MODULE SPECIFICATION

KEY FACTS

<table>
<thead>
<tr>
<th>Module name</th>
<th>Principles of Therapeutics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Module code</td>
<td>OVM050</td>
</tr>
<tr>
<td>School</td>
<td>School of Health Sciences</td>
</tr>
<tr>
<td>Department or equivalent</td>
<td>Division of Optometry and Visual Science</td>
</tr>
<tr>
<td>UK credits</td>
<td>15</td>
</tr>
<tr>
<td>ECTS</td>
<td>7.5</td>
</tr>
<tr>
<td>Level</td>
<td>7</td>
</tr>
</tbody>
</table>

MODULE SUMMARY

Module outline and aims

Information for Clinical Optometry students
The Department of Optometry and Visual Science at City, University of London has been providing modular postgraduate training in ocular therapeutics for over 15 years. The purpose of this training has been to provide the theoretical knowledge and clinical skills to enable optometrists to manage ocular disease within the context of the legal and regulatory framework provided by the Opticians Act and relevant medicines legislation.

Candidates entering the full independent prescribing (IP) programme will complete a three module scheme (OVM050 - Principles of Therapeutics, OVM051 - Principles of Prescribing and OVM053 - IP) and complete the requisite clinical placement days. Candidates may opt to exit after modules OVM050 and OVM053 (following completion of a clinical placement) and qualify as an Additional Supply (AS) optometrist by taking the College of Optometrists' Common Final Assessment (CFA) in AS. Alternatively, modules can be taken as stand-alone modules as part of the postgraduate programme in Clinical Optometry.

Each University module constitutes 15 M level academic credits and will be integrated into our modular postgraduate programme in clinical optometry. An RPEL arrangement will be used to import postgraduate credits from the clinical placement aspect of the CFA to allow students qualifying in IP to be awarded a Postgraduate Certificate or use the credits towards a Diploma or MSc.

Completion of this module (Principles of Therapeutics – OVM050 of the AS/IP programme) in addition to OVM051 (Principles of Prescribing) and OVM053 (IP) will enable optometrists to be entered onto a specialist optometry GOC register for therapeutic prescribing. The first element of this prescribing route is termed AS. The rationale behind AS is to provide optometrists with access to those medicines which will allow them to manage a number of common non-sight threatening disorders including: infective conjunctivitis, allergic conjunctivitis, blepharitis, dry eye and superficial injury. These medicines can be sold or supplied by the optometrist directly to the patient in an emergency, or routinely obtained by the patient from the pharmacist, against a written order signed by the optometrist.
The second element of the prescribing training is IP. Qualified independent prescribers will take responsibility for the clinical assessment of a patient, establish a diagnosis and determine the clinical management required, including prescribing where necessary. The training for IP encompasses the AS and Supplementary Prescribing (SP) specialities. Trainees complete all three modules and OVM050 and OVM051 are common to the AS route.

The emphasis in Principles of Therapeutics is on:

- Gross anatomy of the orbit
- Clinical ocular immunology, microbiology and pharmacology
- Pathogenesis, clinical features and management of disorders of the anterior eye

Content outline

On this module you will learn about: Unit 1
Part 1 Gross anatomy of the orbit
Part 2 The ocular adnexa: the eyelid and conjunctiva
Part 3 The ocular adnexa: the lacrimal system and pre-ocular tear film
Part 4 The outer coat: the cornea and sclera
Part 5 The structure and function of the iris

Unit 2
Part 1 Immunology
Part 2 Ocular immune system

Unit 3
Part 1 Basic and ocular microbiology
Part 2 Ophthalmic medical microbiology: microbiology of anterior segment eye conditions

Unit 4
Part 1 Basic and ocular pharmacology
Part 2 Clinical ocular pharmacology and therapeutics
Part 3 Clinical ocular pharmacology and therapeutics

Unit 5
Part 1 Disorders of the eyelids and orbit
Part 2 Disorders of the cornea and lacrimal system
Part 3 Disorders of the conjunctiva, sclera and anterior uvea
Part 4 Laboratory investigation in ocular disease

Information for Advanced Practice Ophthalmic Nurse Practitioner students

This module will introduce you to the principles of therapeutics and prescribing within an ophthalmic context.

The emphasis in Principles of Therapeutics is on:
- Gross anatomy of the orbit
- Clinical ocular immunology, microbiology and pharmacology
- Pathogenesis, clinical features and management of disorders of the anterior eye
Content outline

On this module you will learn about: Unit 1
Part 1 Gross anatomy of the orbit
Part 2 The ocular adnexa: the eyelid and conjunctiva
Part 3 The ocular adnexa: the lacrimal system and pre-ocular tear film
Part 4 The outer coat: the cornea and sclera
Part 5 The structure and function of the iris

Unit 2
Part 1 Immunology
Part 2 Ocular immune system

Unit 3
Part 1 Basic and ocular microbiology
Part 2 Ophthalmic medical microbiology: microbiology of anterior segment eye conditions

Unit 4
Part 1 Basic and ocular pharmacology
Part 2 Clinical ocular pharmacology and therapeutics
Part 3 Clinical ocular pharmacology and therapeutics

Unit 5
Part 1 Disorders of the eyelids and orbit
Part 2 Disorders of the cornea and lacrimal system
Part 3 Disorders of the conjunctiva, sclera and anterior uvea
Part 4 Laboratory investigation in ocular disease

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 the anatomy of the orbit and adnexa
- Demonstrate a general understanding of the principles of immunology and microbiology
- Demonstrate a detailed knowledge of pharmacology
- Provide a detailed explanation of, and differentiate between, anterior ophthalmic conditions and appropriate management
- Demonstrate a general understanding of the relevant laboratory investigations in ocular disease
Skills:

- Exercise and further develop your analytical skills in the field of therapeutics
- Demonstrate an ability to critically apply your knowledge of pharmacology to prescribing practice
- Demonstrate analytical and problem-solving skills in a variety of theoretical and practical situations
- Advance your own knowledge and understanding and develop your skills to a high level
- Demonstrate competence in applying clinical skills to the practice of therapeutics
- Exercise professional judgement in selecting the most appropriate patient management strategy
- Refer patients appropriately
- Demonstrate an ability to apply knowledge of immunology and microbiology within the context of a systematic understanding of the pathophysiology of ocular disease
- Analyse the results of clinical examinations competently acknowledging optometric limitations
- Demonstrate an ability to critically evaluate sources of information, advice and decision support in prescribing practice, taking into account current evidence based practice
- Refine your clinical problem-solving skills
- Operate in a complex and unpredictable environment with an overview of the issues governing best practice

Values and attitudes:

- Show an awareness of ethical practice

HOW WILL I LEARN?

Principles of therapeutics is a distance learning web-based text. The Units are fully comprehensive, and include diagrams and figures to facilitate learning.
Questions are set at the end of each chapter to accustom you to the examination format and facilitate learning.

**Teaching pattern:**

<table>
<thead>
<tr>
<th>Teaching component</th>
<th>Teaching type</th>
<th>Contact hours (scheduled)</th>
<th>Self-directed study hours (independent)</th>
<th>Placement hours</th>
<th>Total student learning hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>8 hours per week for 17 weeks</td>
<td>Guided independent study</td>
<td>14</td>
<td>136</td>
<td>0</td>
<td>150</td>
</tr>
<tr>
<td>Totals</td>
<td></td>
<td>14</td>
<td>136</td>
<td>0</td>
<td>150</td>
</tr>
</tbody>
</table>

**WHAT TYPES OF ASSESSMENT AND FEEDBACK CAN I EXPECT?**

Assessments

The theoretical content of Principles of Therapeutics will be assessed via a two hour written examination using: (i) multiple choice questions (MCQs) and (ii) patient management case scenarios (PMCS).

The assessment consists of:

- MCQs (covering all aspects of the module)
- PMCS (which test your ability to analyse clinical results and manage patients appropriately)

**Assessment pattern:**

<table>
<thead>
<tr>
<th>Assessment component</th>
<th>Assessment type</th>
<th>Weighting</th>
<th>Minimum qualifying mark</th>
<th>Pass/Fail?</th>
</tr>
</thead>
<tbody>
<tr>
<td>MCQ Exam</td>
<td>Written Exam</td>
<td>50</td>
<td>50%</td>
<td>N/A</td>
</tr>
<tr>
<td>PMCS</td>
<td>Written Exam</td>
<td>50</td>
<td>50%</td>
<td>N/A</td>
</tr>
</tbody>
</table>

**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 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

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.

If you are successful in the resit, you will be awarded the credit for that module. The mark for each assessment component that is subject to a resit will be capped at the pass mark for the module. This capped mark will be used in the calculation of the final module mark together with the original marks for the components that you passed at first attempt.

If you do not meet the requirements for a module and do not complete your resit by the date specified you will not progress and the Assessment Board will require that you be withdrawn 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

INDICATIVE READING LIST

Those with * indicate important reference texts.

Anatomy and Physiology

Microbiology/Immunology


**Pharmacology**


**Ocular Disease**


**Prescribing**

British National Formulary (March 2015) Number 69.


Clinical Knowledge (College of Optometrists)
Summaries are a reliable source of evidence-based information and practical ‘know how’ about the common conditions managed in primary care, providing quick answers to real life questions that arise in the consultation.

For further information see:-
http://cks.library.nhs.uk/home

- Department of Health website at www.dh.gov.uk/nonmedicalprescribing
- Medicines and Healthcare Products Regulatory Agency website contains information about the legal framework governing the prescribing, supply and administration of medicines at www.mhra.gov.uk
- Medicines Partnership Programme at www.medicines-partnership.org
- The National Clinical Assessment Service www.ncas.npsa.nhs.uk
- The National Prescribing Centre produces useful information including competency frameworks, guides to practice and resources to help healthcare professionals understand prescribing matters. The NPC also organises study days and conferences to update practitioners. The web address is: www.npc.co.uk
- The National Electronic Library for Medicines includes a web page on Patient Group Directions on which a centrally maintained archive of approved PGDs can be found. Visit www.druginfozone.nhs.org.uk

Appendix: see http://www.hesa.ac.uk/content/view/1805/296/ for the full list of JACS codes and descriptions

<table>
<thead>
<tr>
<th>CODES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>HESA Code</strong></td>
</tr>
<tr>
<td>4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>JACS Code</strong></th>
<th><strong>Description</strong></th>
<th><strong>Percentage (%)</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>B510</td>
<td>The study of the principles and techniques for examining, diagnosing and treating conditions of the human visual system.</td>
<td>100</td>
</tr>
</tbody>
</table>