THE WORSHIPFUL COMPANY OF SPECTACLE MAKERS

LEVEL 3

OPTICAL SUPPORT

CERTIFICATE QAN 601/8991/5
DIPLOMA QAN 601/8999/X

QUALIFICATION HANDBOOK

Version: L3OS 2.2 050319

Contents

WCSM Level 3 Optical Support

Qualification Objective

This qualification has been developed for senior optical support staff and supervisors to build on their existing abilities and expand their knowledge further to enable them to better support all functions of the optical practice or manufacturing lab.

Throughout this document, the term 'learner' is used to refer to the person seeking to gain the qualification.

Entry requirements

There are no specific entry requirements but candidates who have not achieved the Level 2 Optical Support will be expected to have relevant and equivalent experience and knowledge.

Customer Service Statement

See relevant sections of the Customer Service Statement at:

http://www.spectaclemakers.com/awardsandtraining/customer-service-statement.htm

for details of:

Equal opportunities policy
Reasonable adjustments
Special considerations
Complaints and appeals procedures.

Progression

There are opportunities for the learner to progress to the Level 4 Diploma for Optical Technicians, the Level 4 Diploma for Optical Assistants or the Association of British Dispensing Opticians (ABDO) Level 6 qualification in Ophthalmic Dispensing, depending on the units selected and subject to validation. Units which are optional at Level 3 but would be required for further progression are indicated in this handbook.

Training

It is recommended that learners undertake training to support them in achieving this qualification. Details of training providers, materials, other available support and associated fees can be obtained from the Worshipful Company of Spectacle Makers (WCSM), administrator@spectaclemakers.com, 0207 236 2932.

Learner registration

Registration for WCSM examinations is administered by ABDO.

To register for the qualification or to obtain details of examination dates, contact examinations@abdo.org.uk or telephone 01227 732921.

Assessment

The learner will be assessed through a written examination or e-assessment in respect of the mandatory units. Optional units are also assessed in the same way. The format of the written and e-assessment examinations is identical. If a candidate fails any unit, the unit can be retaken on its own, up to three times, at specified times.

Grading

Successful learners will be awarded a Pass for each unit. Passing all selected units is required to achieve the qualification. There are no grades.

Personal Learner Record and Unique Learner Number

The Personal Learner Record (PLR) logs achievement of units and qualifications provided that the learner has received a Unique Learner Number (ULN). The ULN enables learners to have access to their PLR and for them to give access to training providers and/or employers to enable them to view their records as evidence of achievement.

When a learner registers for a qualification they will be asked to provide their ULN.

Total Qualification Time and Guided Learning Hours

The Certificate Total Qualification Time (TQT) is 225 hours; Guided Learning Hours (GLH) is 207 hours. The Diploma TQT is 385 hours, and the Diploma GLH is 272.

Level 3 in Optical Support

Structure

Candidates must take 3 mandatory units and at least one optional unit to achieve the Certificate (minimum of 21 credits). To achieve a Diploma, Learners must pass the 3 mandatory units and at least 2 optional units to gain a minimum of 37 credits.

Candidates who have previously passed the optional unit on Refractive Surgery at Level 2 may not select this unit at Level 3.

Mandatory Unit 1 R/507/6535

Title	The legal requirements in optics
Level	3
Credit	3

Learning Outcomes *The learner will:*	Assessment Criteria *The learner can:*
1. Understand the legal requirements that apply in an optical retail or manufacturing environment and their relevance to the optical support role	1.1 Discuss the implications of the requirements of health and safety law in an optical retail or optical manufacturing environment 1.2 Discuss the implications of trade descriptions law in an optical environment 1.3. Discuss the implications of employment law in an optical environment 1.4 Discuss the implications of equal opportunities legislation in an optical environment 1.5 Discuss the implications of discrimination law in an optical environment 1.6 Describe the key points of current legislation affecting optical retailing and manufacture 1.7 Discuss the implications of the Opticians Act in the retail environment 1.8 Discuss the implications of the legal requirements of CE marking in the optical retail or manufacturing environment 1.9 Explain how CE marking supports the customer and optical practices
2 Understand the health and safety requirements in an optical environment and the relevance to the optical support role	2.1 Discuss the health and safety regulations as they apply to an optical environment 2.2 Discuss how this relates to customer, staff and visitor safety [within optical care] 2.3 Describe the assessment of risk 2.4 Describe the management of risk 2.5 Explain how the management of risk protects the customer and the practice or manufacturing facility

	2.6 Discuss the importance of the correct use of different types of fire equipment in a typical optical environment	
Additional Information about the unit		
Unit Aim(s)	Candidates will demonstrate an understanding of the legal implications including health and safety within an optical environment and how they relate to the role of an optical assistant.	NOS ref: Partial coverage of knowledge elements of some Optical Retail NOS

Mandatory Unit 2 H/507/6538

Title	Managing people in optics	
Level	3	
Credit	7	
Learning Outcomes *The learner will:*		Assessment Criteria *The learner can:*
1. Understand the skills required for communication in optical practice.		1.1 Define a range of communication styles and methods 1.2 Describe the advantages of the different communication methods 1.3 Describe the disadvantages of the different communication methods 1.4 Describe ways in which the concerns of both a customer and their family in cases of sight loss could be addressed 1.5 Describe the limitations of an optical assistant's authority in situations of potential sight loss
2. Understand the principles of being a supervisor in an optical practice		2.1 Describe the role and the responsibilities of a typical supervisor 2.2 Describe typical situations where staff development skills may be used 2.3 Identify the methods that can be used to manage staff more effectively 2.4 Describe typical situations where these management skills may be used
3. Understand the importance of developing an individual's performance.		3.1 Describe the range of methods that can be employed to develop staff in the optical practice 3.2 Describe the benefits to an individual of staff development 3.3 Describe the benefits to the practice or manufacturing facility of staff development 3.4 Explain how to monitor an individual's performance
4. Understand how to achieve excellent customer service in an optical practice.		4.1 Define what is meant by customer service 4.2 Explain how to plan for the delivery of customer service in an optical healthcare environment 4.3 Explain how to deliver customer service in an optical healthcare environment 4.4 Describe the principles of the management of customers 4.5 Describe how to manage customer behaviour in difficult situations.

	4.6 Describe how to handle complaints 4.7 Describe the principles of continuous improvement of customer service	
5. Understand how to sell in an optical practice.	5.1 Describe the stages of selling 5.2 Describe the application of selling skills to optical practice 5.3 Describe the benefits to the optical practice of developing and using selling skills	
Additional Information about the unit		
Unit Aim(s)	Candidates will demonstrate how to effectively manage relationships with colleagues including communication and supervisory skills, and how to develop other people's performance in optical practice. Candidates will have the knowledge to communicate with patients/customers with impaired vision, to improve service, deal with conflict and improve selling skills.	NOS Ref: Optical Retailing

Mandatory Unit 3 K/507/6539

Title	Supporting the provision of spectacles
Level	3
Credit	8

Learning Outcomes *The learner will:*	Assessment Criteria *The learner can:*
1. Understand the design principles for spectacles.	1.1 Explain how the power of a lens influences cosmetic changes in lenses 1.2 Explain how refractive index influences cosmetic changes in lenses 1.3 Explain how the size of a lens can influence cosmetic appearance 1.4 Explain the benefits of aspheric lenses 1.5 Recognise the limitations of certain lens and frame combinations when guiding patient choice 1.6 Discuss the latest trends in spectacle lenses, coatings and frame materials
2. Understand the selection process for dispensing multi-focal lenses including bifocals and trifocals	2.1 Review the main features of multifocal lenses including bifocal and trifocals 2.2 Discuss the benefits of multifocal lenses including bifocal and trifocals 2.3 Discuss the limitations of multifocal lenses including bifocal and trifocals
3. Understand the measurements required prior to the supply of spectacles	3.1 Discuss the facial measurements required for the supply of spectacles 3.2 Describe the lens measurements required for the supply of spectacles 3.3 Describe spectacle frame measurements for the supply of spectacles 3.4 Discuss the importance of accuracy when taking and recording these measurements
4. Understand the principals involved in the use of low vision appliances	4.1 Describe the different types of low vision appliances 4.2 Explain the benefits of low vision appliances 4.3 Summarise the advice that can be given about the use of low vision appliances
5. Understand the principles of fitting spectacles	5.1 Discuss the importance of the good fitting of spectacles 5.2 Discuss the consequences of poor fitting of spectacles 5.3 Describe the properties of different types of frame materials 5.4 Explain how to assess frame fitting 5.5 Describe the methods used to adjust frames

	5.6 Discuss how to guide customers whilst explaining the limitations of certain spectacle frames and lens combinations 5.7 Review the limitations of certain frames and lens combinations 5.8 Explain the NHS vouchers rules for the dispensing of spectacles
6. Understand the types of lens coatings and their applications	6.1 Discuss why a spectacle lens might be coated 6.2 Describe the range of lens coatings available 6.3 Discuss the benefits and limitations of anti-reflection coatings to the customer 6.4 Discuss the benefits and limitations of other coatings to the customer
7. Understand the importance of the care of spectacles.	7.1 Summarise the guidance necessary for the maintenance of spectacles 7.2 Describe the guidance necessary for the cleaning of spectacles including the consequences if not carried out correctly
8 Understand the use and limitations of protective eyewear.	8.1 Describe the types of protective eyewear 8.2 Describe the types of hazards requiring eye protection 8.3 Discuss the advice that can be given about the use and limitations of protective eyewear

Additional Information about the unit		
Unit Aim(s)	Candidates will know and understand the principles and factors about the choice of particular lenses used in spectacles. Candidates will know and understand the benefits of the various alternatives available to the visually impaired including low vision appliances. Candidates will have knowledge of the principles, designs and fitting of frames, including facial measurements, and the importance of protective and other specialist eyewear.	NOS Ref: Partial coverage of knowledge elements of OPTR18

In addition to the above mandatory units, learners must pass as least one of the following optional units to achieve a Certificate (minimum of 21 credits). Passes in at least two optional units will be needed in order to gain the minimum of 37 credits required for a Diploma.

Optional Unit 4 J/507/6538

Title	Supporting the provision of optical screening
Level	4
Credit	7

Learning Outcomes *The learner will:*	Assessment Criteria *The learner can:*
1. Understand how to interpret optical prescriptions	1.1 Interpret single vision prescriptions 1.2 Interpret bifocal prescriptions 1.3 Interpret progressive power prescriptions 1.4 Discuss how accurate interpretation influences the screening procedures
2 Understand the applications of field screening.	2.1 Explain the principles of visual field screening 2.2 Describe visual field defects 2.3 Describe the causes of visual field defects 2.4 Recognise the benefits and drawbacks of visual field screening 2.5 Discuss the actions that can be taken by an optical assistant to improve the accuracy of the field test
3. Understand the application of auto-refraction.	3.1 Explain how auto-refraction can improve the effectiveness of the eye test 3.2 Recognise the limitations of relying on an auto-refractor for the determination of an optical prescription 3.3 Discuss the actions that can be taken by an optical assistant to improve the accuracy of the measurement
4. Understand the application of non-contact tonometry in measuring intra-ocular pressure.	4.1 Explain the principles and the advantages and disadvantages of non-contact tonometry 4.2 Explain why intra-ocular pressure can rise and the implications for patient health and sight 4.3 Describe what types of action may be taken by the optometrist when there is a rise in intra-ocular pressure 4.4 Describe the alternative methods of tonometry

	4.5 Discuss the actions that can be taken by an optical assistant to improve the accuracy of IOP measurement.
5. Understand the importance of fundus photography and optical coherence tomography.	5.1 Explain the principles and benefits of fundus photography 5.2 Discuss the limitations of fundus photography in an eye examination 5.3 Explain the principles of optical coherence tomography 5.4 Describe the benefits of optical coherence tomography 5.5 Discuss the ocular conditions for which OCT would be beneficial 5.6 Discuss the actions that can be taken by an optical assistant to improve the quality of fundus photography 5.7 Discuss the actions that can be taken by an optical assistant to improve the quality of OCT imaging
6. Understand the actions required when confronted with an optical emergency	6.1 Define an optical emergency and provide examples that may be commonly seen in optical practice 6.2 Outline the main priorities in dealing with patients who present with an optical emergency 6.3 Describe the process when dealing with a patient who telephones with a potential optical emergency 6.4 Describe how to deal with "third party" telephone calls about an apparent optical emergency 6.5 Discuss the responsibilities and 'best practice' procedures when patients must be referred for treatment

Additional Information about the unit		
Unit Aim(s)	Candidates will be able to interpret and understand the relevance of common optical prescriptions. Candidates will have a knowledge of the principles of optical screening equipment and processes for tonometry, auto refraction and visual fields and how to obtain the best data or measurements Candidates will understand the actions required when confronted with an optical emergency	NOS ref: Partial coverage of knowledge elements of OPTR13

Optional Unit 5 H/507/6541

Title	Supporting the provision of contact lenses	
Level	3	
Credit	7	
Learning Outcomes *The learner will:*		Assessment Criteria *The learner can:*
1. Understand the legal implications of the supply of contact lenses and aftercare.		1.1 Summarise the Medical Devices Directive in relation to contact lenses 1.2 Describe the eligibility of individuals fitting contact lenses 1.3 Explain the legal implications of the sale of contact lenses 1.4 Explain the legal implications of the supply of aftercare for contact lens wearers
2. Understand the legal implications of the supply contact lens solutions		2.1 Explain the Medical Devices Directive in relation to contact lens solutions 2.2 Describe the legal implications of the supply of solutions
3. Understand the key designs of contact lenses.		3.1 Identify the different optical types of contact lenses 3.2 Compare how the different types work. 3.3 Describe the different material groups used in contact lenses 3.4 Review the advantages and disadvantages of different lens design 3.5 Review the advantages and disadvantages of different lens material
4. Understand the wearing modalities of contact lenses.		4.1 Describe the differing types of wearing modalities of contact lenses 4.2 Review the advantages and disadvantages of each modality 4.3 Explain the types of replacement schemes for differing materials
5. Understand how to manage those customers who have not complied with contact lens care regimens.		5.1 Clearly state the limitations of responsibility and authority of the optical assistant in contact lens supply 5.2 Describe the signs of poor compliance 5.3 Evaluate the consequences of poor compliance 5.4 Describe how to discuss poor compliance with a contact lens wearer. 5.5 Describe storage and lens care regimens within the practice 5.6 Explain the lens care regimens required for different contact lens modalities

	5.7 Describe the insertion, removal and cleaning processes for soft lens wear	
Additional Information about the unit		
Unit Aim(s)	Candidates will understand the key types, principles, designs and wearing modalities of contact lenses. Candidates will understand the more complex designs of torics and multifocals and the legal framework that regulates contact lenses and solutions. Candidates will know about how to identify and manage those customers who have not complied with contact lens care regimes.	NOS Ref: Partial coverage of knowledge elements of OPTR18

Optional Unit 6 Y/507/6536

Note: candidates who may wish to progress to the WCSM SMC (Tech) Level 4 Diploma for Optical Technicians and/or the Association of British Dispensing Opticians (ABDO) Level 6 qualification in Ophthalmic Dispensing in the future are strongly advised to select this unit.

Title	Mathematics for optical assistants	
Level	3	
Credit	7	
Learning Outcomes *The learner will:*	Assessment Criteria *The learner can:*	
1. Understand how to perform arithmetical calculations.	1.1 Perform arithmetical operations	
2. Know how to use a scientific calculator to solve mathematical problems in an optical environment.	2.1 Perform arithmetical operations in sequence using mathematical priorities 2.2 Change the sign of a number or function 2.3 Rearrange basic formulae 2.4 Calculate angles, sines, cosines and tangents (using a calculator) 2.5 Calculate percentages and increase or decrease values by given percentages 2.6 Demonstrate understanding of reciprocal values	
3. Understand the principles of geometry and know how to apply them in optical practice	3.1 Describe the geometry of a circle using appropriate terminology 3.2 Calculate the parameters of a circle 3.3 Define and calculate the parameters of triangles 3.4 Calculate angles within a plane figure	
4. Be able to extract information from line and bar graphs	4.1 Draw a line graph from a table of data 4.2 Draw a bar graph from a table of data 4.3 Extract graphical data 4.4 Interpret graphical data	
5.Solve problems involving simple algebraic expressions	5.1 Solve simple equations 5.2 Evaluate simple algebraic expressions	
Additional Information about the unit		
Unit Aim(s)	In this unit the learner will be able to understand and apply the mathematical principles used in an optical environment.	NOS Ref:

Optional Unit 7 D/507/6537

Note: Candidates who have not previously studied the anatomy of the eye or reflection and refraction of light and any candidates who may wish to progress to the WCSM SMC (Tech) Level 4 Diploma for Optical Technicians and/or the Association of British Dispensing Opticians (ABDO) Level 6 qualification in Ophthalmic Dispensing in the future are strongly advised to select this unit.

Title	The eye and the principles of optics
Level	3
Credit	9

Learning Outcomes *The learner will:*	Assessment Criteria *The learner can:*
1. Understand the anatomical structure of the eye and how it relates to refractive errors	1.1 Identify the anatomical structures of the eye 1.2 Describe the functions of the anatomical structures of the eye. 1.3 Describe refractive errors in the eye 1.4 Describe the correction of refractive errors in the eye 1.5 Describe or illustrate the relationship between the refractive error and the anatomical structure of the eye
2. Understand the nature of light and the importance of the electromagnetic spectrum to vision	2.1 Describe the wave theory and geometrical optics theory of light 2.2 State how velocity, frequency and wavelength of light are related 2.3 Perform calculations involving velocity, frequency and wavelength of light. 2.4 Explain what is meant by the 'Electromagnetic Spectrum'. 2.5 Describe the classification of wavelength ranges. 2.6 Describe the dispersion of light, using appropriate illustrations 2.7 Explain the formulae that demonstrates the behaviour of light when dispersed 2.8 Explain chromatic aberration 2.9 Perform calculations concerning chromatic aberration 2.10 Explain the significance of chromatic aberration with regard to lens material
3. Understand the reflection of light when incident at plane and curved surfaces.	3.1 State the laws of reflection 3.2 Describe reflection at plane surfaces, using appropriate illustrations

	3.3 Use formulae to demonstrate the behaviour of light when reflected at plane surfaces 3.4 Perform calculations concerning reflected light at plane surfaces. 3.5 Describe reflection at curved surfaces, using appropriate illustrations 3.6 Use formulae to demonstrate the behaviour of light when reflected at curved surfaces 3.7 Perform calculations concerning reflected light at curved surfaces
4. Understand the refraction of light when incident at plane and curved surfaces	4.1 State the laws of refraction 4.2 Define refractive index 4.3 Describe refraction at plane surfaces, using appropriate illustrations 4.4 Use formulae to demonstrate the behaviour of light when refracted at plane surfaces 4.5 Perform calculations concerning refracted light at plane surfaces. 4.6 Describe refraction at curved surfaces, using appropriate illustrations 4.7 Use formulae to demonstrate the behaviour of light when refracted at curved surfaces 4.8 Perform calculations concerning refracted light at curved surfaces

Additional Information about the unit		
Unit Aim(s)	Candidates will demonstrate an understanding of the structure of the eye and the principles upon which sight-correcting lenses are based	NOS Ref:

Optional Unit 8 K/507/6542 **WITHDRAWN**

Optional Unit 9 M/507/6543

Title	Processing optical work instructions and providing technical service
Level	3
Credit	5

Learning Outcomes *The learner will:*	Assessment Criteria *The learner can:*
1. Understand the processing of orders and information accurately.	1.1 Explain the significance of elements of a given spectacle order. 1.2 Use order information to be able to explain how to process an order. 1.3 Explain the technical terms used on optical orders. 1.4 Identify errors on a given order. 1.5 Correct errors on an order
2. Understand the characteristics of lenses, their materials and their alternative forms.	2.1 Transpose to an alternate sph/cyl for a given prescription 2.2 Explain the principal powers of a given prescription 2.3 Describe different types of lenses suitable of given properties
3. Understand the full range of manufacturing parameters and adjustments that are technically possible	3.1 Describe the correct uncut based on an order 3.2 Explain the limitations of a suggested lens product based on prescription and measurements 3.3 Make recommendations if an uncut lens is not available for an order
4. Understand the importance of record keeping.	4.1 Describe typical reports and explain their relevance 4.2 Explain, interpret and evaluate report information 4.3 Explain the benefits of good record keeping
5. Understand the management of quality processes and the application of the relevant quality standards	5.1 Explain the quality processes in place 5.2 Identify tolerances for a given prescription order using current BSEN ISO standards 5.3 Explain the procedures that should be followed when a prescription lens prescription does not meet the required standards 5.4 Explain the relationship between quality standards and the management of quality

6. Demonstrate the ability to answer technical questions from other staff and customers	6.1 Respond to technical questions which may be raised in a professional optical environment 6.2 Explain how the above responses would be communicated to customers
7. Understand the processes of stock control for optical products	7.1 Explain how to deal with incoming and outgoing stock 7.2 Discuss methods for recording the movement of stock 7.3 Discuss the processes for monitoring and maintaining stock levels 7.4 Explain the benefits of good stock control
8. Understand the manufacturing and administrative journey of an order.	8.1 Describe the sequence of processes for manufacturing a given order 8.2 Describe the administrative processes for manufacturing a given order

Additional Information about the unit		
Unit Aim(s)	Candidates will be able to process customer instructions so as to be able to complete an order or a job, and to be able to provide technical guidance to customers.	NOS Ref:

Optional Unit 10 J/507/6533

Title	Spectacle lens production methods
Level	2
Credit	12

Learning Outcomes *The Learner will:*	Assessment Criteria *The learner can:*
1. Understand how lens blanks are prepared	1.1 Describe the process from raw materials to lens blanks suitable for uncut production 1.2 Classify types of lens blanks 1.3 Describe other uncut production methods
2. Know the types of production processes for spectacle lens uncuts	2.1 Describe a range of mass production methods for uncut spectacle lenses 2.2 Describe a range of small-scale/individual production methods for uncut spectacle lenses 2.3 Identify typical production methods for given lens categories
3. Know the surface form of uncut lenses	3.1 Define given surface shapes or identify shapes from a given description 3.2 Determine an appropriate method of production for a given surface shape
4. Understand conventional '3-stage' surfacing	4.1 Outline the sequence of operations from marking to de-blocking 4.2 Describe pads and laps and their use 4.3 Describe how the surface is cut, smoothed and polished 4.4 Explain where faults may occur in the production process, and how they would manifest in the finished uncut 4.5 Explain the advantages and disadvantages of 3-stage surfacing
5. Understand digital surfacing	5.1 Explain the terms 'digital surfacing' and 'CNC' 5.2 Describe the essential components of a digital surfacing operation 5.3 Outline the sequence of operations from marking to de-blocking 5.4 Give advantages of digital surfacing compared with 'conventional' surfacing
6. Understand quality control methods and the use of Standards	6.1 Explain the importance of quality control 6.2 Describe the procedure for quality inspection of a given uncut type before dispatch 6.3 Compare and contrast quality inspection procedures in given lens production methods 6.4 Explain how and why Standards are used in quality inspection and control

7. Know how to prepare for the processing of orders for spectacles.	7.1 List the requirements to be able to manufacture spectacles 7.2 List the types of materials used in the manufacture of spectacle frames and lenses
8. Understand the importance of maintaining quality throughout the process of receiving orders and then manufacturing	8.1 Describe a process for dealing with problems or errors in received orders 8.2 Describe a process for dealing with problems or errors during and after manufacture
9. Understand the labelling requirements for spectacles	9.1 Explain the labelling requirements of the Medical Devices Directive 9.2 Explain the importance of correct labelling

Additional Information about the unit		
Unit Aim(s)	Candidates will know the principles of lens production.	NOS ref:

Optional Unit 11 L/507/6551

Title	Assuring the quality of spectacle lenses
Level	3
Credit	5

Learning Outcomes *The learner will:*	Assessment Criteria *The learner can:*
1. Understand production processes for uncut spectacle lenses.	1.1 Describe processes to produce an uncut lens 1.2 Compare and contrast uncut lens production methods
2. Understand spectacle lens materials	2.1 Describe the classification of lens materials 2.2 Outline the properties of lens materials 2.3 Describe how different lens materials are processed to create spectacle lenses
3. Understand the processes in assuring uncut spectacle lenses.	3.1 Describe the features of uncut lenses 3.2 Identify the types of surface and material defects 3.3 Explain the problems associated with types of surface and material defects 3.4 Explain how to assure uncut spectacle lenses to BS EN ISO standards 3.5 Describe the required quality documentation
4. Understand the processes for the range of lens treatments for spectacle lenses.	4.1 Discuss the types of lens treatments. 4.2 Explain the purpose of tinting 4.3 Explain the purpose of anti-reflection coatings 4.4 Explain the purpose of hydrophobic coatings 4.5 Outline the processes of lens tinting and coatings 4.6 Explain the purpose of toughening lens materials 4.7 Explain lens toughening processes
5. Ensure that frame components prior to glazing meet the required specifications	5.1 Describe the properties of modern frame materials 5.2 State the BS EN ISO terms for frame components 5.3 Explain the measurement of spectacle frames 5.4 Explain the adjustment of spectacle frames to the order specification
6. Understand how to assure specialised spectacles and appliances	6.1 Explain what is meant by specialised spectacles and appliances

	6.2 Describe the types of specialised spectacles and appliances 6.3 Explain how a prescription is incorporated into specialised spectacles and appliances 6.4 Identify BS EN ISO standards for specialised spectacles and appliances
7. Understand how to inspect lenses	7.1 State and describe the defects and faults possible in lens uncuts 7.2 State and describe the defects and faults possible in edged lenses 7.3 Explain the symmetry of lens shapes 7.4 Outline factors affecting the cosmetic appearance of the spectacles 7.5 Use BS EN ISO standards to aid visual inspection of uncut and edged lenses
8. Understand how to assure assembled spectacles.	8.1 Explain the properties of lens and frame materials with regard to handling and cleaning 8.2 Ensure that the prescription specifications match the order specification 8.3 Describe the process for ensuring that the form and positioning of the lenses match the order specification 8.4 Explain how BS EN ISO standards are used to aid the verification of finished spectacles 8.5 Describe the appropriate action if the spectacles do not match the order specification

Additional Information about the unit		
Unit Aim(s)	Candidates will demonstrate knowledge of how to assure uncut lenses are produced	NOS Ref:

Optional Unit 12 L/507/6548

Title	Supporting the provision of refractive surgery	
Level	3	
Credit	5	
Learning Outcomes *The learner will:*	Assessment Criteria *The learner can:*	
1. Understand the use of refractive surgery to correct vision	1.1 Describe the methods of refractive surgery 1.2 Explain the advantages of refractive surgery 1.3 Explain the disadvantages of refractive surgery 1.4 Explain the implications for the optical practice	
2. Understand the pre-operative assessments required for refractive surgical procedures.	2.1 Describe the equipment used to carry out pre-operative assessment for refractive surgery 2.2 Explain the procedures undertaken for pre-operative assessment 2.3 Explain the reasons for possible rejection for refractive surgical procedures 2.4 List the complications of refractive surgery	
3. Understand the aftercare processes following refractive surgical procedures.	3.1 Describe the equipment used to assess a patient following refractive surgery 3.2 Explain the procedures undertaken for post-operative assessment 3.3 Describe typical aftercare regimes for refractive surgical procedures 3.4 Explain the management of complications during and after refractive surgical procedures	
Unit Aim(s)	Candidates will demonstrate an understanding of the techniques for refractive surgery, the complications and aftercare involved and how to recommend the best product.	NOS Ref: