

Module Details	
Module Title	Ocular Health and Disease 1
Module Code	OPT4017-D
Academic Year	2024/5
Credits	40
School	School of Optometry and Vision Science
FHEQ Level	FHEQ Level 4

Contact Hours	
Type	Hours
Directed Study	256
Laboratories	24
Online Lecture (Asynchronous)	24
Online Tutorials (Synchronous)	12
Online Lecture (Synchronous)	12
Online Seminar (Synchronous)	12
Seminars	24
Lectures	24
Tutorials	12

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

Module Aims
To develop understanding of the anatomy, structure and function of the eye and visual pathway. To develop understanding of other aspects of human physiology related to vision. To develop understanding of clinical techniques for assessing the health and integrity of the eye and visual pathway. To develop understanding of the mechanisms of ocular and systemic diseases affecting the eye and visual pathway and their management.

Outline Syllabus

Gross anatomy of the eye

Anterior eye, ocular surface, eyelids and lacrimal system:

Anatomy, structure and function of anterior eye, ocular surface, eyelids and lacrimal system

Disorders of the lacrimal system and ocular surface

Disorders of the anterior segment

Disorders of the crystalline lens

Anterior eye clinical examination techniques

Regulation of intraocular pressure and the optic nerve head:

Aqueous humour and intraocular pressure

Anterior chamber angle anatomy and assessment

Tonometry

Optic nerve head anatomy and assessment

Examination of the optic nerve head and surround using direct and indirect ophthalmoscopy and optical coherence tomography

Nervous systems of ocular structures:

Innervation of the eye

Brain and cranial nerves

Fundamental ocular pharmacology

Pupil defects and assessment

The visual pathway

Perimetry

Learning Outcomes

Outcome Number	Description
01	Describe the anatomy of the eye and explain its relationship to the brain.
02	Define the role of commonly used ophthalmic instruments and analyse the information gained from their use.
03	Recount the innervation of the eye and outline its interaction with the fundamentals of ocular pharmacology.
04	Recognise, distinguish and describe physiological and pathological states of the visual pathway using a range of clinical equipment.
05	Describe the principles behind, and perform common techniques used to assess the health of the visual pathway, including the assessment of the visual field and pupillary function using appropriate clinical equipment.
06	Explain the physiological and pathological roles played by aqueous humour within the eye and perform non-contact measurement of intraocular pressure.
07	Describe the anatomy of the optic nerve head, perform its examination in patients via appropriate clinical techniques and analyse the clinical appearance for the presence or absence of pathology.
08	Recognise and describe common pathologies of the structures within the anterior segment, ocular surface and lacrimal system and apply appropriate clinical techniques to detect and diagnose these pathologies.

Learning, Teaching and Assessment Strategy

This module uses a range of approaches to presentation of module content including lectures, prepared written materials, interactive tutorials and practical clinical sessions, supported by online multimedia material and directed study. Practical clinical sessions are used to develop basic skills in fundamental clinical techniques.

This module is assessed by a written exam, a reflective logbook of experience in practical clinical sessions and practical assessments on clinical examination techniques.

The practical assessment is a MUST PASS assessment and students must pass this in order to pass the module.

Mode of Assessment

Type	Method	Description	Weighting
Summative	Computerised examination	Closed Book, unseen, computerised examination	70%
Summative	Coursework - Portfolio/e-portfolio	Lab Logbook	10%
Summative	Clinical Assessment	Practical Assessments (MUST PASS at 40%)	20%
Formative	Examination - Closed Book	Closed book, unseen computerised formative examinations towards the end of semesters 1 & 2 (1 hour each)	N/A
Formative	Other form of assessment	Guided weekly formative question sessions (2 hours)	N/A
Formative	Clinical Assessment	Formative practical assessments	N/A

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.