



THE COLLEGE OF OPTOMETRISTS

Learning outcomes for the Professional Higher Certificate in Contact Lens Practice

1. Aim

This certificate is designed to improve knowledge and skills for GOC registered optometrists to be able to provide an enhanced standard of contact lens care in both a community and/or hospital setting. The Professional Higher Certificate:

- builds on the baseline knowledge and skills of contact lens practice of qualified optometrists
- is a standalone College accredited certificate in contact lens practice
- is a prerequisite to the College accredited Diploma qualification in contact lens practice
- can contribute to further College accredited qualifications
- is worth 30-40 HE credits.

2. Learning outcomes

Following completion of the programme an optometrist will be able to demonstrate:

- a) a detailed knowledge of lens design and manufacture for RGP and hydrogel contact lenses, including verification
- b) an ability to fit and assess a range of RGP lens designs
- c) an ability to fit a range contact lenses to correct regular and irregular astigmatism, such as early keratoconus
- d) an ability to fit a range of contact lenses to correct presbyopia
- e) an understanding of myopia control and orthokeratology
- f) an ability to provide ongoing management and advice for maintaining healthy contact lens wear

- g) an ability to detect, assess and manage the impact of contact lens complications on the anterior eye
- h) an ability to manage the dry eye in contact lens practice
- i) a detailed knowledge of currently available contact lens care products and ocular lubricants
- j) an ability to produce a comprehensive contact lens record
- k) an ability to communicate effectively with contact lens patients, fellow professionals and contact lens manufacturers and suppliers
- l) a detailed knowledge of current legislation and guidelines in contact lens practice.

3. Indicative content

- a) Design and manufacture of RGP and hydrogel lenses:
 - design aspects such as centre thickness, peripheral curves (or flattening factors) and edge design
 - manufacturing techniques such as lathe cutting and injection moulding
 - interpreting and specifying a contact lens prescription according to British Standards.
- b) RGP fitting:
 - benefits of RGPs
 - RGP lens fitting based on corneal topography, eyelid position and tension
 - interpretation of corneal topography to assist contact lens fitting
 - lens selection based on material and design
 - fluorescein assessment and recording of fit
 - decontamination of diagnostic lenses.
- c) Astigmatism regular and irregular:
 - types of astigmatism such as corneal, lenticular and irregular
 - use of instrumentation including retinoscopy, keratometry and topography
 - hydrogel and RGP lens designs
 - the role of non-specialist contact lens designs in early keratoconus management.

d) Contact lenses for presbyopia:

- physiology of the presbyopic eye
- awareness of the visual and occupational needs of the ageing population
- monovision versus presbyopic contact lens options
- hydrogel, RGP lens designs
- fitting strategies.

e) Myopia control and orthokeratology:

- current theories of myopia progression
- rationale for lens design
- patient selection criteria
- fitting systems
- communication of intended outcomes, including managing expectations
- management of adverse outcomes.

f) Ongoing management and advice for maintaining healthy contact lens wear:

- indications and contraindications to lens wear
- aftercare of long term RGP and conventional hydrogel wear
- overnight wear
- water based sports
- plano cosmetic lenses.

g) Contact lens complications on the anterior eye including, but not limited to:

- contact lens associated papillary conjunctivitis (CLAPC)
- contact lens related red eye
- corneal staining
- hypoxia
- infective and non-infective keratitis.

h) Dry eye:

- tear film assessment prior to lens selection
- management of contact lens induced dry eye (CLIDE)
- instrumentation of dry eye.

- i) Lens care products and ocular lubricants:
 - definitions of cleaning, disinfection, rinsing and wetting
 - active ingredients found in solutions
 - contact lens case care
 - patient compliance.

- j) Record keeping:
 - clear and concise recording of clinical episode
 - use of grading scales
 - clear description of contact lens fit
 - advice and management including review appointments.

- k) Communication:
 - appropriate language and terminology for all age groups
 - inter-professional communication
 - referral
 - contact lens ordering.

- l) Current legislation and guidelines in contact lens practice:
 - national and local guidance
 - professional bodies and best practice guidelines.

4. Teaching, learning and assessment strategies

As a prerequisite to the course candidates will have:

- an ability to select appropriate patients for contact lens wear for all ages
- a knowledge of the structures and mechanisms of the anterior eye structures
- an awareness of physical and physiological aspects of contact lens materials
- an understanding of contact lens visual optics
- an ability to use current instrumentation for contact lens practice.

The programme should be of sufficient length to achieve the stated learning outcomes. Programme delivery may be achieved through a variety of learning strategies for example face-to-face instruction, distance learning or directed private study. However, these must be appropriate for the material or skill being taught. Assessments should be designed to provide valid and reliable judgements about a candidate's performance.

Candidates should demonstrate skills such as critical thinking, problem solving and reflection.

To guide teaching strategy we distinguish between different levels of candidate competence in our learning outcomes:

- awareness – the candidate will be familiar with the item(s) in the learning outcome but is not required to demonstrate detailed understanding, knowledge or practical experience
- understanding – the candidate will be able to explain the key item(s) in the learning outcome but is not required to have practical experience
- detailed knowledge – the candidate will be able to demonstrate higher order thinking in most item(s) in the learning outcome
- ability – the candidate will have competence in a practical task acquired through skills based training or experience. Ability should incorporate higher order thinking.

Assessment criteria must be made explicit and be appropriate for the competence they are designed to test. For example, competences relating to a clinical skill should be assessed using an appropriate skills-based assessment. For each assessment, a marking scheme with the appropriate pass/fail criteria should be established.

The following must be included in the assessment:

- log book of 50 patient episodes directly examined by the candidate; the patient episodes must be on a minimum of 20 patients; note that a patient episode is a patient visit and it is assumed that some patients will be seen on several occasions
- a separate presentation of 10 full case records, which cover a range of individual patients and clinical needs, of which six records will be sampled
- case records to include a range of follow up periods of between 1-24 months.

It is suggested that the range of cases and clinical needs could include, but is not limited to:

- high minus (over -10D) CL
- high plus (over +6D) CL
- addressing problems with CL materials
- demonstrating the use of topography in fitting
- regular astigmatism over 3D; including 1 RGP toric and 1 soft toric
- irregular astigmatism
- early keratoconus
- presbyopia
- children over 8 years of age
- continuous extended wear
- complications: RGP and soft
- orthokeratology
- management of dry eye in contact lens wear
- management of blepharitis in contact lens wear.

Accreditation of prior learning (APL) may be awarded to candidates as appropriate. It should be noted that the APL must be specific to the units and certificates already held by candidates. APL can count for no more than one third of the programme.