



The European Council of Optometry and Optics

Final European Diploma in Optometry Benchmark Report

OCULUS Erasmus + Project

Manipal University

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Assessment Panel

Brendan Barrett

Robert Chappell

Julie-Anne Little

Manipal University

ECOO 2nd Benchmarking activity for OCULUS project.

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The OCULUS Project (**O**ptometry **C**urriculum for **L**ifelong learning through **E**rasm**US**), led by a consortium of educators from optometry schools in Europe, aims to improve and reform existing curricula of optometric education in India and Israel to raise it to a high-standard level using the European Diploma in Optometry as a benchmark.

The Board of Management of the European Diploma were asked to conduct a benchmarking procedure for the OCULUS project, both at the outset of the project, and at the end of the project when knowledge had been exchanged and initiatives implemented to enhance the optometry curriculum in the partner organisations of this project.

The first benchmarking procedure consisted of completion of a self-assessment document and a visit to each institution in 2017 to conduct an in-depth examination of the programmes.

The second benchmarking procedure is a desk-based assessment, chiefly investigating the knowledge/clinical gaps identified from the initial assessment.

Consequently, this report is using the evidence presented in written format from each institution to fulfil the OCULUS project objectives. However, we also recognise that some institutions may be interested in going through the full accreditation process for the European Diploma in Optometry (EDO), and such a process would require a site visit to provide more detailed evidence required for full accreditation.

Key changes identified:

- (1) A new, dedicated 1200 sq. ft. pre-clinical laboratory facility has been developed. This contains 'basic ophthalmic set up, dispensing lab, visual perception and visual therapy lab, and advanced imaging instruments.' Some of the instruments in the new facility have been purchased with funds from the OCULUS project and other equipment has been purchased using

MAHE funds. First, second and third year students are taught in this facility, and 'community camps' and 'screening activities' are also held there.

- (2) Manipal indicate that gaps in specific topic and topics have been addressed by means of changes to the curriculum which have been approved by the University's Board of Studies. Changes to a number of units have been made and new units have apparently been introduced in refractive surgery and pharmacology.
- (3) The internship was previously not credit-bearing but now carries a weight of 40 credits. There is an end of semester examination at the end of the 7th & 8th semesters. Students cannot graduate with the B. Optometry qualification unless there is 'satisfactory performance' in these examinations.
- (4) The logbook has been modified. Beginning in the 3rd semester, students are now required to record the cases they have observed or actually examined. The portfolio is maintained until the end of the course. There is also reference to minimum numbers of patients for various conditions/cases. However, there is no information about how each student's logbook is evaluated and whether the logbook evaluation contributes to the assessment for the internship.
- (5) Greater opportunities are provided to students to practice ophthalmoscopy and other 'advanced imaging techniques', and records are maintained in the portfolio.
- (6) In addition to the three local hospitals, the University has indicated that it now also sends its students to other locations including optical shops and these placements are 'managed' by the department.

NB 2 credits in Manipal University equate to 3 ECTS

Outstanding Questions/Issues:

- It is not clear whether in the new clinical facility real patients are seen and whether real dispensings take place?
- Reference is made to a 'minimum number of cases' that students should observe or examine, but it is not clear what these minimum numbers are, and whether they are based on EDO-portfolio recommendations.
- It is recognised that there have been developments in relation to the internships, however the details provided about the monitoring of student experience during internships are very limited. Are the supervisors during the internships appropriately qualified and trained by MAHE and what are the departments management arrangements?
- We appreciate the logbook has been developed to capture the breadth and nature of clinical experience gained from the 3rd to the 8th semesters but there is no information about whether the logbook is assessed, and if so how it is assessed.
- Module/unit summaries do not contain any details about how the topic is assessed. This would have been a helpful addition to help understand how the learning objectives of the module are met.
- It would have been helpful to have an overall map of the courses/modules within the programme. For example, how have the new 40 credits for the internship affected the relative credit weightings of the other units/modules that make up the B. Optometry programme.
- The numbering of the modules/units in the OSAT PDF often does not tally with the titles of the modules/units available via google.docs. This made it difficult to track the changes made in response to the initial benchmarking.
- It would have been helpful if the new instruments provided using OCULS and MAHE funds had been listed
- Annexure : summary of clinical teaching – patient exposure – internship batch (8/19 – 2/20) shows very high variations per student from a grand total of 97 to 7350 with no explanation

2nd Benchmarking Opinion against the Knowledge Base and Competencies of the European Diploma in Optometry for Manipal University

This opinion is based on the Panel's analysis of the documents supplied

Colour Coding

Knowledge Base	Knowledge base for European Diploma competencies
Clinical/Practical competencies	Clinical/practical European Diploma competencies
	Benchmarking Opinion Satisfactory
	Benchmarking Opinion Some weaknesses
	Benchmarking Opinion Inadequate

PART A:Optical Technology

European Diploma Examination Sections	Self-Assessment Document Competency Areas	Provisional Opinion	
Part A 1. Optics 2. Optical Technology	Subject 1: Geometrical Optics		
	Subject 2: Physical Optics		
	Subject 3: Visual Optics		
	Subject 5: Optical Appliances		
	Subject 6: Occupational Optics		
	Subject 5: Optical appliances		
	Subject 6: Occupational Optics		

PART B:Management of Visual Problems

European Diploma Examination Sections	Self-Assessment Document Competency Areas	Provisional Opinion	
Part B 1. Refraction 2. Binocular Vision 3. Contact lenses Visual Perception	Subject 4: Visual Perception		
	Subject 7: Vision and Ageing		
	Subject 8: Refraction		
	Subject 9: Low Vision		
	Subject 10: Ocular Motility and Binocular Vision		
	Subject 11: Contact Lenses		
	Subject 12: Investigative Techniques		

Subject 13: Paediatric Optometry		
Subject 14: Refractive Surgery		Refractive surgery is mentioned only in Ocular Diseases I module and not in the other modules listed in the response. The response also indicated that a separate teaching module has been developed and is currently being delivered. However, this module/unit could not be located online.
Subject 8: Refraction		Detailed rubrics provided which suggest that assessment may be taking place but logbook & OSCE folders are empty so no evidence was found to indicate how refraction is examined practically. No details of exams are provided and 'minimum patient numbers' indicate minimum number of cases seen but not approach to practical/clinical assessment.
Subject 9: Low Vision		
Subject 10: Ocular Motility and Binocular Vision		Some detailed rubrics provided which suggest that assessment may be taking place however no direct evidence of assessment. Extracts from logbook indicate that most/all of the binocular vision techniques are conducted. However, while signatures are present to verify the clinical entries in the logbook, but no direct evidence of assessment of clinical/practical ability in these areas.
Subject 11: Contact Lenses		
Subject 12: Investigative Techniques		Same response as for subjects 8 & 10 above. Some detailed rubrics and some evidence of OSCE-style exams for a few investigative techniques. Also, extracts from logbook indicate these techniques are being taught and conducted, but again little evidence of whether/how they are assessed, particularly in real patients.
Subject 13: Paediatric Optometry		The logbook and OSCE folders which open when the "assessment" link is clicked are empty. Many rubrics are offered but few relate directly to paediatric testing. Thus, there is a continuing lack of evidence that paediatric patients are actually examined.

C:General Health and Ocular Anatomy

European Diploma Examination Sections	Self-Assessment Document Competency Areas	Provisional Opinion	
Part C 1. Biology 2. Ocular Biology 3. Ocular Abnormality	Subject 12: Investigative Techniques		
	Subject 15: Anatomy and Histology		
	Subject 16: Neuroscience		
	Subject 17: General Physiology and Biochemistry		
	Subject 18: Microbiology and Immunology		
	Subject 19: General Pharmacology		
	Subject 20: Pathology and General Medical disorders		

Subject 21: Epidemiology and Biostatistics		
Subject 22: Ocular Anatomy and Physiology		
Subject 23: Ocular Pharmacology		Still having difficulty seeing any mention of first aid training in the documentation, although the response indicates that all students receive this training. Ocular pharmacology accounts for 10 hours of the 55 hours in the Phar 202 module. This module does mention diagnostic drugs but does not specifically mention cycloplegics, mydriatics or miotics.
Subject 24: Abnormal Ocular Conditions		
Subject 12: Investigative Techniques		Logbook extracts and rubrics indicate that the techniques are conducted, however evidence that they are conducted in real patients is still lacking. Sample OSCE exams give an indication of how investigative techniques are assessed.
Subject 14: Refractive Surgery		The online "Manipal clinical report.pdf" has some formatting issues and does not appear to contain any Part C/subject 14 (refractive surgery); hence we are unable to evaluate the response given to the initial benchmarking comment.
Subject 24: Abnormal Ocular Conditions		Expanded logbook and minimum patient numbers are welcome developments. Internship has also been developed and approved. Some evidence of OSCE-style examinations supplied. It is not clear whether the logbook is assessed and, if so, how it contributes to the grading of the internship.