



# Course Outline

VISN5512

Sensory Processes and Movement

*School of Optometry and Vision Science  
Faculty of Medicine and Health  
UNSW Sydney*

Term 2, 2021

## 1. Staff

Position	Name	Email	Contact Details
Course Authority	Associate Professor Sieu Khuu	<a href="mailto:s.khoo@unsw.edu.au">s.khoo@unsw.edu.au</a>	+61 2 9385 4620  School of Optometry and Vision Science, Level 3, Room 3.028, North Wing, Rupert Myers Building
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Lecturer	Dr. Bronwen Scott	<a href="mailto:bronscott@iinet.net.au">bronscott@iinet.net.au</a>	TBA
Lecturer	Dr. Joanna Kidd	<a href="mailto:Joanna.Kidd@health.nsw.gov.au">Joanna.Kidd@health.nsw.gov.au</a>	TBA

## 2. Course information

Units of credit: **6**

Pre-requisite(s): **None**

Teaching times and locations: **Fully Online** (please refer to course Moodle site for up-to-date information)

### 2.1 Course description and aims

This course provides students with an understanding of the brain, the sensory and motor systems and their integration in behavioural interactions with the environment. This course will cover topics such as the anatomy and organisation of the brain, the sensory systems such as vision, hearing and touch, motor processes such as body awareness, proprioception, and kinesthetics. This course will be delivered online and will be comprised of series of recorded lectures, tutorials and practicals. Key concepts will be reinforced through reading and online multimedia exercises.

### 2.2 Course learning outcomes (CLO)

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

1. Identify and explain anatomical and functional aspects of vision, hearing and motor control and its application to Orientation and Mobility
2. Evaluate the implications of common health conditions on the integration of sensory information
3. Recognize and articulate the processes of spatial cognition and their functional implications to Orientation and Mobility
4. Explain and judge the efficacy of clinical and practical methods that assess sensory and motor deficits

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

Course Learning Outcome (CLO)	CLO Statement	Program Learning Outcome (PLO)	Related Tasks & Assessments
CLO1	Identify and explain anatomical and functional aspects of vision, hearing and motor control and its application to Orientation and Mobility.	PLO1 PLO5	Assessment 1 Assessment 3
CLO2	Evaluate the implications of common health conditions on the integration of sensory information.	PLO4 PLO5	Assessment 1 Assessment 2 Assessment 3
CLO3	Recognize and articulate the processes of spatial cognition and their functional implications to Orientation and Mobility.	PLO1 PLO2 PLO4	Assessment 1 Assessment 2 Assessment 3
CLO4	Explain and judge the efficacy of clinical and practical methods that assess sensory and motor deficits.	PLO2 PLO4 PLO5 PLO6	Assessment 1 Assessment 2

## 3. Strategies and approaches to learning

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### 3.1 Learning and teaching activities

This course will be delivered across one term of study and will be online. It will comprise of a series of pre-recorded lectures that will be delivered through Moodle on a weekly basis

through the 10-week teaching term. Lectures will introduce students to key concepts underpinning the contents covered in the course. Lectures will be supported by online tutorials in which students will consolidate and further develop their understanding. In tutorials, students will engage in reviewing research, case studies and engage in activities that expands their conceptualisation of the sensory and motor systems that underlie behavioural interactions with the environment.

## 4. Course schedule and structure

Aligned CLOs	Topics and threshold concepts	Tutorials & Key learning activities	Week
	<b>No activities</b>		O-week
CLO1, CLO2	<b>Lecture Block 1: The brain</b> 1.1. Brain anatomy and review of key structures 1.2. Nerves and neuronal functioning 1.3 Neural systems governing function and behaviour	<b>Tutorial: Introduction</b> <ul style="list-style-type: none"> <li>• <b>Course overview</b></li> <li>• <b>Course rules, essential docs,</b></li> <li>• <b>Course site tour</b></li> <li>• <b>Student/staff introduction</b></li> </ul>	1
		<b>Tutorial</b> <b>Essay and Presentation overview</b>	2
CLO1, CLO2, CLO4	<b>Lecture Block 2: Sensory processing</b> 2.1. Sensory processes 1: Vision 2.2. Sensory processes 2: Beyond vision (Taste and Smell) 2.3. Sensory processes 3: Sensing gravity and movements (touch, proprioception and the vestibular systems). 2.4 Sensory processes 4: Sound and Spatial Awareness (Hearing).	<b>Tutorial: Review of the Brain</b>	3
		<b>Tutorial</b> <b>Journal Club - Presentation</b>	4
CLO2	<b>Lecture Block 3: Human Movement</b> 3.1 Human movement: Ego motion and navigation 3.2 sensory integration and cognition in movement	<b>Tutorial/Exercise: Trying to navigate by sound without vision</b>	5
	<b>Mid-term break</b> <b>Mid-term revision</b>	<b>Tutorial</b> <b>Journal Club - Presentation</b>	6

CLO3, CLO4	<p><b>Lecture block 4: Language and communication</b></p> <p>4.1: Language and communication 1: Introduction to language and speech</p> <p>4.2: Language and communication 2: Disorders, impairments and alternative forms of communication</p>	<p><b>Tutorial</b></p> <p><b>Journal Club - Presentation</b></p>	7
CLO1, CLO2, CLO3, CLO4	<p><b>Lecture Block 5: Implications for O&amp;M practice</b></p> <p>5.1: Orientation and Mobility 1: Introduction to practical methods to assess sensory and motor deficits</p> <p>5.2: Orientation and Mobility 2: Review of the efficacy of current assessment practice</p> <p>5.3: Orientation and Mobility 3: Introduction and the theory for practical solutions for sensory and motor deficits</p> <p>5.4: Orientation and Mobility 4: Practical training and education</p>	<p><b>Tutorial</b></p> <p><b>Journal Club - Presentation</b></p>	8
		<p><b>Tutorial: Review of practical assessment methods</b></p>	9
CLO1, CLO2, CLO3, CLO4	<b>Course revision and consolidation</b>	<b>No tutorial</b>	10

## 5. Assessment

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### 5.1 Assessment tasks

There are three assessment tasks in this course designed to enable you to demonstrate that you have achieved the course learning outcomes. Completion and submission of all assessment tasks by the due date are necessary to receive a final mark in the course. Late submissions without approved Special Considerations will be subject to a 10% penalty of the assessment task weighting per day.

#	ASSESSMENT TASKS (ATs)	ISSUE DATE	DUE DATE	WEIGHTING	CLO(s)	TYPE	FEEDBACK DATE
1	AT1: Assignment Research Essay	Week 1	Week 10	35%	1, 2, 3 and 4	Written submission	Study period
2	AT2: Presentation	Week 1	Fortnightly	15%	1, 2, 3	Presentation	Fortnightly
3	AT3: Final Exam	Final Exam period	Final Exam period	50%	1, 2, 3 and 4	Online (Multiple choice and short answer questions)	Final Exam period

### Further information

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

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

## 6. Academic integrity, referencing and plagiarism

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**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.<sup>1</sup> At UNSW, this means that your work must be your own, and others' ideas should be appropriately acknowledged. If you don't follow these rules, plagiarism may be detected in your work.

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

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

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

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See Leganto list

## 8. Administrative matters

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School of Optometry and Vision Science

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

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<https://www.optometry.unsw.edu.au/>

## 9. Additional support for students

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- The Current Students Gateway: <https://student.unsw.edu.au/>
- Academic Skills and Support: <https://student.unsw.edu.au/academic-skills>
- Student Wellbeing, Health and Safety: <https://student.unsw.edu.au/wellbeing>
- Disability Support Services: <https://student.unsw.edu.au/disability-services>
- UNSW IT Service Centre: <https://www.it.unsw.edu.au/students/index.html>