PSYX2247

Perception

Session 1, Fully online/virtual 2021

Archive (Pre-2022) - Department of Psychology

Contents

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Notice

As part of Phase 3 of our return to campus plan, most units will now run tutorials, seminars and other small group activities on campus, and most will keep an online version available to those students unable to return or those who choose to continue their studies online.

To check the availability of face-to-face activities for your unit, please go to timetable viewer. To check detailed information on unit assessments visit your unit's iLearn space or consult your unit convenor.

General Information

Unit convenor and teaching staff
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Credit points
10

Prerequisites
(PSYC105 or PSYU1105 or PSYX105 or PSYX1105 or PSYU1102 or PSYX1102) or COGS100 or COGS1000

Corequisites

Co-badged status

Unit description
Perception, using the senses, is an organism's only link to the outside world. As the only method for our brain to absorb information, perceptual processes mediate what we believe is real and everything we have ever learned. This unit investigates the mechanisms of perception through all of the major senses, giving special attention to the best understood sense of all: vision. We explore aspects from the physiological bases of the senses to the rich and complex experiences and illusions that they produce, answering questions such as 'How do 3D movies work?', 'How do we know which way is up?', 'Why are some people colour-blind?', 'What do wine-tasters know that I don't?', 'How can we tell the pitch of a musical note?', and 'How do we tell our friends from strangers?'

Important Academic Dates

Information about important academic dates including deadlines for withdrawing from units are available at https://www.mq.edu.au/study/calendar-of-dates

Learning Outcomes

On successful completion of this unit, you will be able to:

ULO1: Identify, define and demonstrate an understanding of the key terms, physiological processes, research findings and theories related to human perception.

ULO2: Interpret, synthesise and critically evaluate theories and empirical research in human perception.

ULO3: Appreciate the difference between the real world (what is) and the phenomenological world (what seems to be), and explain 'real world' perceptual phenomena.

ULO4: Recognise ethical challenges in perception research involving children and animals.

General Assessment Information

Note that some assessments for this unit are conducted online. Therefore, access to a reliable computer and internet connection is essential. Technical difficulties will not be accepted as a reason for special consideration.

Mid-Semester Test

The Mid-semester Test will assess all topics covered in lectures, practicals and assigned reading before the mid-semester break**.** It will be held online at 10am on Tues. 6/4/2021. It should be noted that **this is in the first week of the mid-session recess.** The test is "open book" (i.e. you can use resources such as lecture notes, textbooks, web resources, etc.).

Final Exam

This exam will assess *only the aspects of the course on vision, plus the Multisensory lecture.* Some information from the Introduction and General Principles lecture will also be relevant, as much of this lecture applies to all of the senses. This includes the content covered in lectures, practicals and assigned reading. The date and time for this exam will be announced later in the semester.

Online Quizzes

Online quizzes will be administered weekly from week 3 to week 12 and must be completed individually by each student. Although reference materials may be used, it is advised that students also prepare for each quiz by reviewing the relevant material before attempting the questions. The online quizzes will be delivered via the online iLearn webpage for the unit. Students will have precisely one week (from the beginning of the lecture) to complete each quiz. No extensions will be given. Detailed feedback on your performance will be provided when the quiz closes.

Practical Worksheets

Online worksheets, which accompany the practical activities, must be completed and submitted by the end of each of the 4 practical periods (i.e. by midnight Sunday of weeks 4, 6, 10 & 12 respectively).

Assessment Tasks

Name	Weighting	Hurdle	Due
Practical worksheet	9%	No	midnight Sunday of weeks 4, 6, 10 & 12
Mid-session exam	25%	No	6/4/2021
Final examination	50%	No	TBA
Online Quiz	16%	No	Weekly, on Tuesdays at 10am from week 4 to 13.

Practical worksheet

Assessment Type [1]: Quiz/Test
Indicative Time on Task [2]: 0 hours
Due: **midnight Sunday of weeks 4, 6, 10 & 12**
Weighting: **9%**

Four practical worksheets, completed as part of the practical exercises and based on practical content. The top three out of four worksheets contribute to the final unit grade.

On successful completion you will be able to:

- Identify, define and demonstrate an understanding of the key terms, physiological processes, research findings and theories related to human perception.
- Interpret, synthesise and critically evaluate theories and empirical research in human perception.
- Appreciate the difference between the real world (what is) and the phenomenological world (what seems to be), and explain 'real world' perceptual phenomena.

Mid-session exam

Assessment Type [1]: Quiz/Test
Indicative Time on Task [2]: 23 hours
Due: **6/4/2021**
Weighting: **25%**

Mid-session multiple choice exam, assessing unit content.

On successful completion you will be able to:

- Identify, define and demonstrate an understanding of the key terms, physiological processes, research findings and theories related to human perception.
- Interpret, synthesise and critically evaluate theories and empirical research in human perception.
- Appreciate the difference between the real world (what is) and the phenomenological world (what seems to be), and explain 'real world' perceptual phenomena.
- Recognise ethical challenges in perception research involving children and animals.

Final examination

Assessment Type [1]: Examination
Indicative Time on Task [2]: 46 hours
Due: **TBA**
Weighting: **50%**

Final examination held within the University's formal exam period, in accordance with relevant requirements.

On successful completion you will be able to:

- Identify, define and demonstrate an understanding of the key terms, physiological processes, research findings and theories related to human perception.
- Interpret, synthesise and critically evaluate theories and empirical research in human perception.
- Appreciate the difference between the real world (what is) and the phenomenological world (what seems to be), and explain 'real world' perceptual phenomena.
- Recognise ethical challenges in perception research involving children and animals.

Online Quiz

Assessment Type [1]: Quiz/Test
Indicative Time on Task [2]: 25 hours
Due: **Weekly, on Tuesdays at 10am from week 4 to 13.**
Weighting: **16%**

10 multiple-choice quizzes, based on unit content. The top 8 quizzes will each contribute 2% to the final unit grade.

On successful completion you will be able to:

- Identify, define and demonstrate an understanding of the key terms, physiological processes, research findings and theories related to human perception.
- Interpret, synthesise and critically evaluate theories and empirical research in human perception.
- Appreciate the difference between the real world (what is) and the phenomenological world (what seems to be), and explain 'real world' perceptual phenomena.
- Recognise ethical challenges in perception research involving children and animals.

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[1] If you need help with your assignment, please contact:

- the academic teaching staff in your unit for guidance in understanding or completing this type of assessment
- the Writing Centre for academic skills support.

[2] Indicative time-on-task is an estimate of the time required for completion of the assessment task and is subject to individual variation

Delivery and Resources

This unit is taught through lectures and practicals with support from web-based resources such as iLearn, including the online discussion board. While lectures are useful principally for introducing new concepts and knowledge, practicals allow more direct interactions between instructor and students. They are your opportunity to enhance your understanding further by participating in activities and asking questions. The iLearn discussion board also allows students to discuss topics in greater depth, and may also feature contributions by staff members when there appears to be confusion amongst the student body. The lecture schedule set out above is a guide only and is intended to be flexible. On occasion, more time will be spent on certain topics if additional explanation is required. As such, material from one lecture may overlap into the next, where necessary.

Technology Used and Required

For this unit, you will need to have access to a computer that can reliably connect to the Internet. This will be essential for completing some assessments (see the section on "Assessment Tasks"), and in accessing the unit's web-page, which can be found at https://ilearn.mq.edu.au. It will also be essential for engaging in online practicals.

Note that for practical #3 students will require anaglyph 3D glasses (either red-blue or red-green). Although pairs will be available for students in face-to-face practicals, students completing online practicals will be required to source their own. Anaglyph glasses can be purchased from many stores online or can be constructed at home very cheaply.

Required Text

Snowden, R., Thompson, P., & Troscianko, T. *Basic Vision: an introduction to visual perception 2nd Edition.* Oxford: Oxford University Press, 2012.

This is a very accessible text that is always popular with students. It introduces technical concepts in an easy-to-grasp fashion and is an excellent introduction to the discipline of visual perception. It will be an indispensable resource for students on this course.

Recommended Text

Mather, G. *Foundations of Sensation & Perception, 3rd Edition*. Taylor & Francis Group, 2016.

This text offers broader coverage of perception in general and will be especially useful for topics outside of vision, which Snowden *et al.* does not cover. It also offers more technical detail than Snowden *et al.* in certain areas, allowing the conscientious student to deepen their understanding of the topics that are covered in the required text.

Access to Assigned Reading Material

Both the required and the recommended texts are available for purchase, but there are also hard copies available at the library in the main collection as well as those available for download as eBooks. Where availability is limited, students should consider using previous editions of each book which are are just as good for most topics.

Basic Vision, 2nd Edition (2014)

Basic Vision, "Revised" Edition (2012)

[Note: As far as I can see, these are identical, and either could be referred to as the 2nd Edition.]

Basic Vision, First Edition, (2006), available in print only

Foundations of Sensation & Perception, 3rd Edition

Foundations of Sensation & Perception, 2nd Edition

What does it take to do well in PSYX2247?

Students are expected to pay close attention to all lectures and to take notes to aid their retention of the material covered. Reading assigned during each lecture should be completed close to the date of the relevant lecture. Review of the material (individually, or in group sessions) in the student's own time will be essential to consolidate knowledge and enhance understanding. Active participation in practicals is also mandatory. Online practical worksheets are assessed and need to be completed by the due date. Online quizzes offer the chance to answer questions while using resources such as textbooks and lecture notes. While students who are on top of the material may find the questions relatively easy to answer in a short time period, those whose knowledge is still developing have the opportunity to research their answers over an extended period of time, if necessary.

It should be noted that according to Senate guidelines, workloads should involve 1 hour per credit point per week. This results in 10 hours per week (including lectures and practicals) for a 10 credit point unit such as PSYX2247.

Note: Assessment will be based on the successful *understanding* of the material from lectures, practicals and from the assigned reading. Please note that rote learning alone will not be a successful strategy, as the assessments will test for deeper appreciation of the course material in a variety of formats. Simply remembering the "facts" will not suffice. Students need to demonstrate their understanding of the principles and demonstrate the ability to apply such understanding in new contexts.

What material is examinable?

Obviously, the exact details of the questions to be asked in the examinations will not be released in advance. However, questions will come from topics covered during lectures and practicals.

Where additional information on these topics is supplied in the assigned reading, this should also be considered examinable. The examinations will not feature questions on topics not covered during lectures even if they are included in the assigned reading.

Statement on Social Inclusion and Diversity

Social inclusion at Macquarie University is about giving everyone who has the potential to benefit from higher education the opportunity to study at university, participate in campus life and flourish in their chosen field. The University has made significant moves to promote an equitable, diverse and exciting campus community for the benefit of staff and students. It is your responsibility to contribute towards the development of an inclusive culture and practice in the areas of learning and teaching, research, and service orientation and delivery. As a member of the Macquarie University community, you must not discriminate against or harass others on the basis of their sex, gender, race, marital status, carers' responsibilities, disability, sexual preference, age, political conviction or religious belief. All lecturers, tutors and students are expected to display appropriate behaviour that is conducive to a healthy learning environment for everyone. The Unit Convenor is a member of the Ally Network and is happy to provide support to members of the LGBTIQ community.

Unit Schedule

Unit Overview

The course will comprise lectures and practicals supported by assigned reading. Although some of the material from these separate components may be related to each other, different concepts and topics will be contained in each.

The Unit Convenor role will be filled by A/Prof Kevin Brooks. Early lectures by Kevin Brooks and Kirk Olsen will concentrate on the low-level mechanisms of perception through a variety of senses, with special attention given to the details of auditory and visual perception. In later lectures, Kevin Brooks, Ann Carrigan and Regine Zopf will cover higher-level issues, such as the perception of faces and objects, the issue of multisensory integration and the development of perceptual abilities.

Practicals will supplement and build upon the lecture material, allowing a hands-on approach to perceptual phenomena and their explanation.

It is University policy that the University-issued email account will be used for official University communication. All students are required to access their University account frequently.

Lecture Topics and Assigned Reading:

Weekly lectures will be delivered online on Tuesdays from 10am-12noon.

Session Week	Topic (Lecturer)	Assigned Reading	Also Relevant
1	Course Introduction (KB) General Principles/Methods (KB)	Mather, Ch1	Snowden et al., Ch0, 12
2	Sound, Ear & Brain (KO) Auditory Perception (KO)	Mather, Ch4	-
3	Auditory Perception (KO) Body Senses (KB)	Mather, Ch5	-
4	Body/Chemical Senses (KB)	Mather, Ch2 Mather, Ch3	-
5	Light, Eye & Brain (KB)	Snowden Ch1-2	Mather Ch6-7
6	Spatial Vision (KB)	Snowden et al., Ch3-4	Mather Ch9
7	Colour Vision (KB)	Snowden et al., Ch5	Mather, Ch8
8	Motion Perception (KB)	Snowden et al., Ch6	Mather, Ch12
9	Depth Perception (KB)	Snowden et al., Ch7	Mather, Ch11
10	Visual Development (KB)	Snowden et al., Ch8	-
11	Face Perception (KB) Q&A on KB's lectures (KB)	Snowden et al., Ch10	-
12	Shape & Object Perception (AC) Multisensory Processing (RZ)	Mather, Ch10 Mather, Ch13	-
13	Study Week	-	-

Practicals

The practical program will run from university session weeks 3-6 and 9-12 inclusive. During this period, students will complete a practical in each of 4 separate periods, in weeks 3-4, 5-6, 9-10 & 11-12, as set out on iLearn.

Practicals can be accessed online and will be supported by experienced tutors via scheduled Zoom and online chat sessions. These tutors will be your first contact if you have problems with

this unit. Their names and contact details can be found in the "Teaching Staff" section. The schedule and topics to be covered are displayed below. The content of the practical classes is identical for all classes.

Practical Topics:

Session Weeks	Topic
3-4	Illusions & Aftereffects
5-6	Spatial Vision
9-10	Binocular (3D) Vision
11-12	Psychophysical Methods

Policies and Procedures

Macquarie University policies and procedures are accessible from Policy Central (https://policies.mq.edu.au). Students should be aware of the following policies in particular with regard to Learning and Teaching:

- Academic Appeals Policy
- Academic Integrity Policy
- Academic Progression Policy
- Assessment Policy
- Fitness to Practice Procedure
- Grade Appeal Policy
- Complaint Management Procedure for Students and Members of the Public
- Special Consideration Policy

Students seeking more policy resources can visit Student Policies (https://students.mq.edu.au/support/study/policies). It is your one-stop-shop for the key policies you need to know about throughout your undergraduate student journey.

To find other policies relating to Teaching and Learning, visit Policy Central (https://policies.mq.edu.au) and use the search tool.

Student Code of Conduct

Macquarie University students have a responsibility to be familiar with the Student Code of Conduct: https://students.mq.edu.au/admin/other-resources/student-conduct

Results

Results published on platform other than eStudent, (eg. iLearn, Coursera etc.) or released directly by your Unit Convenor, are not confirmed as they are subject to final approval by the

University. Once approved, final results will be sent to your student email address and will be made available in eStudent. For more information visit ask.mq.edu.au or if you are a Global MBA student contact globalmba.support@mq.edu.au

Student Support

Macquarie University provides a range of support services for students. For details, visit http://students.mq.edu.au/support/

Learning Skills

Learning Skills (mq.edu.au/learningskills) provides academic writing resources and study strategies to help you improve your marks and take control of your study.

- Getting help with your assignment
- Workshops
- StudyWise
- Academic Integrity Module

The Library provides online and face to face support to help you find and use relevant information resources.

- Subject and Research Guides
- Ask a Librarian

Student Services and Support

Students with a disability are encouraged to contact the Disability Service who can provide appropriate help with any issues that arise during their studies.

Student Enquiries

For all student enquiries, visit Student Connect at ask.mq.edu.au

If you are a Global MBA student contact globalmba.support@mq.edu.au

IT Help

For help with University computer systems and technology, visit http://www.mq.edu.au/about_us/offices_and_units/information_technology/help/.

When using the University's IT, you must adhere to the Acceptable Use of IT Resources Policy. The policy applies to all who connect to the MQ network including students.