

**A RECOMMENDED
OUTLINE CORE CURRICULUM FOR
DISPENSING OPTICIANS**

Note to readers

The GOC has prepared this recommended core curriculum to give guidance to training institutions on how to present their training programmes. The GOC recommended core curriculum is not intended to be prescriptive. It is emphasised that it is the training institutions that are the experts in the delivery of their programmes. It is expected that the training institutions will use the GOC recommended curriculum as the building blocks upon which to build the details of their programmes.

For this reason, the GOC has decided that the content of the recommended core curriculum should make no reference to the required foundation skills and knowledge. These had been omitted on the basis that each institution will consider which foundation skills and knowledge it should teach in order to underpin the outline core curriculum.

COMPETENCY TITLE:	1. Communication Skills
STEM STATEMENT:	The ability to seek and communicate relevant information from and to patients in an effective and appropriate manner.
CRITICAL COMPETENCE(S);	<p>1.1 The ability to communicate effectively with the patient, taking into account his/her physical, emotional, intellectual and cultural background and to take accurate history from patients with a range of ophthalmic problems and needs.</p> <p>1.2 The ability to deal effectively with patient concerns and complaints.</p>
<i>TO ACHIEVE THE CRITICAL COMPETENCE(S) STUDENTS NEED THE FOLLOWING APPLIED KNOWLEDGE & SKILLS:</i>	
<p>1.3 An understanding of the importance and significance of family history, signs and symptoms including a recognition of the importance of the patient's health status, medication, work, sports, lifestyle and special skills.</p> <p>1.3.1. Task analysis</p> <p>1.3.2. Analysing information</p> <p>1.3.3. Interpreting verbal and written information</p> <p>1.3.4. Effective questioning</p>	

1.3.5. Decision Making

1.4 The development of the key skills of listening to patients and explaining and discussing with them ophthalmic matters, taking into account relevant individual characteristics.

1.4.1. Two way communication

1.4.2. Listening skills

1.5 The ability to understand patients' fears, anxieties and concerns about their visual welfare in the eye examination and its outcome.

1.5.1. Handling difficult patients

1.5.2. Dealing with people who are upset

1.5.3. Non verbal communication

1.5.4. Developing empathy

1.5.5. Maintain and respect confidentiality

1.6 The ability to discuss with the patient an understanding of systemic disease and its ocular impact, its treatment and the possible ocular side effects of medication.

1.6.1. Working within limits of responsibility

1.6.2. Two way communication

1.7 The ability to understand the patient's expectations and aspirations and managing situations where these cannot be met.

1.7.1. Managing conflict

1.7.2. Dealing with people who are upset

1.7.3. Negotiating skills

1.7.4. Overcoming barriers

1.7.5. Handling Complaints

1.8 The ability to recognise cultural diversity, and to communicate with patients who have poor or non-verbal communication skills, or those who are confused, reticent or misled.

1.8.1. Cultural sensitivity

1.8.2. Non verbal communication

1.8.3. Using appropriate language

1.8.4. Interprets patient responses

1.8.5. Confirming understanding

COMPETENCY TITLE:	2. Professional conduct
STEM STATEMENT:	In fulfilling his/her duty of care a Dispensing Optician must have an understanding and working knowledge of the relevant legislation and civil laws, as well as codes of conduct and professional guidance to be able to care for, respect and protect the rights, dignity, privacy and confidentiality of patients.
CRITICAL COMPETENCE(S):	2.1 The demonstration of the ability to manage a patient's care in a safe, ethical and confidential environment. 2.2 The demonstration of the ability to keep clear, accurate and contemporaneous patient records, which record all relevant findings and decisions made.

TO ACHIEVE THE CRITICAL COMPETENCE(S) STUDENTS NEED THE FOLLOWING

APPLIED KNOWLEDGE & SKILLS:

2.3 Have an understanding and working knowledge of health care delivery systems to be able to demonstrate an ability to care for patients who have additional clinical or social needs.

2.3.1. The implications of current UK and European legislation and policies relevant to the dispensing of ophthalmic appliances.

2.3.2. The interpretation of current legislation regarding the referral and duty of care – generally and in particular for patients with special needs.

2.4 Demonstrate the ability to interpret and respond appropriately to patient records and other relevant information. Demonstrate the ability to work within a multi-disciplinary team and within the guidelines and codes set for the profession.

2.4.1. The Code of Professional Conduct as established by the GOC and the implications of UK and European legislation on fitness to practise

2.4.2. The Advice and Guidelines on Professional Conduct of the professional body (ABDO).

2.4.3. The implications of working as part of a multi-disciplinary team

2.4.3. The range and limitations of duties and decisions in Ophthalmic Dispensing

2.5 Demonstrate an understanding of the importance of their legal and ethical responsibilities in relation to the publication, advertising and broadcasting information of services, facilities and goods.

2.5.1 The implications of any general and optical legislation and guidelines regarding publicity /advertising/media

2.5.2. The ethical issues involved in publicity / advertising/media

2.6 Demonstrate the ability to act with probity in professional practice. This includes:

- ◆ **Keeping clear, accurate and contemporaneous records of financial transactions relating to fees and vouchers and other financial information;**
- ◆ **The provision of information about payment of fees by all means and other costs relevant to patients needs and wants;**
- ◆ **A knowledge and understanding of professional guidance in relation to conflicts of interest.**

2.6.1. The current legislation and policies regarding financial support for the purchase of optical appliances.

2.6.2. Basic business management and financial accounting.

2.6.3. The implications and interpretation of current consumer legislation

2.7 Demonstrate an understanding of the importance of Health and Safety issues in the workplace, for themselves as employees and for patients.

2.7.1. The implications of current legislation regarding employment and health and safety at work, including cross-infection.

2.7.2. Current legislation and policies regarding professional and practice indemnity insurance

COMPETENCY TITLE:	3. Refractive Management
STEM STATEMENT:	An understanding of methods of assessing vision, refraction, binocular status and visual acuity in all patients.
CRITICAL COMPETENCE(S):	3.1 An understanding of refractive prescribing and management decisions.
TO ACHIEVE THE CRITICAL COMPETENCE(S) STUDENTS NEED THE FOLLOWING APPLIED KNOWLEDGE & SKILLS:	
<p>3.2 A knowledge and understanding of the use of ocular diagnostic drugs to aid refraction.</p> <p>3.2.1. Overview of ophthalmic diagnostic drugs</p> <p>3.3 An understanding of the methods of refracting children, a knowledge and understanding of cycloplegic drugs and their effects, and an understanding of prescribing and management decisions.</p> <p>3.3.1. Refractive techniques and test types for paediatric use</p> <p>3.3.2. Overview of the use of cycloplegic drugs</p> <p>3.3.3 Interpretation of results</p> <p>3.4 An understanding of the refraction of patients with reduced visual acuity</p> <p>3.4.1. Refractive techniques and test types for patients with reduced visual acuity</p> <p>3.4.2. Interpretation of results</p> <p>3.5 An understanding of the investigation and management of patients presenting with heterophoria, heterotropia and amblyopia based anomalies of binocular vision, including the relevance of history and the recognition of any clinical symptoms.</p> <p>3.5.1. Basic relevant aetiology</p> <p>3.5.2. Heterophoria, heterotropia and other binocular vision anomalies</p> <p>3.6 An understanding of the objective and subjective tests necessary to investigate binocular status</p> <p>3.6.1. Tests to investigate binocular status</p>	

3.7 An understanding of likely management options including: vision training, refractive correction, modified refractive correction and prismatic correction, related to the prescribing of the appliance.

3.7.1. Optometric management of binocular insufficiencies.

3.7.2. Refractive Surgical procedures – current practice and procedures available

3.8 An understanding of the investigation and management of patients presenting with incomitant deviations, including the recognition of symptoms and referral advice.

3.8.1. Tests to investigate comitancy of ocular deviation.

3.9 An awareness of the special examination needs of patients with learning and other disabilities.

3.9.1. Overview of the needs of patients with learning and other disabilities.

3.10 An awareness of the diagnostic methods for patients with field defects.

3.10.1. Visual field and its measurement.

COMPETENCY TITLE:	4. Optical Appliances
STEM STATEMENT:	The ability to dispense an appropriate optical appliance.
CRITICAL COMPETENCE(S):	<p>4.1 The ability to interpret and dispense a prescription using appropriate lenses and facial and frame measurements.</p> <p>4.2 The ability to advise on and dispense appropriate spectacle frame types and materials and lens forms and materials.</p> <p>4.3 The ability to dispense optical low vision aids</p> <p>4.4 The ability to relate the development of a child's facial anatomy to the fitting of optical appliances.</p>
<p><i>TO ACHIEVE THE CRITICAL COMPETENCE(S) STUDENTS NEED THE FOLLOWING:</i></p> <p>APPLIED KNOWLEDGE & SKILLS:</p>	
<p>4.5 The ability to identify anomalies in a prescription and implement the appropriate course of action.</p> <p>4.5.1. When to modify and when to refer a prescription.</p> <p>4.5.2. The identification of incomplete, inaccurate and ambiguous prescriptions.</p> <p>4.6 The ability to measure and verify optical appliances including the replication of existing spectacles, taking into account relevant standards where applicable.</p> <p>4.6.1. How to determine and record information for single vision, bifocal and progressive power lenses.</p> <p>4.6.2. The measurement of vertex powers in the distance and near portions of lenses</p> <p>4.6.3. How to check and record where appropriate any errors in a pair of spectacles with reference to appropriate standards.</p> <p>4.6.4. The recognition of lens data.</p>	

4.7 The ability to match the form, type and positioning of lenses to meet all the patient's needs and requirements.

- 4.7.1. The prismatic effect at any point on a single vision or bifocal lens.
- 4.7.2. The prismatic effect produced by decentring a single vision lens.
- 4.7.3. The decentration required to produce specified amounts of prism.
- 4.7.4. Curvature of the cylindrical surface. Notional cylinder power.
- 4.7.5. Calculation of the edge and centre thickness of spherical and astigmatic lenses.
- 4.7.6. Calculation of the thickness of an astigmatic prism.
- 4.7.7. Summation of obliquely combined cylinders.
- 4.7.8. Spectacle lens media and availability. Comparison of properties of glass and plastics media. Significance of curve variation factor, density, Abbe number.
- 4.7.9. Lenticular lenses, Bi-centric lenses.
- 4.7.10. Bifocal, trifocal and progressive power lenses.
- 4.7.11. Taking and recording adult facial and frame measurements
- 4.7.12. Taking and recording children's facial and frame measurements
- 4.7.13. Aberrations and their influence on the performance of ophthalmic lenses.
- 4.7.14. Monochromatic aberrations of high power ophthalmic lenses and effects on vision.
- 4.7.15. Front and back surface compensation. Modifications to account for differing vertex distances.
- 4.7.16. Near vision effectivity error.
- 4.7.17. Spectacle magnification.
- 4.7.18. Aspherical surfaces on spectacle lenses.
- 4.7.19. Reflections (ghost images) in spectacle lenses and methods of reducing unwanted reflections.
- 4.7.20. Magnification properties of optical appliances including angular magnification, nominal magnification and maximum magnification of low vision appliances
- 4.7.21. Design and use of iseikonic lenses
- 4.7.22. Properties and application of tinted spectacle lenses
- 4.7.23. The design of spectacle lenses for children

4.8 Demonstrate a knowledge of personal eye protection regulations and relevant standards, and the ability to appropriately advise patients on occupational visual requirements.

- 4.8.1. International Standards affecting the dispensing, testing and supply of personal eye protection.
- 4.8.2. The manufacture of spectacle lenses and frames to international safety standards.
- 4.8.3. Legal responsibilities and safety standards.

4.9 The ability to recommend and dispense special optical appliances.

- 4.9.1. The manufacture design and fitting of optical appliances with or without means of correcting a refractive error, for medical, vocational or any other specified purpose.
- 4.9.2. Optical principles of hand and stand magnifiers, spectacle magnifiers, loupes, telescopes, bar magnifiers, fresnel sheets.
- 4.9.3. Design, availability and suitability of optical low vision aids.
- 4.9.4. Relevance of spectacles to different types of optical low vision aids
- 4.9.5. British and International Standards for low vision aids.

4.10 Demonstrate a knowledge of frame and lens manufacturing and the application of special lens treatments.

- 4.10.1. The manufacture and application of hydrophobic and scratch resistance coatings.
- 4.10.2. Raw materials of frame and lens manufacture.
- 4.10.3. Methods of surfacing, moulding and polishing lens material
- 4.10.4. Methods of tinting spectacle lenses.
- 4.10.5. The construction of adult's spectacle frames.
- 4.10.6 The construction of children's spectacle frames

4.11 The ability to identify current and obsolete frame materials and consider their properties when handling, adjusting, repairing and dispensing.

- 4.11.1. Adjustment properties of plastics and metal frame materials
- 4.11.2. The identification and use of tools for adjustments and repairs
- 4.11.3. The identification characteristics of frame materials

COMPETENCY TITLE:	5. Contact Lenses
STEM STATEMENT:	An understanding of the choice, fitting and management of contact lenses.
CRITICAL COMPETENCE(S):	5.1 An understanding of the symptoms and signs of serious contact lens complications.
<i>TO ACHIEVE THE CRITICAL COMPETENCE(S) STUDENTS NEED THE FOLLOWING:</i> APPLIED KNOWLEDGE & SKILLS:	

5.2 An understanding of contact lens types and materials, their benefits and disadvantages, and their most appropriate applications.

5.2.1. Overview of contact lens types including benefits and disadvantages

5.2.2. Overview of contact lens materials including benefits and disadvantages

5.2.3. Optical comparisons of spectacles and contact lenses

5.2.4. Overview of therapeutic use of contact lenses

5.2.5. Overview of dispensing contact lenses for the low vision patient

5.3. An understanding of the initial contact lens selection and fitting of RGP and soft contact lens patients.

5.3.1. Overview of factors which effect the choice of design and parameters of all types of contact lenses

5.4 A knowledge of the different methods of contact lens removal and the ability to remove the lens in an emergency if feasible, and the ability to discuss the use of care regimes.

5.4.1. Methods of contact lens insertion and removal by the patient – of all contact lens types.

5.4.2. Methods of removal of all lens types by someone other than the patient

5.4.3. Use of the products involved in contact lens care regimes

5.4.4. Awareness of the limitation of knowledge regarding the removal of a contact lens

5.5 An understanding of both the aftercare of patients wearing RGP and soft contact lenses and the management of any complications.

5.5.1. The format and content of an aftercare consultation for all types of contact lenses

5.5.2. Management of contact lens aftercare issues for all contact lens types

5.5.3. Signs, symptoms and differential diagnosis of serious contact lens complications

5.5.4. Overview of treatment of serious contact lens complications.

COMPETENCY TITLE:	6. Low Vision
STEM STATEMENT:	The management of low vision patients.
CRITICAL COMPETENCE(S):	6.1 An understanding of the causes of low vision and their effects on vision. 6.2 The ability to assess a patient with low vision. 6.3 The ability to advise on the use of, and dispense appropriate low vision aids.

TO ACHIEVE THE CRITICAL COMPETENCE(S) STUDENTS NEED THE FOLLOWING:

APPLIED KNOWLEDGE & SKILLS:

6.4 The ability to consider the effectiveness of current refraction of patients with low visual acuity and to refer back where appropriate.

6.4.1. Definition of vision, low vision, visual acuity and visual field

6.4.2. Methods of refractive verification, relevance of pin hole and least distance of distinct vision (LDDV)

6.4.3. Distance and near test charts

6.4.4. Criteria for referral for new prescription

6.4.5. Low vision and contact lenses

6.5 An understanding of the assessment of visual function, including the use of LogMAR and other specialist charts, and the effects of illumination, contrast and glare.

6.5.1. Effects of reduced/increased illumination and low contrast sensitivity on vision and visual acuity

6.5.2. Reasons for reduced near visual acuity (reading acuity)

6.6 An understanding of the assessment of the visual field of patients with reduced vision.

6.6.1. Visual field and visual pathway

6.6.2. Effects of pathologies on visual field

6.6.3. Instruments for measuring visual field

6.7 An understanding of binocular vision in relation to low vision appliances.

6.7.1. Indications for binocular low vision aids

6.7.2. Use of occlusion

6.8 A knowledge of the relevance of optical low vision aids and of common types of non-optical low vision aid.

6.8.1. Relevance of suitability of magnification spectacles Rx and type of optical low vision aids for different visual tasks.

6.8.2. Design, availability and suitability of non-optical aids.

6.8.3. CCTV and TV reader systems and field expanders.

6.9 The ability to advise low vision patients on illumination, glare and contrast.

6.9.1. Types of lamps and positioning of light

6.9.2. Discomfort and disability glare

6.9.3. Ways of improving contrast

6.10 The ability to advise patients about their impairment and its consequences.

6.10.1. Psychology of low vision

6.10.2. Identification of patient's visual needs

6.10.3. Signs and symptoms of ocular and systemic pathologies

6.10.4. Effects of ocular and systemic pathologies on vision, visual acuity and visual field

6.10.5. Visual acuity/criteria for sight impaired (partial sight)/severely sight impaired (blind) registration and appropriate forms

6.10.6. Assessment of magnification for distance and near vision (and other distances)

6.10.7. Selection of aids

6.10.8. Training in use of aids

6.10.9. Statutory/non-statutory benefits of registration

6.10.10. Support groups

6.11 An understanding of the need for multi- and inter-disciplinary approaches to low vision care

6.11.1. Role of other health care professionals in the low vision field

6.11.2. Advantages of multi-disciplinary team care for the low vision patient

6.12 The ability to refer low vision patients to other agencies where appropriate

6.12.1. Social services, support groups, specialist trainers and teachers and (children)

6.12.2. Specialist trainers/rehabilitation officers

6.13 After-care management of low vision patients

6.13.1. Frequency of visits

6.13.2. Review of progress and suitability of low vision aids, and statutory/voluntary benefits

6.13.3. Communication with referring practitioner/agency

COMPETENCY TITLE:	7. Ocular Examination and Technique
STEM STATEMENT:	An understanding of the technologies used in the examination of the eye and adnexa.
CRITICAL COMPETENCE(S);	7.1 An understanding of the purpose and use of the instruments used in the examination of the eye and adnexa and the implications of results.
TO ACHIEVE THE CRITICAL COMPETENCE(S) STUDENTS NEED THE FOLLOWING: APPLIED KNOWLEDGE & SKILLS:	
<p>7.2 An understanding of the examination of the external eye and anterior segment by use of the slit lamp.</p> <p>7.2.1. Principles, illumination and viewing systems; methods of use.</p> <p>7.3 An understanding of the appropriate ocular diagnostic drugs to aid ocular examination and investigation.</p> <p>7.3.1. Ophthalmic drugs and regulations affecting use and storage of ophthalmic drugs in ophthalmic practice.</p> <p>7.4 An understanding of the examination of the fundus using either a direct or indirect ophthalmoscope.</p> <p>7.4.1. Principles of instruments used for ophthalmoscopy.</p> <p>7.5 An understanding of the methods of assessment of colour vision.</p> <p>7.5.1. Colour vision, Monochromacy, dichromacy and trichromacy. Colour deficiencies.</p> <p>7.5.2. Tests for colour deficiencies: colour naming tests, sorting and matching tests, confusion tests.</p> <p>7.6 An understanding of methods of assessment of corneal shape and integrity.</p> <p>7.6.1. The Cornea</p> <p>7.6.2. Radii of curvature and refractive index.</p> <p>7.6.3. Keratometry.</p> <p>7.6.4. Corneal Topography</p> <p>7.7 An understanding of the instruments involved in visual field analysis and results.</p> <p>7.7.1. Visual field instruments</p> <p>7.7.2. Visual field tests, Pathological fields</p> <p>7.8 An understanding of the use of a tonometer and of the results.</p> <p>7.8.1. Principles and methods of use; applanation and non-applanation tonometer.</p>	

7.8.2. Intra-ocular tension, normal values and variations.

COMPETENCY TITLE:	8. Ocular Abnormalities
STEM STATEMENT:	An understanding of the relevance of ocular disease.
CRITICAL COMPETENCIES:	8.1 The ability to recognise conditions and symptoms requiring referral and/or emergency referral and the demonstration of the ability to take appropriate action.
<i>TO ACHIEVE THE CRITICAL COMPETENCIES STUDENTS NEED THE FOLLOWING:</i>	
APPLIED KNOWLEDGE & SKILLS:	
8.2 The ability to identify common diseases of the external eye and adnexa.	
8.2.1. Signs and symptoms of external eye disease including eyelid, conjunctival, lacrimal, corneal disorders and associated dermatology	
8.3 An understanding of symptoms associated with internal eye disease.	
8.3.1. Signs and symptoms of abnormal internal ocular conditions	
8.4 An understanding of the clinical treatment of a range of significant ocular diseases/disorders and conditions.	
8.4.1. Macular degeneration, cataract, glaucoma, retinitis pigmentosa, retinal detachment and other common conditions	
8.4.2. Drugs	
8.4.3. Surgical procedures	
8.4.4. Diet Vitamin and mineral supplements (VMS)	
8.5 An understanding of the clinical treatment of a range of systemic diseases with ocular manifestations and adverse ocular reactions to medication.	
8.5.1. Diabetes, hypertension, sickle cell anaemia and other common conditions	
8.5.2. Drugs	
8.5.3. Vitamin and mineral supplements (VMS)	

8.6 An understanding of the implications of the manifestations of eye disease.

8.6.1. Prognosis of eye diseases

8.6.2. Surgical intervention

8.7 The ability to recognise and deal with ocular emergencies.

8.7.1. The ability to recognise that the condition constitutes an 'ocular emergency'

8.7.2. The ability to know what immediate treatment, if any, to apply.

8.7.3. The ability to take appropriate action to involve emergency services and/or ensure the transfer of the patient to a hospital A&E department.

8.7.4. The ability to record signs/symptoms and treatment and to advise the patient's GP of the action taken.