assessed for 5 out of the 5 discussions, so that all groups would have equal opportunity to have participants with which to interact online, therefore this has been done.

Work Health and Safety[3]	Information on relevant Occupational Health and Safety policies and expectations both at UNSW and if there are any school specific requirements. 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/about/information-and-policies/work-health-and-safety
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 Equitable Learning Services (formerly Disability Support Services) at 9385 4734 or https://student.unsw.edu.au/els 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[4]	School Contact	Faculty Contact	University Contact
	Dr Alex Hui alex.hui@unsw.edu.au Tel: 9385 9228	Prof 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 Conduct and Integrity Unit Telephone 02 9385 8515, email studentcomplaints@unsw.edu.au
University Counselling and Psychological Services[5]	Information on Counselling and Psychological Services [CAPS] is available at: https://www.counselling.unsw.edu.au/ Tel: 9385 5418		

[2]myExperience process: https://teaching.unsw.edu.au/myexperience
[3]UNSW OHS Home page
[4]Student Complaint Procedure
[5]University Counselling and Psychological Services

9. Additional support for students

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