

abdo|EDUCATION

Level 7 Professional Certificate in Paediatric Eyecare

Qualification syllabus

LEVEL: Prof.Cert.PE



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Conditions of admission

The Professional Certificate in Paediatric Eyecare is a post-graduate course offered to qualified optometrists, contact lens opticians and dispensing opticians registered with the General Optical Council or CORU.

This is an 80 credit award, therefore the total qualification time is 800 hours to include guided learning, independent study and assessment.

It is recommended that on completion of this course, graduates hold an enhanced DBS certificate and have completed a recognised course in child safeguarding at Level 2.

ABDO members have access to both discounted enhanced DBS checks and a free Level 2 child safeguarding CPD course via the ABDO website.

Examination arrangements

Course Overview

Nine units are delivered online as recorded lectures.

NO.	UNIT TITLES
Unit 1	Advanced communication and psychology
Unit 2	Paediatric Dispensing
Unit 3	Facial development and research data
Unit 4	Refractive management
Unit 5	Neurodiversity and learning differences
Unit 6	Interventions
Unit 7	Specialist care
Unit 8	Paediatric low vision
Unit 9	Paediatric common eyecare conditions and acute presentations
Unit 10	Practical assessment <ul style="list-style-type: none"> • Section A • Section B

Assessments

The professional certificate in paediatric eyecare contains 9 units of MCQ's with an individual pass rate of 60%. All Unit MCQ's need to be successfully completed before booking the practical assessment. The maximum number of attempts per unit is 4, with an automatic referral for support after 3 attempts. If the maximum number of attempts is reached unsuccessfully, the qualification will not be awarded, however, the course can be completed by the learner and any successful units can be uploaded for CPD purposes.

Unit 10 is the practical assessment offered 4 times per annum at the ABDO National Resource Centre (NRC) in Birmingham, UK. It involves 2 sections, and both need to be passed individually with a minimum mark of 60%.

Following successful completion of all 10 units and exam board procedures, ABDO awarding body will bestow the award of 'Professional Certificate in Paediatric Eyecare' and the holder will be entitled to use the post-nominals Prof.Cert.PE

A. The interactivity of communication

The expected learning outcome is that the student will be able to demonstrate:

- A.1 Comprehensive knowledge and understanding in recognising the implications of the unique characteristics of the individual child.
- A.2 A perceptive and insightful approach in describing a range of ways in which children communicate.
- A.3 Clarity in explaining the parent/carer attributes that impact on appointment/s and the dispensing process.
- A.4 Critical appreciation of the practitioner skills required for effective interaction with children and parent/carers.
- A.5 The skills and ability to recognise and analyse the nature of interactions between the child, parent/carer, and practitioner.

B. The practice environment: Consent and record keeping

The expected learning outcome is that the student will be able to demonstrate:

- B.1 Awareness of the key elements in the sequence of activities and communications that develop and inform the preparedness and engagement of the child and parent/carers for the process of dispensing of spectacles.
- B.2 Critical understanding of children and parent/carers' rights, concepts of capacity, consent and competence and the consequences of possible acquiescence and suggestibility.
- B.3 Systematic knowledge and understanding of the referral and reporting process.
- B.4 Insightful recognition and comprehensive understanding of the implications of the practitioner's duty of care.

C. Adherence with spectacle wearing

The expected learning outcome is that the student will be able to demonstrate:

- C.1 The ability to identify and analytically consider the key factors which affect children's wearing of spectacles.
- C.2 Critical thinking in comparing strategies to aid adherence.

D. The psychology of spectacle wear

The expected learning outcome is that the student will be able to demonstrate:

- D.1 Knowledge and expertise in understanding the roles of the parent/carer, the child and others in the care and encouragement of the use of spectacles.
- D.2 Critical skills in examining the barriers to wearing spectacles including perceptions of discomfort.
- D.3 Ways of selecting and synthesising the evidence for the impact of wearing glasses on self-image, confidence, and self-esteem.
- D.4 Insight into the recognition of the influence of social perceptions and peer pressures real and imagined.
- D.5 Critical evaluation of the application of psychological theory and research to spectacle wear.

A. The 'WHY' – evaluating the impact of poor dispensing

The expected learning outcome is that the student will be able to demonstrate:

- A.1 Evaluation of the research in challenges within vision screening and eye examinations in children, understanding why uptake is relatively low and how to encourage more parents/carers to make eye examinations a more routine healthcare visit for their children.
- A.2 Critical evaluation of current spectacle frames marketed at children and appraise their features.
- A.3 Comprehension of the detrimental effect to the child if fitted with a frame designed for a small adult in terms of the impact of not seeing clearly on both their education and social development.
- A.4 Calculation of the resultant effective power of the lenses experienced by the child in the 'as-worn' position if fitted with a frame designed for adults and how these results compare to associated standards.
- A.4 Appraisal of the practice environment from the viewpoint of a child, the dispensing experience, parent/carer education and duality of communication.
- A.5 Enhanced communication tools to facilitate when and how to gain information about that child and understand how this can make the experience more positive.
- A.6 Reflection on the impact of the difference a registrant can make to the experience and outcome by defining and following best practice.

B. The relationship between the frame and the face

The expected learning outcome is that the student will be able to demonstrate:

- B.1 Evaluation of the definitions of British and International Standards relating to spectacle frames and the lack of facial parameter equivalents.
- B.2 Comprehensive knowledge and understanding of how to measure spectacle frame parameters including different frame element designs.
- B.3 Comprehensive knowledge of how to measure facial parameters and their relationship to the resultant frame design parameters and fit.
- B.4 Understanding of the relationship between the frame and the face and how facial measurements should inform frame selection.

C. Lenses and frame measurements

The expected learning outcome is that the student will be able to demonstrate:

- C.1 Reflection on the importance of prescription analysis, visual task analysis and the relevance to ophthalmic lens, tint and coating options.
- C.2 Comparison of different plastics materials for ophthalmic lens dispensing in terms of thickness, weight, safety and optical performance.
- C.3 Understanding the relevance of manufacturing methods and the differing forms of ophthalmic lenses to the finished weight and thickness of the spectacles.
- C.4 Comparison of bifocal use for children in terms of shape, diameter and size.
- C.5 Consideration of the theory and designs of myopia management spectacle lens options with fitting parameters.
- C.6 Appraisal of the research surrounding under-correction of myopia and how this may relate to the fit of a frame.
- C.7 Evaluation of the use of the Fairbanks facial rule with children and justify which facial measurements are essential to best practice and strategies to achieve these without a facial rule.

D. Frame selection and fit

The expected learning outcome is that the student will be able to demonstrate:

- D.1 Appraisal of different frame design elements in terms of individual patient facial parameters and apply knowledge to inform frame selection.
- D.2 Knowledge of adjustment properties of each element of the frame components and the extent and limitations of adjustments.
- D.3 Understanding the psychological impact of the spectacles fitting the child at the first attempt.
- D.4 Advising and supporting parents and children with adherence, tips for adherence and the importance of maintenance and aftercare.

A. Facial development

The expected learning outcome is that the student will be able to demonstrate:

- A.1 Comprehensive knowledge and understanding of how the face develops from embryonic development to teenage years.
 - A.2 Understanding the development of the neurocranium and viscerocranium, observing differences in a child's skull compared to an adults.
 - A.2 Understanding differences in facial growth particularly at the key areas for a spectacle frame; nasal development, the outer ear and the mastoid process.
 - A.3 Evaluation of paediatric frames in comparison to adult frames by measuring and application of a scaling factor to frame parameters.
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B. Paediatric facial anthropometry studies

The expected learning outcome is that the student will be able to demonstrate:

- B.1 Appraising differing methodologies of acquiring facial anthropometrical data and the suitability of these for children.
- B.2 Comparison of gender differences in facial growth from academic literature and observational studies.
- B.3 Appraising existing literature of studies specific to frame design and children.
- B.4 Understanding how to design a robust research study, what considerations, preparations and statistical analysis are involved.

C. Facial data and differences due to ethnicity

The expected learning outcome is that the student will be able to demonstrate:

- C.1 Understanding of different presentations of population data and how these can inform frame manufacture.
 - C.2 Understanding of recent data on facial measurements for typically developed white British children and observing differences in growth, spread of data and any gender differences.
 - C.3 Understanding of recent data on facial measurements for typically developed Chinese children and observing differences in growth, spread of data and any gender differences.
 - C.4 Comparisons of facial data and growth rates for typically developed white British and Chinese children.
 - C.5 Understanding of data on children of African-Caribbean ethnicity and the differences reported in comparison to white British children.
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D. Facial data and differences found in children with Down's syndrome

The expected learning outcome is that the student will be able to demonstrate:

- D.1 Understanding of recent data on facial measurements for white British children with Down's syndrome and observing differences in growth, spread of data and any gender differences observed.
- D.2 Comparison of growth rates between typically developed white British children and children with Down's syndrome.
- D.3 Comparison of growth rates between typically developed Chinese children and children with Down's syndrome.
- D.4 Understanding of a correlation matrix to show which facial measurements share a relationship across groups of children.

D. Practical task for assessment

The expected learning outcome is that the student will be able to:

- D.1 Research and locate relevant percentile data on facial parameters for a typically developed white British child and create a card frame front by constructing the parameters and cutting out a template.
- D.2 Research and locate percentile data on facial parameters for a typically developed Chinese child and create a card frame front by constructing the parameters and cutting out a template.
- D.3 Research and locate percentile data on facial parameters for a white British child with Down's syndrome and create a card frame front by constructing the parameters and cutting out a template.
- D.4 Appraise the three templates and appreciate the differences in frame design features and adjustments or modifications required to fit these three children effectively.

N.B *This exercise will be evaluated and form a basis for discussion in Unit 10, the practical in-person assessment.*

A. Refracting methods and refractive errors

The expected learning outcome is that the student will be able to demonstrate:

- A.1 Understanding of the different ways of measuring refractive errors in children.
- A.2 Appreciation of why accommodation is important to assess and measure in children.
- A.3 Knowledge of the expected prevalence and progress of refractive errors among typically developing children.
- A.4 Appreciation of the different prevalence and progress of refractive errors among children with additional needs / disabilities.
- A.5 Understanding of the interaction between accommodation and refractive errors in children.
- A.6 Knowledge of the prevalence of accommodative deficits among children with disabilities and the impact on managing refractive errors.

B. Visual acuity

The expected learning outcome is that the student will be able to demonstrate:

- B.1 Comparison of the different ways of measuring visual acuity in children, appreciating the difference between them and the variability of acuity scores in children.
- B.2 Knowledge of how to decide which acuity test to use on an individual child and strategies to make the tests positive.
- B.3 Understanding the factors that may influence acuity and how it is regarded as a guide to visual status.

C. Binocular vision

The expected learning outcome is that the student will be able to demonstrate:

- C.1 Understanding of the most common defects of binocular vision in children.
 - C.2 Knowledge of the impact of spectacle wear on common defects of binocular vision.
 - C.3 Understanding of what anomalies of binocular vision can present in children.
 - C.4 Understanding of both the purpose and outcomes of amblyopia therapy and how to manage parent expectations.
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D. Prescribing spectacles for children

The expected learning outcome is that the student will be able to demonstrate:

- D.1 Understanding of the decision-making process in spectacle wear for the full range of refractive errors, including borderline cases.
- D.2 Understanding when a reduced or modified prescription may be prescribed and the reasons for this decision.
- D.3 An appreciation of the barriers to spectacle wear that children experience and skills to help them adapt.
- D.4 Reviewing the evidence on wearing time, adherence and strategies for successful wear.

A. Working with children with neurodiversity and learning differences

The expected learning outcome is that the student will be able to demonstrate:

- A.1 Analysis and understanding of the differences between different neurodiversity's and how these can affect the patient's experience in the practice.
 - A.2 Comprehensive knowledge and understanding of the various classifications of specific learning difficulties.
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B. Academic disorders

The expected learning outcome is that the student will be able to demonstrate:

- B.1 Comprehensive knowledge and understanding of dyslexia and implications for dispensing practice.
 - B.2 Comprehensive knowledge and understanding of dysgraphia and implications for dispensing practice.
 - B.3 Comprehensive knowledge and understanding of dyscalculia and implications for dispensing practice.
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C. Motor skills disorders

The expected learning outcome is that the student will be able to demonstrate:

- C.1 Comprehensive knowledge and understanding of DCD and dyspraxia and implications for dispensing practice.
- C.2 Analysis of the different types of cerebral palsy and understand the visual problems associated with the condition.
- C.3 An appreciation of how cerebral palsy affects the patient and understand the dispensing solutions.
- C.4 Awareness and recognition, of the differences in presentation, perception, functioning, thinking and abilities between individuals with various neurodiverse conditions and learning differences.

D. Speech, language and communication disorders

The expected learning outcome is that the student will be able to demonstrate:

- D.1 Comprehensive knowledge and understanding of the implications of autism spectrum conditions for dispensing.
 - D.2 Analysis and understanding of Aspergers syndrome and its visual considerations.
 - D.3 Analysis and understanding of the different forms of the Autism Spectrum Disorder (ASD) and the visual considerations needed for dispensing solutions.
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E. Attention disorders

The expected learning outcome is that the student will be able to demonstrate:

- E.1 Knowledge and understanding of ADHD, Tourette's syndrome, OCD and how it affects dispensing.
 - E.2 Awareness and recognition of the affects medication for ADHD can on visual function.
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F. Visual Stress

The expected learning outcome is that the student will be able to demonstrate:

- F.1 Awareness and recognition of the visual stress test available.
- F.2 Analysis and understanding the differences between dyslexia and visual stress.
- F.3 Comparison of the different types of treatment for visual stress and understand where it could potentially benefit patients.

G. Children with Special Educational Needs and Disability (SEND)

The expected learning outcome is that the student will be able to demonstrate:

- G.1 Awareness of relevant legislation and understanding implications for practice.
- G.2 Application of the Children and Families Act 2014, and the Special educational needs and disability code of practice: 0 to 25 years, which includes the provision of advice for an Education, Health and Care needs assessment in relation to the prescription and usage of spectacles and the practicalities for children's learning.
- G.3 Awareness of what the local authorities must do in relation to Section 19 of the children's and families act.
- G.4 Knowledge of the definition of SEN according to the code of practice and the broad areas of need.
- G.5 Knowledge of how SEN support can be implemented and how the education, health and care assessment plan can be used.

Interventions

Unit 6

A. Myopia management and axial length

The expected learning outcome is that the student will be able to demonstrate:

- A.1 Understanding of the evidence surrounding the increasing prevalence of myopia and associated risk factors.
- A.2 Understanding of and able to make informed judgements for the instrumentation and clinical measures required for initiating and monitoring children for myopia management, and apply this understanding to wider myopia management.
- A.3 Understanding of the typical concerns and thoughts of parents and children in relation to newly diagnosed myopia and recommended interventions for myopia management, and how to communicate with them effectively.
- A.4 Clinical decision making about when a conversation about myopia management may be appropriate, and the typical enquiries parents may have when considering myopia management. To be able to compose a hypothetical conversation with parents in this regard.
- A.5 Clear comprehension and appropriate communication skills in order to describe the different types of myopia management interventions to parents and children, particularly the technical aspects, and when they have not been described by colleagues or other eye care professionals in a way that is appropriate for lay audiences.
- A.6 Management of patient and parents' expectations with myopia management and describe the potential outcomes. To consider how to approach this when interventions may not go as expected i.e. unexpected outcomes or adverse events.

Interventions

Unit 6 - continued

B. Interventions for myopia management

The expected learning outcome is that the student will be able to demonstrate:

- B.1 Evaluation of the current evidence for myopia development and progression and determine the benefits and detriments of different research methodologies.
- B.2 Critical analysis of the advantages and disadvantages of different types of myopia management intervention.
- B.3 Critical analysis of the evidence behind myopia management interventions, including identifying current areas of uncertainty.
- B.4 Knowledge of the current licensed approaches available for myopia management, their differences and categorisation of pharmacological, optical, and non-optical interventions.
- B.5 Awareness of recommended monitoring time intervals for those prescribed with myopia management, and the clinical measures necessary to ascertain an understanding of their progress with the intervention.
- B.6 An application of knowledge of myopia management interventions to common simulated scenarios of paediatric patients they may encounter to enhance their clinical decision-making for which treatment to recommend.

C. Binocular Vision and orthoptics

The expected learning outcome is that the student will be able to demonstrate:

- C.1 Understanding and synthesising the principles of primary eye care and orthoptic assessment within the Hospital Eye Service, including what circumstances would warrant paediatric patients to be recommended for a referral to an orthoptist.
- C.2 Knowledge of common approaches and assessments made within an orthoptics appointment, including the use of ocular muscle exercises, patching for amblyopia, and other interventions, and interpret the results obtained for patient care.
- C.3 Interpretation of the various outcomes of these appointments and expected monitoring regime, and what this may mean for a typical patient's journey, and understand how to apply these in current practice.
- C.4 Empathy and understanding of how parents and patients may feel when being advised they may need a referral to another practitioner or the hospital eye service, and what information they need to receive.

D. Children and contact lenses

The expected learning outcome is that the student will be able to demonstrate:

- D.1 The ability to coordinate and discuss expectations with parents about paediatric contact lens wear, and how to effectively work with parents to provide the best outcomes and safety measures for children wearing contact lenses in potentially problematic situations.
- D.2 Evidence-based decision making of the circumstances for when contact lenses may be recommended for paediatric patients as an intervention, and use this to inform parents of these options.
- D.3 Understanding of the specific considerations required for fitting paediatric patients with contact lenses, and how to monitor these patients appropriately.

A. Specialist communication

The expected learning outcome is that the student will be able to demonstrate:

- A.1 Analysis and understanding why providing specialist dispensing care to paediatric patients is important and the role of primary care settings.
- A.2 Listening to the child's views, preferences and concerns and keep them at the centre of all decision making when deciding on frame choice, modifications and lens options.
- A.3 Identifying how to recognise and overcome barriers to effective communication with paediatric patients and families/ carers.
- A.4 Effective communication skills with a diverse group of patients, and their parents/carers, with a range of conditions and needs, showing a respectful and caring manner when discussing facial differences.
- A.5 Critical evaluation of the language and terminology used for a patient with facial differences and understand how this can impact on their self-esteem.

B. Dysmorphic features and systemic conditions

The expected learning outcome is that the student will be able to demonstrate:

- B.1 Knowledge and recognition of craniosynostosis and Apert's syndrome and associated surgical treatment, and the many interacting factors which will influence the dispensing solutions.
- B.2 Discussion and analysis of methods of treating childhood cataracts or aphakic paediatric patients and the associated dispensing solutions.
- B.3 Knowledge and recognition of epidermolysis bullosa, and the many interacting factors which will influence the choice of frame and lenses.
- B.4 Appropriate communication skills, that a guardian or parent can understand, of the most appropriate lens option and care regime for a paediatric aphakic patient.
- B.5 Awareness of the main signs of retinoblastoma and the correct course of action if a patient presents with any of these signs.
- B.6 Knowledge and recognition of microtia, and the interacting factors which will influence the choice of frame and lenses.
- B.7 Knowledge and recognition of cerebral palsy, and the interacting factors which will influence the choice of frame and lenses.
- B.8 Knowledge and recognition of Down's syndrome, and the interacting factors which will influence the choice of frame and lenses.
- B.9 Knowledge and recognition of haemangiomas, and the interacting factors which will influence the choice of frame and lenses.
- B.10 To understand current developments in 3D printing technology and how this can be utilised for patients with specialist dispensing requirements.

C. Dispensing considerations

The expected learning outcome is that the student will be able to demonstrate:

- C.1 To analyse and interpret complex prescriptions in order to dispense the most appropriate lenses.
- C.2 Development of specialist dispensing skills and knowledge, to conceptualise and create unique solutions for patients with facial differences and to provide individualised care.
- C.3 Understanding how facial measurements can vary with some paediatric eye conditions and to learn the scientific terminology to describe dysmorphic features.
- C.4 To reformulate and use practical and technical knowledge of frames, to make modifications to paediatric frames for patients requiring a specialist fit.
- C.5 Understanding the importance of an anti-reflection coating on specialist spectacles.
- C.6 Recognising the importance of safety eyewear in paediatric patients where an increased emphasis would be advised to reduce the risk of ocular trauma.
- C.7 Understanding and conveying the risk and importance of UV radiation and protection in paediatric patients.
- C.8 Analysis and discussion of the risk of sports for paediatric patients and the importance of appropriate protective eyewear.
- C.9 Recognition and understanding of the conditions that may cause photophobia and discuss the solutions.
- C.10 Application and knowledge of the NHS voucher guidance for small frame or special facial characteristic supplement and the importance of detailed records.
- C.11 Critical evaluation of the dispensing solution and reflect on the dispensing process to improve future clinical outcomes and communication skills.

A. Conditions & Symptoms

The expected learning outcome is that the student will be able to demonstrate:

- A.1 Knowledge of ocular conditions that can cause low vision in children to include;
- Albinism
 - Cataracts
 - Nystagmus
 - Retinopathy of prematurity
 - Retinal dystrophies
 - Glaucoma
 - Optic atrophy
 - CVI
- A.2 Understanding of how the conditions listed in A1 impact vision differently, their associated symptoms and their prevalence.
- A.3 Knowledge and understanding of the emotional, social and economical impact of being sight impaired, in addition to the symptoms caused by different ocular conditions and the impact of these on daily activities.

B. Certification & Assessment

The expected learning outcome is that the student will be able to demonstrate:

- B.1 Recollection of the definition of sight impaired and severely sight impaired and other associated terminology and legal acts.
- B.2 Knowledge of the eligibility criteria, process and benefits of certifying and registering as sight impaired or severely sight impaired.
- B.3 Comprehensive understanding of what is involved in a low vision assessment, and be able to adapt vision testing for children, according to their age and ability, with the use of specialist charts for distance and near vision.
- B.4 Obtaining a relevant history relating to a child's educational and recreational visual needs, and to consider their personal lifestyle requirements holistically.
- B.5 An ability to elicit a child's symptoms and respond to both the child and parent's concerns about their vision appropriately, with compassion and professionalism.

C. Magnifiers, Telescopes, Lighting & Tints

The expected learning outcome is that the student will be able to demonstrate:

- C.1 An advancement on theoretical knowledge of low vision aids to be able to calculate the magnification required by a patient to appropriately dispense hand and stand magnifiers.
- C.2 Understanding of different types of magnification, trade magnification and how these are used in low vision devices.
- C.3 Recall and apply knowledge of the benefits and disadvantages of distance telescopes in order to appropriately dispense them.
- C.4 Clinical decision making to be able to carefully consider a patient's symptoms, including differentiating between disability and discomfort glare and give advice on lighting and tints.
- C.5 Consistently fastidious in keeping full, clear, accurate and contemporaneous records when dispensing low vision aids and to apply logical judgement when booking follow up reviews.

D. Practical Advice for Home, School & Life

The expected learning outcome is that the student will be able to demonstrate:

- D.1 Interpret and apply how investigative results including colour vision, contrast sensitivity, visual acuity and visual fields correlate to a patient's symptoms and use this with visual task analysis as a foundation to build appropriate recommendations.
- D.2 Exercising initiative to learn local referral pathways; to be able to act autonomously as a professional who makes an appropriate judgement regarding referrals to services such as habilitation; including cane training.
- D.3 Understanding the child and the parent's expectations and aspirations and managing situations where these cannot be met, with kindness and empathy.
- D.4 Understanding of support that is available including; physical devices, technology software, activity groups, or training courses according to the activity or emotional support that the child requires.
- D.5 Critical evaluation of the information obtained from a low vision assessment in order to direct patients to relevant support and to be able to document this for the team involved in the child's care, including parents, teachers and employers.

A. Strabismus

The expected learning outcome is that the student will be able to demonstrate:

- A.1 Knowledge and understanding of different types of strabismus in children and related classifications and terminology.
- A.2 Knowledge and understanding of how strabismus is assessed and associated grading.
- A.3 Knowledge and understanding of the relationship of strabismus to refractive error.
- A.4 Recognition of the red flags within strabismus and who may require a referral to the hospital eye service (and urgency).
- A.5 Awareness of interventions to correct strabismus, both surgical and non-surgical.

B. Acute red eye

The expected learning outcome is that the student will be able to demonstrate:

- B.1 Knowledge and understanding of causes of traumatic red eye presentation, such as corneal abrasion, foreign body, chemical injury and traumatic uveitis.
- B.2 Recognise the range of different underlying aetiologies that a child may have when they present with a red eye: blepharitis, chalazion, cellulitis, congenital nasolacrimal duct obstruction, infective conjunctivitis, allergic conjunctivitis, keratitis and uveitis, allergies, lids and lashes.
- B.3 Knowledge and understanding of how the conditions in B.2 are assessed and treated.
- B.4 Recognition of who may need referral to the hospital eye service (and urgency).

C. Early onset visual problems

The expected learning outcome is that the student will be able to demonstrate:

- C.1 Knowledge and understanding of the range of aetiologies that may present with early onset visual problems: congenital cataracts, retinoblastoma, congenital glaucoma, retinopathy of prematurity, retinal dystrophy and optic disc anomalies, CVI.
- C.2 Awareness of how the conditions in C.1 are diagnosed and managed.

D. Optic disc swelling / papilloedema

The expected learning outcome is that the student will be able to demonstrate:

- D.1 Knowledge and understanding of the potentially serious underlying pathology when a child is diagnosed with papilloedema.
- D.2 Knowledge and understanding of pseudopapilloedema and their causes; tilted optic nerves, myopic obliquely inserted disc, disc crowding and disc drusen, PHOMS and migraines.
- D.3 Knowledge and understanding of how suspected optic disc swelling is assessed.
- D.4 Knowledge and understanding of other causes of headache.

SECTION A

90 minutes in duration and will consist of:

A1. Paediatric dispensing practical 60 minutes

This section consists of dispensing three specialist cases on anatomically correct models of children's heads, selecting the most suitable frames and lenses for the specific cases presented and taking relevant, accurate measurements.

The expected learning outcome is that the candidate should be able to:

- A1.1 Dispense a suitable frame or appliance to a presenting child of any age, ethnicity, congenital condition, hearing impairment or any facial dysmorphia.
- A1.2 Obtain accurate facial parameters and translate this data into frame parameters and design features that will ensure a stable and comfortable fit.
- A1.3 Prescribe the most appropriate lenses with associated measurements, manufacturing methods and surface treatments.
- A1.4 Give clear fitting instructions using correct terminology demonstrating exemplary record keeping.

A2. Paediatric dispensing case management 30 minutes

This section will involve detailed discussions on further complex cases presented for the candidate to analyse, offer justified solutions and recognise additional needs in providing optimal eyecare for the patient.

The expected learning outcome is that the candidate should be able to:

- A2.1 Justify prescribing decisions that will impact on choice of lens design, fitting criteria, manufacturing methods and the impact of vertex distance, pantoscopic and face form angle.
- A2.2 Analyse a child's face of any age from an image or model and offer relevant advice on a suitable frame option.
- A2.3 Identify and dispense a range of special optical appliances such as those designed for certain sports, including relevant lens materials, tints and coatings.
- A2.4 Demonstrate and discuss advanced communication skills such as managing parental concerns and children with additional needs.
- A2.5 Demonstrate strategies for non-cooperative children in order to obtain measurements
- A2.6 Discuss potential adaptations to the patient journey in order to make a more positive experience for paediatric patients.

Paediatric eyecare qualifying assessment

Unit 10 - *continued*

SECTION B

90 minutes in duration and will consist of:

B1. Paediatric frame fitting and modifications *60 minutes*

This OSCE-style section will require the candidate to complete three tasks associated with fitting or modifying a paediatric spectacle frame.

The expected learning outcome is that the candidate should be able to:

- B1.1 Competently fit suitable frames to children of all ages, including babies.
- B1.2 Competently fit suitable frames to children of varying ethnicities such as Chinese, Indian, white British and African Caribbean.
- B1.3 Competently fit suitable frames to children with more complex facial requirements such as children with Down's syndrome, craniofacial synostosis and cerebral palsy.
- B1.4 Competently fit suitable frames to children with hearing impairments taking into account a variety of aids they may present with and the impact on spectacle frame fitting.
- B1.5 Demonstrate an ability to modify frames and make suitable adjustments such as; conversion of a fixed pad bridge frame to a frame with pads on arms, altering the angle of let back to accommodate temple or head width and permanent shortening of metal or plastics frame sides.

B2. Paediatric development and refractive management - 30 minutes

This viva will cover discussions on facial development in children utilising the three fronts created in unit 3 and covering variations in age, ethnicity and congenital conditions.

Discussions will also focus on refractive management decisions such as myopia management, binocular vision, and contact lenses

The expected learning outcome is that the candidate should be able to:

- B2.1 Describe the differences in facial parameters as the child grows, understanding rate of growth and how this will impact on frame design requirements.
- B2.2 Describe the differences in facial parameters due to ethnicity and known growth differences and how this will impact on frame design requirements.
- B2.3 Describe the differences in facial parameters due to congenital conditions and known growth differences and how this will impact on frame design requirements.
- B2.4 Explain prescribing decisions and related dispensing solutions for children including those related to myopia management, accommodation support and binocular vision anomalies.
- B2.4 Recognise and advise on contact lenses as a dispensing solution for children.
- B2.5 Discuss the requirements of paediatric patients with low vision and the associated dispensing advice.
- B2.6 Recognise ocular emergencies and referral procedures for common paediatric ocular conditions that may present and advise appropriately.



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