

## MODULE SPECIFICATION

### KEY FACTS

Module name	Paediatric Optometry
Module code	OVM034
School	School of Health Sciences
Department or equivalent	Division of Optometry and Visual Science
UK credits	15
ECTS	7.5
Level	M

### MODULE SUMMARY

#### Module outline and aims

Most optometrists work in the community and are ideally placed to assist in the early detection of ocular problems. Recent developments in instrumentation have facilitated relatively detailed investigations of ocular function in children of all ages, including infants. Visual functions and indeed the eye itself are still developing through infancy, and lectures will review the expected norms for various age groups reflecting current research.

This module aims to provide you with:

- a comprehensive knowledge of normal and abnormal visual development
- in-depth knowledge and practical skills enabling you to assess visual acuity and manage amblyopia
- a systematic knowledge of paediatric visual problems, electrophysiology, dispensing, colour vision, orthoptic anomalies, specific learning difficulties and contact lenses
- an overview of paediatric ophthalmology

#### Content outline

On this module, you will learn about:

Embryology

Optometric examination of children

Investigation and management of concomitant esodeviations

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Investigation and management of incomitant deviations

Nystagmus

Post natal development of the visual system

Learning difficulties in children

Specific learning disabilities

Posterior segment disorders

Paediatric contact lenses

Infantile cataract and visual fields

A guide to examination  
Refractive development and prescribing criteria  
Paediatric vision screening  
Colour vision  
Paediatric dispensing  
Amblyopia  
Child psychology  
Pupils, ptosis and functional visual loss  
Hospital management of strabismus  
Visual impairment

Practical  
Case scenarios and practical assessments

### **WHAT WILL I BE EXPECTED TO ACHIEVE?**

**On successful completion of this module, you will be expected to be able to:**

#### Knowledge and understanding:

- Demonstrate an in - depth knowledge of paediatric optometry including prescribing criteria, amblyopia therapy, visual therapy and referral criteria
- Demonstrate a systematic understanding of the various techniques for investigating children's visual functions and ocular health
- Provide a detailed explanation of, and differentiate between, ocular pathology affecting the paediatric population group

#### Skills:

- Exercise and further develop the analytical skills required in the field of paediatric optometry
- Demonstrate a refinement of your analytical and problem-solving skills
- Analyse and synthesise the optometric requirements of a child in practice and evaluate and assess the results of clinical examinations
- Advance your own knowledge and understanding and develop your skills to a high level
- Synthesise information from a number of sources in order to develop your overall knowledge and understanding
- Communicate effectively with children, parents, relatives and carers
- Refine clinical problem-solving skills

- Use appropriate judgement in patient management
- Use new techniques to diagnose paediatric ocular problems
- Operate in a complex and unpredictable environment with an overview of the issues governing best practice
- Refer paediatric patients appropriately

Values and attitudes:

- Use appropriate interpersonal and communication skills
- Show an appropriate professional attitude towards patients, their guardians and colleagues
- Show an awareness of ethical practice

**HOW WILL I LEARN?**

It is well-established that adult learners learn best in smaller groups and with greater interaction. The module is therefore designed using a blended learning approach so that we can use the most appropriate teaching methods: the first day is delivered online using our Virtual Learning Environment (VLE) called Moodle. This allows you to study the background materials in your own time and as needed. This flexible approach also reduces time away from your practice with all of its cost implications. However, it is very important that you have significant face to face learning and so the remainder of the module is taught in didactic sessions of up to 32 students with the addition of group work and case discussions. All lecturers are experts and encourage questions and discussion during their teaching. Some will also include specific interaction sessions to encourage critical thinking and to allow you put what you have learnt into practice. Practical sessions work in groups of about 5/6 allowing you some hands-on experience and the chance to ask in-depth questions. Finally, virtual case discussions allow group discussion about specific cases.

*Teaching pattern:*

Teaching component	Teaching type	Contact hours (scheduled)	Self-directed study hours (independent)	Placement hours	Total student learning hours
Online Materials	Online	8	22	0	30
Lectures, practical classes and workshops, demonstrations	Lectures	13	107	0	120

Totals		21	129	0	150
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## WHAT TYPES OF ASSESSMENT AND FEEDBACK CAN I EXPECT?

### Assessments

The assessment will consist of two written assessments. You must pass each of the two components to be awarded a module pass. Questions will test your critical and evaluative understanding, clinical recognition skills, ability to differentially diagnose and application of knowledge. The assessment consists of:

MCQs (based on all aspects of the module)

Patient management case scenarios (which test your ability to analyse clinical results and manage patients appropriately)

### *Assessment pattern:*

Assessment component	Assessment type	Weighting	Minimum qualifying mark	Pass/Fail?
Patient management case scenario Exam	Written Exam	50	0	N/A
MCQ Exam	Written Exam	50	0	N/A

### Assessment Criteria

Assessment Criteria are descriptions, based on the intended learning outcomes, of the skills, knowledge or attitudes that you need to demonstrate in order to complete an assessment successfully, providing a mechanism by which the quality of work can be measured. Grade-Related Criteria are descriptions of the level of skills, knowledge or attributes that you need to demonstrate in order to achieve a certain grade or mark in an assessment, providing a mechanism by which the quality of an assessment can be measured and placed within the overall set of marks. Assessment Criteria and Grade-Related Criteria will be made available to you to support you in completing assessments. These will be provided on the virtual learning environment or attached to a specific assessment task.

### Feedback on assessment

Feedback will be provided in line with our Assessment and Feedback Policy. For end of module examinations or an equivalent significant task, feedback will normally be provided within four weeks of the submission deadline or assessment date. In the case of smaller pieces of work you will normally be provided with feedback within three weeks. This would normally include a provisional grade or mark. The timescale for

feedback on final year projects or dissertations may be longer. The full policy can be found at:

[https://www.city.ac.uk/\\_data/assets/pdf\\_file/0008/68921/assessment\\_and\\_feedback\\_policy.pdf](https://www.city.ac.uk/_data/assets/pdf_file/0008/68921/assessment_and_feedback_policy.pdf)

### Assessment Regulations

The Pass mark for each module is 50%. Where the module requires more than one assessment, the contribution of each to the final mark is stated in the module specification.

In the event of a fail mark being awarded, the following will apply

Resit: You will normally be offered one resit attempt. However, if you did not participate in the first assessment and have no extenuating circumstances, you may not be offered a resit.

If you are successful in the resit, you shall be awarded the credit for that module. The mark used for the purpose of calculation towards your Award shall be calculated from the original marks for the component(s) that you passed at first attempt and the minimum pass mark for the component(s) for which you took a resit.

If you do not satisfy your resit by the date specified you will not progress and the Assessment Board shall require that you withdraw from the Programme.

If you would like to know more about the way in which assessment works at City, please see the full version of the Assessment Regulations at:

[http://www.city.ac.uk/\\_data/assets/word\\_doc/0003/69249/s19.doc](http://www.city.ac.uk/_data/assets/word_doc/0003/69249/s19.doc)

### **INDICATIVE READING LIST**

Birch, J. (1998) Diagnosis of colour deficiency. London: Butterworth-Heinemann.

Duckman, R.H. (2012) Visual development, diagnosis and treatment of the paediatric patient. London: Lippencott, Williams and Wilkins.

Evans, B.J. (2007) Pickwell's binocular vision anomalies. London: Butterworth-Heinemann.

Gilmartin, B. and Harvey, W. (2004) Paediatric optometry. Oxford: Butterworth-Heinemann.

Leat, S., Shute, R. and Westhall, C. (1999) Assessing children's vision. Oxford: Butterworth-Heinemann.

Moore, A.T. (2000). Paediatric ophthalmology. Cambridge: BMJ Books.

Siderov, J. and Waugh, S. (2007) Eye essentials: Paediatric Optometry. Oxford: Butterworth:Heinemann

Southwell, C. (2003) Assessing functional vision: Children's complex needs. London: RNIB.

Treby, N. (2009) Visual processing and the use of colour for those with dyslexia. London: VDM Verlag

Wright, K.W., Speight, P.H., Thomson, L. and Hengst, T.C. (2006) Handbook of paediatric eye and systemic disorders. Chicago: Springer

Wright, K.W., Speight, P.H., Thomson, L. and Hengst, T.C. (2006) Handbook of paediatric retinal disease. Chicago: Springer

Wright, K.W. and Ning Y.J. (2012) Paediatric ophthalmology and strabismus New York: Oxford University Press

Wilkins, A. (2003) Reading through colour: How coloured filters can reduce reading difficulties, eye strain and headaches. London: Wiley-Blackwell.

Notes relating to each lecture are provided on-line. Individual lecture notes also specify recommended further reading (including journal articles and research reports).

Version: 2.0

Version date: July 2014

For use from: 2013-14

### Appendix:

<b>CODES</b>		
<b>HESA Code</b>	<b>Description</b>	<b>Price Group</b>
106	Anatomy and Physiology	B
<b>JACS Code</b>	<b>Description</b>	<b>Percentage (%)</b>
B510	The study of the principles and techniques for examining, diagnosing and treating conditions of the human visual system	100