

Module Details	
Module Title	Physiology of Vision and Perception
Module Code	OPT4004-B
Academic Year	2022/3
Credit Rating	20
School	School of Optometry and Vision Science
Subject Area	Optometry
FHEQ Level	FHEQ Level 4
Pre-requisites	
Co-requisites	

Contact Hours	
Type	Hours
Seminars	20
Lectures	28
Directed Study	152

Availability	
Occurrence	Location / Period
BDA	University of Bradford / Academic Year

Module Aims

To introduce the physiology of vision and perception as applied to the clinical study of optometry. To stimulate an understanding of the physical, physiological and psychological aspects of visual perception in the normal visual system. To provide a basis for understanding the design of some clinical tests of vision.

Outline Syllabus

Delivered content:

Methods for studying visual perception - an introduction. Overview of eye and vision. Rods and cones. Light adaptation. Spectral sensitivity. Retinal physiology. Visual pathway. LGN and visual cortex. Visual acuity. Visual psychophysics - stimuli, responses and procedures. The limits of vision - detection and discrimination. Spatial vision & contrast sensitivity. Temporal perception. Binocular vision - fusion, rivalry and sensitivity. Binocular vision - disparity, stereopsis and space perception. Colour perception - normal and abnormal. Eye-movements and Reading.

Learning Outcomes

01	Describe different methods for studying visual perception.
02	Describe the mechanisms of human visual perception.
03	Outline the physiology of vision.
04	Explain the essential principles in visual psychophysics, limits of vision, binocular vision and colour perception.
05	Interpret physiological and behavioural measurements of visual function.

Learning, Teaching and Assessment Strategy

Delivered content will introduce and explain ideas about how the visual system is organised in terms of physiology, and the consequences that this has for visual perception.

Mode of Assessment				
Type	Method	Description	Weighting	
Summative	Computerised examination	Closed book computer-based continuous assessments (6x 0.5 hours)		12%
Summative	Computerised examination	Closed book computer-based exam at the end of the module (2.0 hours)	2 hour	88%
Summative	Computerised examination	Supplementary assesment: closed book, unseen computerised exam (2hrs)	2 hour	100%

Reading List
To access the reading list for this module, please visit https://bradford.rl.talis.com/index.html

Please note:

This module descriptor has been published in advance of the academic year to which it applies. Every effort has been made to ensure that the information is accurate at the time of publication, but minor changes may occur given the interval between publishing and commencement of teaching. Upon commencement of the module, students will receive a handbook with further detail about the module and any changes will be discussed and/or communicated at this point.