The European Council of Optometry and Optics

Guidelines for the accreditation of qualifications which meet the standards of the European Diploma in Optometry

Part I:

The ECOO Accreditation Scheme

Part I: The Accreditation System

1. Introduction

The European Council of Optometry and Optics (ECOO) has a vision of Europe where there is easy access to affordable eye care provided by opticians and optometrists who practise autonomously to conserve and improve human vision

The legal scope of practice within the countries of ECOO varies from assembling spectacles to the autonomous management of eye disease. In the spirit of the Bologna declaration ECOO established the European Diploma in Optometry as a stimulus to the harmonization of European optometric education and clinical practice. The European Diploma is set at the Bachelor level in European Higher Education and provides a qualification appropriate for Optometric practice at Category 3 of the World Council of Optometry's four categories model. The countries of ECOO have adopted the Diploma as the "Gold Standard" for European Optometry.

As harmonization progresses an increasing number of schools and universities now base their curriculum on the Diploma. To foster this harmonization ECOO has established an **accreditation agency** to invite training institutions to benchmark their programmes against the European Diploma. Graduates of institutions of fully accredited programmes will be granted the award of EurOptom.

2. What will be the benefits of the accreditation process?

- All European Optometry/Optics programmes can be compared against an agreed international standard, the European Diploma.
- Training Institutions will be encouraged to match their programmes to all or part of the competency-based European Diploma, with reference to the European Diploma in Optometry Syllabus - this will help to harmonize Optometry within Europe.
- It may help training institutions, in the course of their national academic accreditation, if they can demonstrate that all or part of their programme meets the European standard.
- It will enhance the status of your programme having demonstrated through an external benchmarking programme that delivery of optometry training is at a high level and progression of the status of optometry and as a healthcare profession.

- Graduates of fully accredited programmes will be recognised with the European Diploma and this will demonstrate their achievement that their education and training meets the European standard, and enhance mobility

- National "competent authorities" will find it easier to evaluate the training of applicants from another EU country – this will help to facilitate free movement of professionals.

3. What will actually be accredited?

- Because of the diversity of Optometry/Optics training within Europe the system will be Competency-based. The emphasis will be on the quality of the graduate taking the training process into account.

- The European Diploma is competency-based:

  Competency is the ability to perform the activities within an occupation to the standard expected in employment.
  Competencies are the ***skills, attitudes and knowledge*** needed to be able to practice.

  In the context of this document ***"Competency"*** refers to the performance of the optometric/optical practitioner: the integration of skills, attitudes and knowledge that informs the practitioner in his/her professional activities. ***"Competencies"*** are the individual components of the skills, attitudes and knowledge that must be mastered to achieve ***"Competency"***.

  In training programmes the skills, attitudes and knowledge gained on successful completion of a module or course are referred to as the ***"learning outcomes"*** of that module or course. The student demonstrates the achievement of these ***"learning outcomes"*** by passing the corresponding module assessments (examinations) that are designed to test specifically for the acquisition of these ***"learning outcomes"***.

  "Learning outcomes" are typically defined in the format: *"On successful completion of the module the student will be able to ……."*. Hence ***"Learning Outcomes"*** can be conveniently matched against the European Diploma ***"Competencies"***.

- The accreditation system will consider the skills, attitudes and knowledge achieved by graduates of the programme. The approach will be to benchmark the learning outcomes of the training programme being considered against the competencies of the European Diploma.

- Exemption will be given from any or all of the five Parts of the European Diploma whose competencies can be shown to have been taught and assessed to the European Diploma standard within the training programme.

It may be possible to give exemption from subsections of each of the five Parts. The subsection is the smallest unit that will be given exemption.

4. The Accreditation Self-Assessment document.

- A Self-assessment document has been prepared that lists all the Competencies/Learning outcomes of the European Diploma. ***(See Part II)***.

- An Institution applying for accreditation completes the Self-assessment document indicating where these European Diploma learning outcomes are being taught and assessed within the programme being considered.

- The location of each competency/learning outcome within the programme is defined with respect to the Institution's formal Optometry ***programme specification/course documentation***.

- The relative importance of each competency/learning outcomes within the programme is given by the associated ECTS weighting.

- The method of assessment of each competency/learning outcome and its contribution to the final examination mark is indicated by reference to the programme's ***examination document*** or equivalent.

The Self-assessment document is long, but it is straightforward. It does not ask for details of the teaching process over many years. It asks for evidence of the quality of the graduate - the learning outcomes and the clinical/practical competencies achieved by graduates after successful completion of the programme.

5. Additional documentation to support the Self-assessment document.

In addition to completing the self-assessment document please supply the following:

- Comprehensive Programme Handbook/document which contains the structure of the programme, including ECTS, where and how subject areas are taught and assessed, entry criteria and information about how students' progress through the programme

- Student numbers, progression and graduate rates.

- History of programme and how it fits with the development of optometry profession in your country

- Details of the patrons or donators of the institution and if it is a public/state supported or private institution.

- Details of how the programme is assessed internally by the institution.

- Detailed course descriptions/subject handbooks, including information supporting the self-assessment document in terms of how learning outcomes are taught and assessed.

- Programme structure and timetable indicating when each aspect of the programme is taught and assessed.

- Assessment schedules (or equivalent)

- Student timetable, didactic and clinical.

- Records of students' clinical experience held by the institution.

- Staff list, including CVs and programme responsibilities

Please also give a synopsis of the programme as follows

Programme details.

- Programme leader:
  Contact Email:

- Duration of programme
  Number of years: _____
  Full-time or part-time: _____

- Is the programme competency-based? _____

- Is there a period of supervised clinical practice? _____
  Is this organised by the training institution? _____
  Is this external to the training institution? _____
  How many weeks does it last? _____

- Qualification awarded on graduation: _____

- National Qualification Framework Level _____

- What is the national scope of practice for optometry? Please indicate where this sits in the World Council of Optometry (WCO) global competencies model in terms of levels 1-4. _____

- Are there any developments in national legislation to change scope of practice? If so what changes?

- Is this qualification graduates receive recognised by national legislation?

- Is this qualification linked to a regulatory body that the graduate needs to register with?

6. Analysis and verification of the Completed Self-assessment document.

- The completed Self-assessment document is considered by ECOO and a provisional opinion is given as to possible exemptions.

- If the training institution wishes to continue with Accreditation a panel of ECOO nominated Opticians, Optometrists and Educationalists (the Visitors) are invited to visit the Institution to verify the contents of the Self-assessment document and associated information.

- The procedure to be followed on the visit by both the Visitors and the Institution is defined in the **Part III** of these supporting documents.

7. Guidance in Completing the Self-assessment document.

- Guidance in the completion of the self-assessment document is given in the examples from the self-assessment document reproduced below in Tables 1 and 2. This is accompanied by an example course Handbook in Appendix 1 showing how Tables 1 and 2 can be cross-referenced against supporting documentation.

  *The Self-Assessment Questionnaire itself is **Part II** of these suite of documents on the ECOO Website*.

- In the Self-assessment document (see example in Tables 1 and 2 below) the first column lists all of the European Diploma Competencies in the twenty-four Subjects that cover the syllabus.

- **Knowledge Base**
  Some of the twenty-four Subjects in the Competency-based European Diploma relate to the knowledge base that supports the competency and clinical skills.

- The requirement is to ***"have an understanding of"*** or ***"a knowledge of"***.

- The achievement of "**understanding**" or "**knowledge**" can be acceptably demonstrated by indicating the formal written examination(s) in which the graduate demonstrated satisfactory understanding and knowledge of all aspects of the specific competency. An example of how this part of the questionnaire could be completed is given in Table 1.

Note: If the Learning Outcomes of a Subject are achieved across several different courses/modules it may be more convenient when completing the questionnaire to subdivide the list of Learning Outcomes amongst the relevant courses/modules.

Table 1. Example of Knowledge base for the European Diploma competencies: Subject 5

Subject 5: Optical Appliances

Suggested ECTS: 12

Learning outcomes*:* The candidates should demonstrate knowledge and skills of optical appliances and dispensing and how visual correction interact with the eye. Knowledge and skills should be demonstrated in the areas of: (1) physical characteristics of ophthalmic lenses, (2) optical characteristics of ophthalmic lenses, (3) ophthalmic prisms and prismatic effect of lenses, (4) multifocal lenses, (5) physical characteristics and biological compatibility of frame materials, (6) specification and nomenclature of spectacle frame components, (7) optical and spectacle frame considerations of high-powered lenses, (8) spectacle magnification, (9) absorptive lenses, (10) impact resistance, (11) optical tolerances and physical requirements of ophthalmic lenses and frame materials (EN), and (12) spectacle applications.

Learning outcomes	**Details of how* and where this is delivered in the programme?** ****theoretical/practical/self-directed***	**Contribution of this component to Credit weighting?**	**Method of assessment?**
(1) physical characteristics of ophthalmic lenses,	OP206: Lecture 2, Properties of lens materials	0.5 ECTS	Written examination at end of course OP206
(2) optical characteristics of ophthalmic lenses,	OP103: Geometrical Optics OP101: Visual and Ophthalmic optics *Lecture and practicals*	1 ECTS 1 ECTS	Written examination at end of courses OP101 and OP103; Coursework assessment OP103 weekly calculations and assignments
(3) ophthalmic prisms and prismatic effect of lenses,	OP206: Lecture 8, Prismatic effect and anisometropia OP101 Visual Optics OPT305: Clinical optometry *Lecture and practicals*	1 ECTS 1 ECTS 0.5 ECTS	Written examination at end of course OP206
(4) multifocal lenses,	OP206: Lectures 5 & 6, Presbyopia, Multifocals and progressive lenses *Lecture and practicals*	2 ECTS	Written examination at end of course OP206 Coursework assessment: Case scenarios

(5) physical characteristics and biological compatibility of frame materials,	OP206: Lecture 3, Frame materials *Lecture and practicals*	0.25 ECTS	Written examination at end of course OP206
(6) specification and nomenclature of spectacle frame components,	OP206: Lecture 3, Frame materials Practical 2: frame measurements	1 ECTS	Written examination at end of course OP206 Coursework assessment: Practical Station examination
(7) optical and spectacle frame considerations of high-powered lenses,	OP206: Lectures 2 and 4, Properties of lens materials, Dispensing in hyperopia and myopia *Lecture and practicals*	1 ECTS	Written examination at end of course OP206 Coursework assessment: Case scenarios and Oral examination
(8) spectacle magnification,	OP103: Geometrical Optics OP206: Lecture 3, Field of view, vertex distance and lens magnification	0.5 ECTS 0.25ECTS	Written examination at end of course OP206 and OP103 Coursework assessment OP103 weekly calculations and assignments
(9) absorptive lenses,	OP206: Lecture 10, Tinted lenses, photochromic and polarizing lenses.	1 ECTS	Written examination at end of course OP206 Coursework assessment: Case scenarios and Oral examination
(10) impact resistance,	OP206: Lecture 2, Properties of lens materials	0.1 ECTS	Written examination at end of course OP206
(11) optical tolerances and physical requirements of ophthalmic lenses and frame materials	OP206: Lectures 2 & 3, Properties of lens materials, Frame materials, Tolerances *Lecture and practicals*	1 ECTS	Written examination at end of course OP206 Coursework assessment: Practical Station examination
(12) spectacle applications.	OP206: Lectures 4, 5, 6, 11, dispensing in hyperopia and myopia, presbyopia, Progressive lenses, paediatric dispensing, communication with patient *Lecture and practicals*	2 ECTS	Written examination at end of course OP206 Coursework assessments: Case scenarios and Oral examination

Practical/Clinical Competencies.

The remaining competencies relate to the clinical skills of the graduate.

The clinical requirement is to ***"have an ability to do"***.

The achievement of "**an ability to do"** can be acceptably demonstrated by indicating the clinical examination(s) in which the graduate demonstrated competence in the specific skill required. An example of how this part of the questionnaire could be completed is given in Table 2.

Table 2. Clinical/practical European Diploma Competencies

	Subject 5: Optical Appliances				
	Clinical/practical competencies:	Competency assessment		Clinical experience	
		Brief details of the assessment	Where in the programme?	Minimum number of patients a student would examine	Brief description of how evidence of clinical experience is recorded
1	The ability to advise on and to dispense the most suitable form of optical correction taking into account durability, comfort, cosmetic appearance and lifestyle.	Ophthalmic Dispensing Clinic Assessment See Examination Doc p xx	Ophthalmic Dispensing Third Year See Programme Specification p xx	8 patients	Student 3rd year clinic Logbook
2	The ability to measure and verify optical appliances, taking into account relevant standards.	OP206 Practical station examination Ophthalmic Dispensing Clinic Assessment See Examination Doc p xx	Year 2 Ophthalmic Dispensing Third Year See Programme Specification p xx	12 patients	Student Clinic Logbook

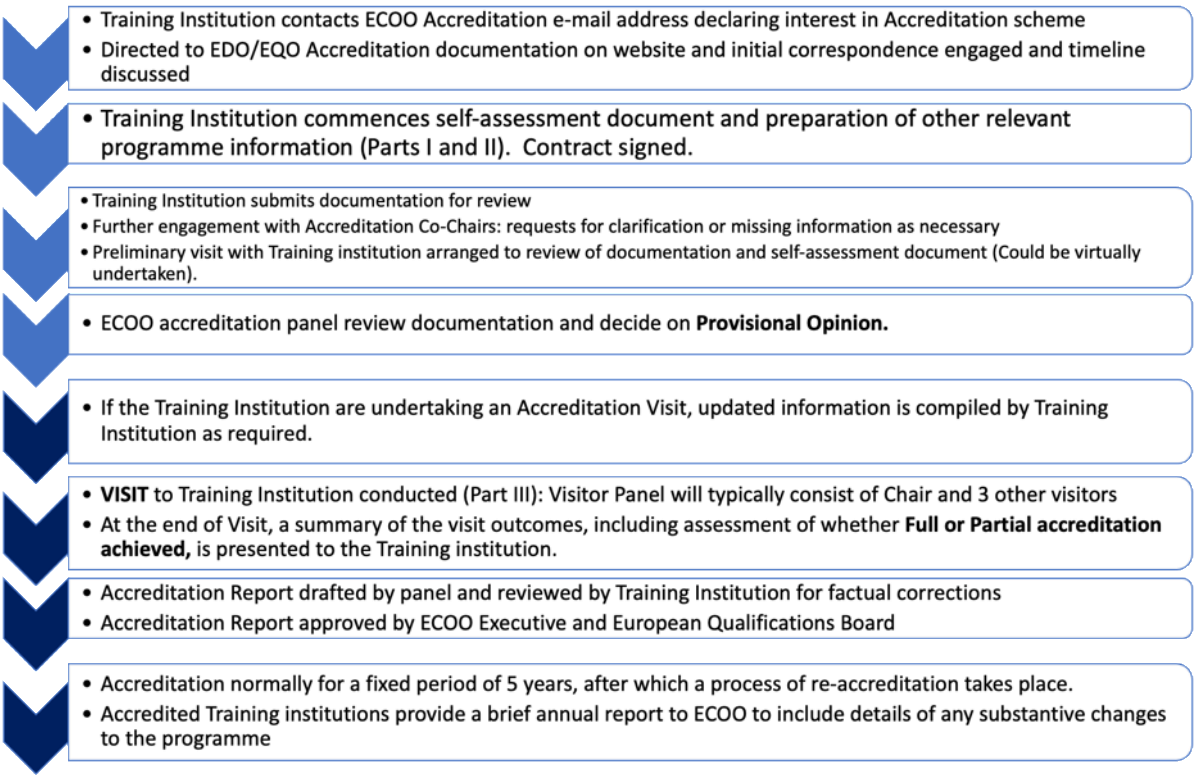
8. Portfolio

Information on the Clinical portfolio is contained in Part III of the European Diploma documentation.

For full accreditation, all graduates must complete a portfolio recording their patient experience and this must be assessed by training institutions. The assessment process of training institutions for these portfolios needs to be described and approved as part of the accreditation work. Please refer to the 'Portfolio Guidance' document for more detailed information.

9. Timescale of the Accreditation process

The following flowchart indicates the steps for the Accreditation process. Timescales are unique to each training institution as it is dependent on the readiness of the institution and the resourcing and time allocated to it, as well as the capacity of the Accreditation panel to review documentation and organise visits. However, as an indicative timescale, institutions have completed the process in a 12-18 month-period



APPENDIX 1: EXAMPLAR COURSE HANDBOOK: part of second year of programme covering the topic of ophthalmic dispensing. THIS DEMONSTRATES HOW COMPLETION OF SELF-ASSESSMENT DOCUMENT SECTIONS IN TABLES 1 AND 2 ARE COMPLETED AND EVIDENCED

COURSE TITLE:	DISPENSING PRACTICE
COURSE CODE:	OP206
ECTS:	12
COURSE STATUS:	Compulsory
SEMESTER:	1
PREREQUISITE(S):	Successful accumulation of 60 ECTS in first year of BSc (Hons) Optometry, or equivalent.
COURSE CO-ORDINATOR(S):	Dr J Smith
TEACHING STAFF RESPONSIBLE FOR COURSE DELIVERY:	Dr J Smith, Dr B Jones

HOURS:	Lectures:	24 hrs
	Practicals:	33 hrs
	Independent study (including assessment)	243 hrs
TOTAL EFFORT HOURS:	300 hours	

SUMMARY DESCRIPTION

This course allows students to become competent in the use of a range of techniques appropriate for ophthalmic dispensing. It will provide a sound basis for the student to dispense optical appliances and provide appropriate advice and care to patients in the Optometry clinic in future courses. It will provide the student with a detailed knowledge of lens materials and permit the student to develop skills in appropriate lens choice according to analysis of the spectacle prescription and the patients' needs and lifestyle.

Learning Outcomes

A successful student will be able to:

- Develop and demonstrate a critical knowledge of all aspects of spectacle frame and lens dispensing.
- Describe the methods of verification relating to all aspects of ophthalmic dispensing
- Describe and use various instruments and techniques appropriately and accurately.
- Provide comprehensive advice and information relating to all aspects of ophthalmic dispensing.
- Describe and measure accurately that which is required in order to produce an optical appliance
- Communicate effectively with patients and consumers, giving information about appropriate spectacle dispensing options, and guiding them to appropriate dispensing solutions.

APPENDIX 1: EXAMPLAR COURSE HANDBOOK (OP206)

Delivery of teaching:
This course OP206 will consist of weekly lectures and practicals.

For practical sessions, the class will be split into smaller groups. Students' attendance at lectures and practicals is **mandatory**. Students will be expected to attend at the allotted time. Students will use the Practical sessions to develop dispensing skills and understanding necessary to undertake the techniques covered in the lecture series. **Students are encouraged to use the facilities outside of the scheduled times to ensure practical knowledge is embedded and techniques are practised for accuracy.**

Revision: The subjects covered in this lecture series will assume knowledge of the First year courses OP101 Geometrical Optics and OP103 Visual Optics. Revision of these are essential.

Students should be familiar with the following techniques:
Focimetry Measurement, Inter-pupillary distance measurement, back vertex distance measurement

Lecture Schedule

Week	Topic
1	Introduction to dispensing course Recap over optics principles Centration of lenses
2	Properties of lens materials – parameters of a lens, e.g. abbe number, refractive index, density Lens thickness High index lenses – in greater detail.
3	Frame materials Field of View & vertex distance Effective power of a lens Lens magnification ISO standards for Rx, ISO tolerance tables Lens manufacture
4	Lens materials – different types Dispensing to high myopes and hyperopes
5	Presbyopia management options– how to correct? Reading glasses Bifocals Types and parameters
6	Progressive lenses - varifocals - designs & terminology - fitting considerations - verification - prism control
7	Aspheric lenses Lenticular lenses
8	Anisometropia Prismatic effects of lenses Putting required prism in lenses – single vision and multifocals Anisometropia, Prisms in Bifocals

9	Ghost images Lens coatings Principles and applications of coatings Anti-reflection coatings, Hard/mirror/hydrophobic coatings Lens glazing
10	Tinting of lenses, Solid and surface tints Polarising lenses Photochromic/transitions
11	Communicating with the Patient Occupational/sport dispensing Paediatric dispensing
12	Revision lectures

Practical Schedule

Week	Topic
1	**Focimetry** revision s/v and multifocals Critical measurements from spectacles Transposing lens powers Power crosses
2	**Frame measurements** Boxed centres etc
3	**Facial measurements** Measurement of inter-pupillary distance, and use of pupillometer BVD, Pantoscopic tilt
4	The Lens measure Spectacle frame dispensing Frame fitting and adjustment Repairing frames Continuing Focimetry
5	Bifocal fitting and considerations Focimetering progressive lenses
6	Progressive lenses markings and fitting
7	Verification of spectacle lenses – British standard tolerances Recap over Progressive lenses
8	REVISION WEEK
9	Prismatic effects on lenses Balance lenses and decentration of lenses
10	**Practical stations examination**
11	Ready Readers – do they meet the standard?
12	Polarizing lenses and tints Occupational and paediatric dispensing Sports e.g. squash, swimming etc **Oral dispensing examination**

TEACHING AND LEARNING METHODS

Lectures will permit detailed evaluation of the fundamental aspects of optical dispensing and permit opportunity for students to attain a detailed theoretical knowledge of the design of lenses, lens materials and frame materials. Students will have an in-depth knowledge of aspheric and multifocal lenses. Students will also gain a specific knowledge of polarizing lenses, photochromic lenses and tints, as well as lens coatings. Students will be able to articulate the advantages and disadvantages of lens materials, and specific lens designs and types.

Practicals will permit the demonstration of techniques discussed in lectures, and allow the student to practice and develop these techniques appropriately in a group environment on each other. These practicals permit not only tutorial-style teaching, with the course coordinator in a less formal environment than a lecture, but it also encourages peer to peer learning. The course is supplemented by a written practical handbook, and a virtual learning environment is used as a resource tool.

Each student will also attend the glazing laboratory for tutorials in glazing with the dispensing technician.

Students will be directed to read the optical and ophthalmic literature relating to dispensing and keep abreast of current developments.

ASSESSMENT

Coursework (overall 60% of course)

Coursework 1:
Practical Station Examination **Week 10** **25%**
The student will typically be required to perform a range of different practical techniques, with assessment taking the form of several “stations”. The student will have a limited amount of time to perform these tasks.

Coursework 2:
Case Scenario: **Week 11** **20%**
This piece of assessment will explore the students’ ability to advise on dispensing problems. Students will submit a written piece of work addressing the dispensing issues of a range of dispensing specific case scenarios. Maximum length 1500 words.

Coursework 3:
Oral Examination **Week 12** **15%**
The student will undergo an oral examination of approximately 10 minutes duration, based on the course syllabus.

Written Examination (overall 40% of course)

This is a 2 hour written examination paper. The examination will consist of 2 sections. The first section will take the form of short answer questions. There will be no choice within this section, and this section is worth 40% of the overall examination mark. The second section will contain four questions, of which the student will answer three questions. Each question is worth 20%, and in total the second section is therefore worth 60% of the overall examination mark.

All questions will test both the knowledge and understanding of the range of subjects covered in this course.

Feedback in this course will be provided in differing forms including:

- General comments made in lectures/tutorials/seminars
- Tips on how to best approach assignments and examinations to maximize student learning and performance
- Help, advice, and comments in practical sessions by lecturers and/or demonstrators
- More specific verbal comments about your work, progress, and performance in and out of class
- Specific written comments on your work to help indicate progress and develop your understanding

60% Coursework 40% Examination

READING LIST

Required

Jalie, M. (2008) *Ophthalmic Lenses and Dispensing,* 3rd Edition, London, Butterworth Heinemann London

Recommended Books

Obstfeld, H. (1997) *Spectacle Frames and their Dispensing,* London, Saunders
Tunnacliffe, A (1998) *Essentials of Dispensing,* Association of British Dispensing Opticians.
Brooks, C & Borish, I (2007) System for Ophthalmic Dispensing 3rd Edition. Place of Publication, Butterworth Heinemann
Wakefield KG (2000) *Bennett's Ophthalmic Prescription Work,* 4th Edition, London, Butterworth Heinemann
North, R (2001) *Work and the Eye,* 2nd Edition, London, Butterworth Heinemann. London