ADVANCED CLINICAL OPTOMETRY AND OPHTHALMOLOGY

MODULE DESCRIPTIONS

MEDICAL CONTACT LENSES LEVEL 1 (30 CREDITS)
This 30 credit module in contact lenses will give you an introduction to the design, fitting, evaluation and indications of contact lenses. The module assumes a basic knowledge of contact lens fitting and slit lamp examination skills.

The learning outcomes for this module include:

- a detailed knowledge of lens design and manufacture for rigid gas permeable (RGP) and hydrogel contact lenses, including verification
- an ability to fit and assess a range of RGP lens designs
- an ability to fit a range contact lenses to correct regular and irregular astigmatism, such as early keratoconus
- an ability to fit a range of contact lenses to correct presbyopia
- an understanding of myopia control and orthokeratology
- an ability to provide ongoing management and advice for maintaining healthy contact lens wear
- an ability to detect, assess and manage the impact of contact lens complications on the anterior eye
- an ability to manage the dry eye in contact lens practice
- a detailed knowledge of currently available contact lens care products and ocular lubricants
- an ability to produce a comprehensive contact lens record
- an ability to communicate effectively with contact lens patients, fellow professionals and contact lens manufacturers and suppliers
- a detailed knowledge of guidelines in contact lens practice.

MEDICAL CONTACT LENSES LEVEL 2 (30 CREDITS)
This 30 credit module follows on from the first level where the fundamentals of contact lens fitting and design were covered. This module aims to provide you with more detailed knowledge of complex medical contact lens fitting and evaluation with a more thorough knowledge of lens design.

The learning outcomes for this module include:

- an ability to identify and select the most appropriate lens for patients with complex refractive and clinical needs
- an ability to assess, fit and manage specialist designs to include hybrids, mini-sclerals and sclerals
- an ability to assess, fit and manage patients with advanced keratoconus in contact lens practice
- an ability to assess, fit and manage children under 8 years of age with contact lenses
- an ability to assess, fit and manage patients who require bandage, therapeutic, cosmetic or occlusive contact lenses
- a detailed knowledge of contact lens fitting following corneal and refractive treatments
- an ability to investigate and manage anterior segment conditions related to contact lens wear
- an ability to manage contact lens discomfort, intolerance and complications
- a detailed knowledge of myopia control with contact lenses and orthokeratology
- an ability to identify and verify a range of contact lenses
- a detailed knowledge of emerging technology in contact lens design and use

GLAUCOMA LEVEL 1 (15 CREDITS)
This introductory 15 credit module in glaucoma aims to provide you with the understanding of the condition as well as the knowledge and skills to evaluate a patient who may have glaucoma. It further aims to provide additional specialist knowledge and skills for monitoring patients with diagnosed ocular hypertension (OHT) and suspect open
angle glaucoma (OAG) who have an established management plan. This module assumes intermediate slit lamp skills.

The learning outcomes of this module include:

- an ability to take a comprehensive ophthalmic history in a patient with diagnosed OHT or suspect OAG
- an awareness of demographic, ocular and systemic risk factors for OAG
- an ability to accurately measure IOP using a slit-lamp mounted Goldmann applanation tonometer and to interpret the results
- an ability to perform an assessment of central corneal thickness using appropriate instrumentation and to interpret the significance of the results
- an ability to assess the optic nerve head by non-contact slit-lamp binocular indirect ophthalmoscopy and to detect the characteristic features of glaucomatous optic neuropathy
- an awareness of the risk factors for angle closure and an ability to perform and interpret the results of the van Herick test for the assessment of anterior chamber depth
- an ability to recognise the signs and symptoms of a patient suffering from acute angle-closure and refer the condition appropriately
- an understanding of the use of perimetric tests for the assessment of a patient at risk of OAG and an ability to choose the most appropriate test strategies, be familiar with their limitations, understand the sources of error, correctly interpret results and recognise glaucomatous field loss
- an ability to differentiate OAG from other ocular and central visual pathway anomalies
- an ability to make appropriate clinical decisions relating to OHT and OAG diagnosis and management
- an awareness of timescales for follow-up of patients with diagnosed OHT and suspect OHT
- an ability to detect change in clinical status in patients with diagnosed OHT and suspect OAG (e.g. change in visual fields or optic nerve head)
- an ability to inform patients/public about glaucoma, its detection, prognosis and management and provide them with relevant and accessible information and advice at initial and subsequent visits
- A knowledge of national guidance around referrals for patients with OHT, OAG or suspect OAG (based on a United Kingdom case study).

GLAUCOMA LEVEL 2 (15 CREDITS)

This 15 credit module follows on from level 1 to further develop your knowledge and skills in the detection, evaluation and management of patients with stable ocular hypertension (OHT) and open angle glaucoma (OAG). You will further develop your skills in detecting change in clinical status and decision-making in patients at risk of developing glaucoma. The module centred around critical evaluation of the evidence base and clinical decision making.

The learning outcomes of this module include:

- an ability to perform a gonioscopic examination of the anterior chamber angle and to identify anatomical structures, accurately grade the angle width and interpret the significance of clinical findings
- an ability to diagnose OHT or OAG through an integration of clinical observations/results of clinical investigations
- an ability to make appropriate management decisions in a patient with OHT
- an ability to monitor the response to treatment in a patient with OHT and modify the management plan or refer if necessary
- an awareness of the contraindications of anti-glaucoma medications and an ability to detect and manage drug-induced side effects
- an ability to inform patients of the rationale for monitoring their condition and an ability to explain the risk of developing glaucoma
- an ability to counsel patients regarding the risk of blindness associated with glaucoma, risk to family members, and potential impact of the disease on lifestyle
GLAUCOMA LEVEL 3 (30 CREDITS)

This 30 credit module aims to equip you with the knowledge and skills to provide non-surgical management of patients with established open angle glaucoma (OAG) and other cases of glaucoma e.g. treated angle closure, pseudo exfoliative glaucoma. The module also builds further on critical appraisal of evidence and application to clinical decision making.

The learning outcomes of this module include:

- an ability to take a comprehensive ophthalmic history in a patient with established glaucoma
- an understanding of the use of perimetric techniques for the assessment of a patient with diagnosed glaucoma
- an ability to detect disease progression by observation of the optic nerve head/nerve fibre layer and/or results of imaging/functional test
- an ability to monitor the response to treatment and modify the management plan if necessary, in primary open angle glaucoma, normal tension glaucoma, secondary glaucomas, primary angle closure glaucoma and previous juvenile glaucoma
- an understanding of the pharmacology, cautions, contraindications, interactions and side effects of anti-glaucoma medication
- an understanding of the indications for, techniques, expected outcomes and complications of laser therapies and surgical interventions used in the management of glaucoma and its related conditions

MEDICAL RETINA LEVEL (15 CREDITS)

This 15 credit module aims to provide the knowledge of common medical retina conditions and includes topics covering screening, referral and possible treatment pathways, with an emphasis on optical coherence tomography (OCT) interpretation and diabetic retinopathy grading. It also aims to provide you with the knowledge and skills to make accurate and appropriate referral decisions for patients with medical retina conditions and prepares you to commence working under supervision in medical retina new patient triage clinics, AMD treatment-retreatment clinics and to work in photography based diabetic retinopathy screening services.

The learning outcomes of this module include:

- a detailed knowledge of the anatomy, physiology and pathophysiology of the retina, with emphasis on the macula
- an understanding of the risk factors and differential diagnosis of disorders of retinal and macular pathology
- an understanding of treatments of medical retina disorders including the patient’s response to treatment
- an ability to communicate effectively with patients
- an ability to interpret OCT images and fundus photographs for AMD and diabetic retinopathy, with appropriate patient management
- an awareness of the use of fluorescein, ICG angiography and autofluorescence in medical retina service delivery
- an understanding of the principles, processes, protocols, potential benefits and limitations of national diabetic retinopathy screening programmes
- an understanding of diabetes and its relevance to retinopathy screening
- an ability to detect and classify diabetic retinal disease
- an ability to recognise acute retinal pathology, conduct appropriate tests and make appropriate referrals, clearly stating the level of urgency
- an awareness of UK national referral guidelines and detailed knowledge of local referral pathways for patients with medical retina disorders
- an awareness of the rapidly evolving nature of medical retina treatments including pertinent treatment trials
- an understanding of current guidelines for management of medical retina disorders
- safeguarding adults and children

CLINICAL LEADERSHIP (15 CREDITS)

This 15 credit module aims to provide you with the opportunity to:

- recognise applicable objectives, strategies and methodologies within clinical leadership practices
• gain a sound comprehension of theories of case review and peer analysis, change management, solution modelling/implementation and evaluation of impact
• synthesise theory with practical implementation and contextual drivers
• explore the interface between work-based learning (current and previous) and academic study.

At the end of this module, you should have the knowledge and understanding of
• Methods and systems to measure impact of advanced clinical practice
• The implications and applications of epidemiological, demographic, social, political and professional trends and developments appropriate to your clinical practice
• Theories, techniques and models of leadership and teamwork and how these can be applied across professional boundaries in health and social care
• The importance and impact of peer review and evaluation in advanced clinical practice
• Theories, models and techniques which can be deployed across health and social care systems to affect change at individual, team and organisational level
• Identify the need for change; generate practice innovations; act as a role model; lead new practice and service redesign solutions in response to individuals’ feedback and service need
• The range of evidence-based strategies to manage risk in clinical practice.

At the end of this module, you should demonstrate the skills and abilities to
• Impact of advanced clinical practice within your scope of practice and the wider community
• Use your advanced clinical expertise to provide consultancy across professional and service boundaries; drive service development and influence clinical practices to enhance quality productivity and value
• Provide professional leadership and supervision in situations that are complex and unpredictable; instil confidence and clinical credibility in others; work across boundaries to promote person-centred care
• Actively seek and participate in peer review of your own and others’ practice across traditional health and social care boundaries
• Identify the need for change; generate practice innovations; act as a role model; lead new practice and service redesign solutions in response to individuals’ feedback and service need
• Establish and exercise your individual scope of practice within legal, ethical, professional and organisational policies, procedures and codes of conduct to manage risk and enhance the care experience
• Identify and manage risk in own and others’ clinical practice; be receptive to challenge and demonstrate the ability to challenge others.

RESEARCH METHODS AND STATISTICS (15 CREDITS)
This 15-credit module provides a comprehensive engagement with the evidence-based approaches (data and literature review) which underpin research and clinical practice developments. Contemporary approaches to research and analysis will be considered, emerging from theory and practice as a context. You will encounter the range of frameworks (ethical and legal), data sets and the evidence bases which inform the field, and develop their capacity to identify, interrogate and interpret these in order to draw conclusions which will inform practice and understanding. Students will evaluate own learning in order to frame an individual strategy for study and its synthesis with your practice as preparation for the research project.

You will engage in tasks such as conducting literature searches, critical reading of papers, statistical analysis, identifying and designing projects, evaluative report and presentation writing. Delivery will be structured through focused online units of study supported by face to face workshop/seminar style sessions in order to consolidate and synthesise understanding in advance of summative assessment.

DISSERTATION (60 CREDITS)
This 60-credit module will be delivered primarily through supported independent study and project work. Key skills methodologies, critical paradigms and approaches to research will be covered in the Research and Stats Module earlier in the programme. There will be some variation in respect of support and approaches according to subject matter, in order to support the specifics of individual projects.
There will be some face to face attended seminar workshop/ sessions to support writing and engagement with the project which will be scheduled around the attended assessment period in term 3.

Tutorial support from a nominated supervisor is available, for guidance and at fixed points for feedback on drafts. This will include online sessions.

This module aims to provide students with:

- In depth knowledge of a specific defined area of clinical ophthalmic and/or optometric practice and its associated literature/evidence base
- Appropriate research and reviewing skills and clinical procedures required for a successful literature review research project experience
- The opportunity to pursue in depth exploration of a topic emerging from a particular clinical focus

The ability to ask a clinical or related scientific question and answer it by appraisal and critical review of the literature, with a focused dissertation.