

The European Council of Optometry and Optics

Accreditation of the Department of Optometry

Bachelor of Optometry programme at the Hadassah Academic College, Jerusalem, Israel

Against the Knowledge Base, Competencies and Portfolio of the ECOO European Diploma in Optometry

10-12th January 2023

1. Background

The Course team at Hadassah Academic College, Israel, led by Prof Ariela Gordon-Shaag, was a key member of the Erasmus+ OCULUS project. The OCULUS (**O**ptometry **CU**rriculum for Lifelong learning through Erasm**US**) project sought to address the issue of a shortage of well-trained optometrists in India and Israel through establishing a consortium of educators from optometry schools in Europe. The consortium came together to review and reform existing curricula of optometric education. The competency framework of the European Diploma of Optometry (EDO) was used as the benchmark for the OCULUS project, and colleagues at Hadassah expressed a desire to continue towards full accreditation for the EDO after the OCULUS project ended. As part of the OCULUS project, a 'baseline' visit took place in 2016, and findings from this were used to further develop the programme curriculum. Full details of the accreditation process for the EDO by the Accreditation Agency are available <u>here</u>.

There are approximately 2,500 registered optometrists in Israel, the majority of whom work part-time. There are 5200 ophthalmologists for a country population of 9.5 million, a large percentage of whom are refractive surgeons and retina specialists. There are 60 paediatric ophthalmologists in Israel and another 50 who are willing to examine children.

In Israel, the law recognising optometry dates back to 1991. In 1996, two programmes for optometry were established in Hadassah Academic College and Bar Ilan University: there is a third program Zfat Academic College which has just started and took a small intake of students in 2022/23 academic year. These are the only programmes providing optometric training in Israel. The Israeli higher education structure includes Universities and Colleges. As a College, Hadassah awards degrees at Bachelor level, and a Masters course in Optometry was introduced in 2007. The Master's programme is not under consideration as part of the EDO Accreditation process. A course for ultra-orthodox Jewish women was started in 2013/4. Hadassah Academic College does not award PhD's, but has recently developed a collaboration with the Universidad Polytechnica Catalyna (UPC) in Barcelona for a joint PhD programme.

The Bachelors Optometry course is four years duration, but the BOptom is not a licence to practice. The programme is regulated by the Ministry of Education which is responsible for approval of the course. The academic year begins in October and students graduate in June.

Graduates have to undertake a written and practical examination which is run by the Ministry of Health but is administered by the Israeli College of Optometry through a panel of optometrists and ophthalmologists. The written examination typically takes place in Autumn (Fall), approximately three months after graduation, and if passed, candidates then proceed to undertake the practical examination a further 3-5 months later. In the past 5 years, HAC students had a pass rate of 73% for the written exam and 81% for the practical exam. These can be taken at any point after graduating with a BSc Optometry. Continuing education/professional development is not mandatory to maintain a licence to practise. The Israel College of higher education conducts accreditation of education programmes approximately every 10 years, and the HAC Accreditation Visit Report, 27th January 2023 Version post-factual accuracy check

Hadassah Academic College B.Optom Strauss programme achieved national reaccreditation in 2019.

Optometry qualifications of graduates from Jordan and elsewhere who wish to practise in Israel are not recognised by the Ministry of Education but are allowed to take the licensing examination by the Ministry of Health.

The Israel Law of Optometry states the following regarding use of diagnostic pharmaceuticals: "An optometrist may not treat a patient with medicines or pharmaceutical agents and may not possess such agents **unless** guidelines are prepared by a Ministry of Health Committee." Since 1991, a committee has not been appointed to prepare guidelines for optometric use of diagnostic pharmaceuticals. The HAC legal advisors indicate that Optometrists are only allowed the use of diagnostic pharmaceuticals under the direct supervision of an ophthalmologist.

Regarding children and elderly patients, the 1991 law of optometry reads "An Optometrist may not treat a child or elderly person, unless it is under the supervision of an ophthalmologist. The **Minister of Health** will issue rules based on a professional staff of doctors and optometrists appointed by the Minister to **determine the definition of "child" and "elderly**".

Entry requirements for the Hadassah course are a high-school diploma (matriculation) including a minimum of 21 points, of which 4-5 points must be in each of Maths, English and Chemistry. Physics and biology are not required subjects in themselves, as they are taught in the first year. There is a psychometric test and interviews as part of admissions criteria.

The School of Optometry is one of 14 departments in Hadassah Academic College in Jerusalem and there are around 5,000 students in the College as a whole.

The undergraduate intake for the B.Optom programme is approximately 40-60 on the regular course and 15-20 on the Ultra-Orthodox programme. The delivery of lectures for the Ultra-Orthodox programme takes place at a neighbouring campus (Strauss), but otherwise Strauss students undertake practical (labs) and clinical teaching at the regular campus. HAC had two intakes of a programme for French students with a BTS, but this ceased in 2020. There is a Challenge Centre to provide additional resources for students. The age profile of the students varies from 18-19 years (Ultra-Orthodox and Arab) to 22-25 years for Israelis who have completed military service before joining the programme. Overall, 80-90% of students are female. The cost of the course to students is ~10K Shekels per year and the rest of the tuition costs are supplemented from the Government.

The Visitor Panel consisted of: Prof Brendan Barrett Dr Bob Chappell Dr Julie-Anne Little (Chair of Panel) Ms Ciara Maria Marinari (Student representative) Prof Daniela Nosch

2. Overarching analysis of the programme

There are 11 full-time senior faculty in the Department of Optometry, of whom 9 have an optometric qualification. There is one 1.0 FTE senior faculty who is an MD ophthalmologist. They are supported by 30 adjunct faculty staff, 21 of whom have positions with >0.5 FTE, and most of whom have an MSc qualification beyond B.Optom. Many of the adjunct faculty have positions in ophthalmology/optometry clinics as other employment. In addition, there are 17 External Teachers who teach on specific courses within the programme. Two other ophthalmologists are employed on fractional appointments to support a corneal clinic and general eyecare examinations. The Head of Department is Prof Ariela Gordon-Shaag, and Dinah Paritzky is the Administrative manager of the Department as well as a member of Senior Faculty. Some of the course team have PhDs and are research active. The students gain exposure to active research projects and all staff and students are encouraged to attend lectures delivered by external guest speakers at bi-weekly 'Academic lunch' events.

Entry to the course is competitive and the course is at full capacity, with a total of 70 students offered places on the programme in 2021/22, and 72 in 2020/21. In common with other schools of optometry, the COVID-19 pandemic affected the programme in terms of delivery of practical experience and in relation to retention rates. Course delivery moved to online content, and the course maintains one day per week of virtual teaching for each year of the programme.

	Regular Campus			Ultra-Orthodox Campus						
Academic Year of graduation	Started	Finished	%	Started	Finished	%				
2021-22	56	39	70%	32	25	78%				
2020-21	62	42	68%	29	23	79%				
2019-20	65	53	82%	31	27	87%				

Recent graduation rates at the HAC Department of Optometry for the regular and ultra-Orthodox campuses are as follows:

With regard to facilities, the department uses shared lecture rooms for didactic teaching. On the regular campus, they have 18 clinical cubicles for optometric practicals and for examination of patients; six of these are used for contact lens clinics, 11 for general eyecare clinics, and there is 1 additional testing cubicle for further investigative techniques. These are fairly well equipped with slit lamps and keratometers, phoropters, digital vision charts, including some video slit lamps. There is a non-contact tonometer, as well as a Goldmann tonometer. There is a Cirrus OCT, fundus camera, Humphrey visual field perimeter, corneal topographers, Haag Streit LensStar, and a range of other clinical equipment. The use of diagnostic drugs is taught for dilation and cycloplegic refraction in General Clinics under the supervision of ophthalmologist. Goldmann tonometry is also undertaken under this supervision. There is a well-equipped Dispensing clinic with a comprehensive frame selection open to the public and supported by optometric staff which students rotate through for dispensing, clinical optometry labs for refraction and a slit lamp lab. Students across

all years use these facilities for all types of optometric clinical experience and skills building. Low Vision clinics are undertaken in three assessment cubicles and Visual therapy as a larger single area. Both have a good range of low vision and binocular vision equipment. On the Strauss Ultra-orthodox campus, there is a Visual Therapy clinic for overflow of patients and also practical lab space. In the Dispensing Laboratory, there are two automatic edgers, and range of manual and automatic focimeters. Students gain practical experience of glazing, assembly and repair of spectacles and learn ophthalmic dispensing fitting techniques.

The structure of the programme is shown below in this schematic supplied by the course team:

YEAR 1: First semester	ECTS	YEAR 1: Second semester	ECTS
Geometric Optics	6	Dispensing Optics Laboratory A	3
Physics	4.5	Physical Optics	4.5
Biology	3	Dispensing Optics B	4.5
Dispensing Optics A	4.5	General Physiology and neurophysiology	6
Theoretical Optometry	3	General Pathology	6
Biochemistry	3	Visual Optics	4.5
General Anatomy	6	External Clinics B	0
Microbiology and Immunology	3	Clinical Optometry A	2.25
External Clinics A	0	Clinical Optometry Laboratory A	3
	33		33.8
YEAR 2: First semester		YEAR 2: Second semester	
Clinical Optometry B	4.5	Visual Perception	3
Dispensing Optics C	3	Visual Perception Laboratory	1.5
Dispensing Optics Laboratory B	3	Dispensing Optics Laboratory C	3
Binocular Vision Laboratory A	3	Clinical Optometry C	2.25
Binocular Vision A	6	Introduction to Patient Care	3
Ocular Anatomy	4.5	Binocular Vision Laboratory B	3
General Pharmacology	3	Dispensing Clinic A	1.5
Clinical Optometry Laboratory B	6	Binocular Vision B	6
		Visual Neurophysiology	4.5
		Clinical Optometry Laboratory C	3
		Ocular Pharmacology	3
	33		33.8
YEAR 3: First semester		YEAR 3: Second semester	
Ocular Pathology A	4.5	Ocular Pathology B	4.5
Contact Lenses Laboratory A	3	Contact Lenses Laboratory B	3 6
Vision Therapy Laboratory A	3	Advanced Optometry B	
Advanced Optometry A	6	Advanced Optometry Laboratory B	3
Dispensing Clinic B	1.5	Contact Lenses B	4.5
Advanced Optometry Laboratory A	3	Low Vision	3
Contact Lenses A	3	Vision Therapy Laboratory B	3
Vision Therapy A	3	Vision Therapy B	3
Pediatric Optometry	3	Statistics end Epidemiology	3
General Clinics A	6	General Clinics B	6
		Introduction To Final Project A	0
	36		39
		YEAR 3: Third semester	
		General/Contact Lens/VT Clinics	0
		Introduction To Final Project B	1.5
YEAR 4: First semester		YEAR 4: Second semester	

Advanced Contact Lenses A	4.5	Retinal Clinic	0
Geriatric Optometry	2.25	Advanced Contact Lenses B	4.5
Environmental Optometry	1.5	General Clinics D	6
General Clinics C	7.5	Contact lens clinic B	3
Contact lens clinic A	4.5	Vision Therapy Clinic B	3
Vision Therapy Clinic A	4.5	Final Project B	7.5
Low Vision Clinic	0	Clinic Management	1.5
Retinal Clinic	0	Hospital	0
Clinical seminar	0	Final Project Contact Lenses	0.75
Hospital	0		26.3
Final Project A	0		
	24.8		
		TOTAL ECTS FOR PROGRAMME	260

The structure of the programme across four years builds on knowledge of human anatomy, physiology and pathology, optics and contact lenses. They develop clinical skills in refraction and investigative techniques and later knowledge of ocular disease, binocular vision, low vision and paediatrics. There are significant credits accumulated for clinical experience, and in the final year, students undertake a research project.

The Visitors met the President and Vice-President of Hadassah Academic College, the Dean for Academic affairs. It was evident that the optometry team at HAC are a valued department and that they are supported in their endeavours. We appreciate the time given to the panel by the senior management which helped the panel to gain an understanding of the wider objectives and aspirations of HAC.

The panel observed lectures, practicals and clinics during the visit. Lecture material is supplied ahead of time via e-learning platform Moodle. Lectures are sometimes recorded, at the discretion of the lecturer. Lecture attendance is recorded and tracked, and students are contacted if they miss more than two sessions. Attendance was high for the lectures observed. For the practical sessions, students are split into smaller groups and have set tasks and worksheets to complete.

The HAC provide optometric services through General eyecare, Contact lenses, Low Vision, Visual Therapy and Dispensing clinics. These clinical services are promoted to the community, staff and student population and the Department has clinics running six days a week.

In the General eyecare clinic, students work on a 1:1 basis with the patient and there is a 1:3 student/supervisor ratio. Students in the 3rd year access the General eyecare clinic in both semesters (five hours a week) and the students will see 26 patients during the year. Note that there is capacity in the clinic for more encounters if fully booked. They are encouraged to bring patients into the clinic, particularly using family and friends for the initial examinations to gain confidence in seeing 'real' patients. In the fourth year, the students have increased frequency of attendance in the general clinics, and students will see approximately 65-70 patients for general eye examinations in total across the programme. They have two hours to examine patients in the 3rd year, and this reduces in a gradual fashion to 1 hour in the 4th year. Mr Cyril Kahloun is Head of the General clinic.

An ophthalmologist is present three days a week in the general clinic to supervise and support use of diagnostic drugs (cycloplegia, mydriatics and topical anaesthetics). Each student is required to examine at least one child with cycloplegia and one older adult with mydriatics. At HAC, children under age 6 are seen in clinics with ophthalmologists.

For Contact lenses, 4th year students are scheduled every week in the Contact Lens clinics across both semesters and should see an average of 22 patients (including aftercares) in total across the programme. Mr Eyal Gal is Head of the Contact Lens clinic.

For Binocular Vision and Vision Therapy, clinical experience is in the 4th year; with two sessions a week in the first semester and once weekly in the second. Patients are usually children. Ten students attend each a session and they work in pairs. Each student can expect to see two patients a semester, who they see on a weekly or biweekly basis. There are two supervisors to five patients. Dr Rachel Eichler runs the vision therapy clinics and the students gain experience of managing binocular vision issues.

Students gain experience in Dispensing clinics in the 2nd (second semester), 3rd and 4th years of the programme. Four to six students are in each clinic and each of them fits at least 12 patients, including a vocational dispensing experience, as well as multifocals and high index lenses. The overall number of dispensing episodes approximates 13, (range 10-25) across the programme.

A low vision clinic has been established at HAC and the students rotate through that clinic. Each student examines a minimum of one patient. Ms Veronica Tzur runs this clinic and emphasises the need for functional assessment to look at holistic needs of patients.

The ophthalmologist, Dr Levine, is a medical retina specialist, and he has established a retinal clinic (through public HMO arrangement) at the HAC. This clinic runs one afternoon per week, examining 12 patients over six hours. Six pairs of 4th year students rotate through this clinic weekly and gain hands-on experience of examination, management and communication with patients.

The course team runs an external paediatric vision screening service and 1st and 4th year students undertake this across the academic year. These are held in kindergartens, schools and Mother-Child-Health Centres. First year students undertake cover test, VA's, NPC, motility and stereopsis measurements. Final year students will undertake retinoscopy and ophthalmoscopy. Each 1st year student attends 2-3 times and every 4th year student attends 1-2 times. Any child that requires further assessment is referred to the HAC optometry clinic or referral is arranged to a paediatric ophthalmologist.

In relation to Hospital Experience, the students are required to attend one retina and one cataract clinic at the Hadassah Medical Center Ophthalmology Clinic. They perform hands-on examination of at least one patient in each clinic. They record their encounters in Meditrek and write a case report on one of the patients that they examined. There is also a joint initiative with HAC and Hadassah Medical Center to HAC Accreditation Visit Report, 27th January 2023 Version post-factual accuracy check

deliver domiciliary eyecare to geriatric patients in day centres. Students and ophthalmologists from Hadassah Medical Center perform full eye examinations (including refraction, mydriasis, binocular indirect examination of the fundus and a prescription for glasses when needed) on geriatric patients who are unable to attend a regular clinic.

During the visit, the Visitors went to Hadassah Medical Centre, and met with the Head of Optometry, Dr Hadas Ben-Eli. She is also senior faculty at HAC, splitting her time 50/50. Dr Ben-Eli organises the student hospital experience in retinal and cataract clinics. There are 45 optometrists working in hospital in a range of activities including pre-and post-op cataract biometry, refraction clinics, paediatrics, low vision and visual electrophysiology. The Visitors observed the 4th year HAC students rotating through retinal and corneal clinics with ophthalmologists, and met with a number of Hadassah graduate optometrists that work in hospital. The Visitors met with the Head of the Ophthalmology department, Prof Itay Chowers, and were informed about the good collaborative working relationship between ophthalmology and optometry at HMC and how the skills of optometrists are valued for ophthalmology services.

The Visitors met with a sample of students from 1st/2nd/3rd/4th years of the Bachelors programme. There was a mixed profile of backgrounds, from Ultra-orthodox, Jewish and Arab backgrounds, and students originally from Canada, France, Switzerland, Spain. The language of instruction is Hebrew. Many of the 3rd and 4th year students were working part-time in optometric practice. The views expressed by students about the teaching on the course and the support from staff were overwhelming positive, citing the 'family' feeling of the team, and the willingness of staff to support students within and outside working hours. Students were not generally aware of the European Diploma in Optometry.

Dinah Paritzky is the academic advisor for the regular campus students, and Reut Ifrach for the Ultra-orthodox cohort. These staff are an important point of contact to support students with both academic and personal problems, but students also noted that they could approach module teachers for any issues. There does not appear to be a staff/student committee, but the students are asked to feedback on modules and teaching at the end of each semester. These results are reviewed by the Head of Department, and issues and areas for improvement are addressed.

The panel met with a large number of the staff who teach on the programme, both in two scheduled meetings and in our observation of the various practical/clinical sessions that were running during our visit. The staff all demonstrated a high level of engagement and understanding of the accreditation process. They were proud of the developments in recent years promoting active learning to develop students' skills in clinical management of patients. In addition, it was clear that there had been positive developments in relation to formative and summative assessment processes in place for student performance, including standardised rubrics for clinical and practical assessments.

The Visitors observed contact lenses, low vision, general, visual therapy and dispensing clinics. An electronic patient record, 'My Vision Express' (MVE) is used to capture all patient eye examinations. The Meditrek system is also used to log student patient encounters and grade students.

The Meditrek logbook of patient experience was available to Visitors and demonstrated that considerable efforts are made to provide parity of experience to students. The students have minimum numbers of patients/episodes that they are required to undertake, and they cannot graduate unless these are achieved. The Visitors observed students undertaking general eyecare clinics. It was noted that posterior segment examination with slit lamp biomicroscopy + Volk (or similar) or direct ophthalmoscopy was not always conducted, and fundus camera imaging was often used and relied upon as an alternative. The panel recognised that during the COVID-19 pandemic that fundus photography was used instead of direct ophthalmoscopy, but indicated their views that retinal photography does not a provide a sufficient examination of the posterior eye, and going forward students should be encouraged to use slit lamp biomicroscopy with 90D lens. The Visitors did not observe perimetry or OCT being used during any clinical observations.

The Visitors observed students working with low vision patients, where they prescribed low visual aids and signposted to additional services, including rehabilitation and social services.

The Visitors also met a number of recent graduates from the programme working in community optical practices. They reported that they felt their training was very good and prepared them to a high level, but they were frustrated about not being able to use these skills in primary eye care due to legal limitations of diagnosing and using diagnostic drugs. While some conducted fundus examination and tonometry routinely, it was clear that not everyone did.

The Visitors also met with employers. They were all satisfied with the level of knowledge of the students coming into practice and reported that Hadassah graduates have good knowledge of ocular pathology and have good communication and clinical skills. All practices are equipped with slit lamps. One of the employers was part of a large chain, and they noted that the chain has a strong clinical ethos with an internal standard for eye examinations that all their optometrists should adhere to. However, fundus examination was not part of this, but at the discretion of the optometrist. The other employer reported that Volk lenses were present in all his practices with the expectation for routine use. This employer's practices served the religious Jewish section of the population. A third employer said that ophthalmoscopy was not included in their eye examination protocol.

Prior to the visit, there were some difficulties in mapping the self-assessment document with volume the information provided. Additional communication with the course team ensured access to Moodle VLE ahead of the visit, along with further information regarding portfolios and other details. During the visit, the Visitor panel had opportunity to talk to the course team and were supplied with additional information requested. Through these efforts, the panel were able to view in detail the content and assessment for modules and to gain a good understanding of how the programme is delivered.

Areas for Improvement

- There is a need to ensure that posterior segment examination of the eye is embedded as part of a routine eye examination beyond using fundus photography. These clinical skills, particularly slit lamp biomicroscopy + Volk, are vital to learn during training, serving to embed these for future practice as optometry in Israel seeks to move towards being primary eyecare providers.
- There is a need to create a more positive attitude to maximise the use of the diagnostic capabilities that students develop, utilising their skills performing a comprehensive ocular examination towards delivery of primary eye care. While we understand the limitation of lack of access to diagnostic drugs, there seemed to be a somewhat negative view of conducting a full eye examination due to the legal constraints on practice. The Panel were concerned that if students and graduates do not push the boundaries of this, this will limit the development of primary eye care in Israel.
- The students could be more proactive in using diagnostic drugs in clinics. There were a number of case reports where use of cycloplegic or dilation would have been indicated, and on the visit, it would seem that the decision to use diagnostic drugs rests with the ophthalmologist rather than being initiated by the students.
- The course team need to ensure that all students have exposure to the eye examination needs of special populations (e.g. patients with learning and other disabilities). This is important in regards to developing the communication skills that are needed to interact effectively with these patients in the clinical setting, as well as utilizing alternative testing techniques and objective techniques.
- Visual fields assessment does not seem to get as much prominence in clinical assessments of patients and hence there is a need to ensure this is more routinely used.
- We suggest that the Course team examines ways to greater embed research and the principles of evidence-based practice into student learning, especially in their write-up of clinical cases and in the Portfolio. We appreciate that there appears to be a good foundation for case-based practice by the students but the Panel did not get a strong sense that this was actually happening. For example, this was not reflected in the case reports for the Portfolio that the Visitor panel saw.
- There is a need to establish a plan for Portfolio assessment including; clear assessment structure to ensure portfolios meet the standard of the EDO, plagiarism check, arrangements for final sign off, and a means to check the veracity of the 130 cases. There is also a need to engage to a greater extent with students in preparation of their portfolios, signposting when to start, how to embed the research methods/EBP learning in their write up of cases and by encouraging reflective practice.

3. Summary analysis of the self-assessment document

Part A

A number of modules, chiefly in years 1 and 2 of the Bachelors programme, support the subject areas and learning outcomes for Part A with sufficient depth. Practical competencies are achieved through successful completion of assessments.

Decision: Standard Met

Part B

A range of modules, across years 1, 2 and 3 of the BSc Optometry programme support the subject areas and learning outcomes for Part B. These include modules on clinical optometry A & B, advanced optometry A & B, paediatric optometry, binocular vision and vision therapy, visual perception, ocular pathology, contact lenses and low vision.

Students need to demonstrate that they are conducting full eye examinations with examination of the posterior segment routinely. Improved QA procedures to develop the completion of the Portfolios of clinical experience to a satisfactory standard will help to evidence this.

Decision: Standard Met Subject to Fulfilment of Conditions 1-2 [conditions listed below]

Part C

A range of modules, chiefly across years 1, 2 and 3 of the programme, support the subject areas and learning outcomes for Part C. These include general and ocular anatomy and physiology, microbiology and pathology and general medical disorders, general and ocular pharmacology.

As above, students need to demonstrate that they are conducting full eye examinations with examination of the posterior segment routinely. Improved QA procedures to develop the completion of the Portfolios of clinical experience to a satisfactory standard will help to evidence this.

Decision: Standard Met Subject to Fulfilment of Conditions 1-2 [conditions listed below]

Part D

Learning outcomes for professional conduct and communication are delivered in year 1 to a sufficient level. The students have informal workshops on cultural sensitivity and HAC promotes and encourages applications from a range of religious and cultural backgrounds. The course team are proud of the opportunity students have to mix with other religious groupings at HAC, many for the first time. The continuous assessment procedures embedded in general clinics help the students to regularly reflect on their strengths, weakness and areas for growth.

Decision: Standard Met

4. Analysis of the Clinical Portfolio

A system for production of a portfolio of clinical experience has not yet been established. The students write up case reports based on their General and specialist clinic patient experiences and upload these to Moodle. They are given feedback on the quality of these by clinical supervisors. Fourth year students will attend the dispensing clinic in the second semester to ensure dispensing case reports follow their eye examination. The course team note that given the organisation of their contact lens and vision therapy clinics, it is not possible for students to have undertaken a general eye examination on their contact lens patient. The patient will almost always have had an eye examination in the HAC general clinic, but this will not typically have been with the student undertaking the contact lens examination.

The Meditrek system logs patient experiences and this is monitored, so the course team can easily track patient numbers and become aware when minimum patient numbers for different students are off-target.

The course team recognise that at present, not all students will achieve 150 patient episodes consisting of primary healthcare eye examinations that demonstrate their optometric knowledge and skills during the course of the Bachelors programme. They have proposed two methods to address this. The first is to work with external optometry clinics for students to undertake an internship and gain further patient episodes. They are piloting a group of 10 students on an internship programme with one of the optical chains (Opticana) this year. The second initiative would be to develop a post-graduate internship prior to their graduates undertaking their examinations with the Ministry for Health and becoming licenced for students to gain further experience.

The Visitors accessed a number of case reports from a variety of students, and all the case reports from two randomly selected students. We are grateful to the course team for translating this document in order to have allowed us to interpret these documents. These did not number 20, nor did they conform to the requirements set out in the ECOO Guidelines Part III: Portfolio Guidance. Since this is only half-way through the semester, the Visitors appreciate that this is still in progress.

In general, the case reports lacked some detail, and there was limited evidence of the inclusion and embedding of relevant clinical research literature. Also, the case reports appeared to contain more in the way of evaluation and little in the way of reflection on the part of the student. There were some examples of fundus, OCT, topography and anterior/ocular adnexa eye images supporting the case records, but these could have been more frequently apparent. Only one case included visual field plots. Some contained a photograph of an eye condition that matched what was in the record but which was not from the patient whom the student had examined. While on occasion such images could be useful serving as a reference to the condition, we consider these should be used sparingly as this detracts from the nature of these individualised case reports.

At the time of the visit, the course team did not seem to have decided upon the mechanism to be used for overarching assessment of the Portfolios in terms of the establishment of pass and fail criteria, and details about how the veracity of the other 130 non-detailed cases could, if needed, be established.

Decision: Decision deferred until we see a more representative sample of portfolios submitted, and the detailed plans of the course team for Portfolio assessment.

5. Conclusions

The EDO standard for Parts A and D are met and the standard for Parts B and C are also met subject to fulfilment of Conditions 1-2 [see below]. In relation to the Portfolios, our decision is deferred until we see a sample of portfolios submitted, and the detailed plans of the course team for Portfolio assessment.

The Visitors would like to thank Ariela Gordon-Shaag, Dinah Paritzy, the course team and the whole Department for their accommodation and organisation of the Accreditation visit. We recognise the dedicated efforts required to prepare for and undertake accreditation for the EDO.

The Visitors recognise the significant developments in clinical experience students now receive compared to the OCULUS visit to this programme in 2016. During the recent visit, we were also pleased to hear very good feedback from employers on the quality of graduates. We were also very pleased to note the positive comments from students and graduates of the programme. We especially note the dedication of staff creating a supportive environment for students.

Based upon our observations, below we list two **conditions** that would need to be met in order for Full Accreditation to be achieved. The course team should also pay careful attention to the recommendations and other areas for improvement noted in the narrative above.

Should these conditions be met, we would conclude that Full Accreditation is granted for a period of 5 years. The timing of awarding accreditation will depend on whether the University can fulfil the conditions set out below for the graduate year 2023, or 2024.

CONDITIONS

- 1. European Diploma in Optometry Portfolio of Clinical Experience.
 - a. Every student should have a complete Portfolio created with all information set out in the "ECOO Guidelines Part III: Portfolio guidance" drawn together in a single folder/document.
 - b. If the candidate cannot provide a full eye examination that they have conducted alongside contact lens and binocular vision specific cases,

additional case reports will be required for primary eye care examinations. For example, if none of the five CL-specific cases (as part of the detailed case reports required by the EDO) contain a general eye examination undertaken by the same student, then five additional comprehensive case reports of general eye examinations need to be added.

- c. The standard and level of portfolios needs to be more detailed and include supplementary material (fundus images, referral letters, visual fields, embedded relevant literature) consistently to support the comprehensive presentation of interesting cases, together with detailed reflection on the part of the student.
- d. The course team need to ensure that students gain enough patient experience to achieve the further 130 primary healthcare eye examinations required for the EDO using the possible methods discussed during the visit, or via other opportunities.
- e. The course team need to establish a system for holistic assessment of portfolio against the requirements of the ED portfolio of clinical experience, ensuring a mechanism is in place for establishing the veracity and quality of the other 130 examinations.
- 2. Ensure that posterior segment examination of the eye is embedded as part of a routine eye examination beyond using fundus photography. Post-pandemic, and reflective of the change in optometric education, we would encourage the routine adoption of Slit lamp biomicroscopy+Volk, with direct ophthalmoscopy as a secondary technique. This should be reflected in the Meditrek system and portfolios.

RECOMMENDATIONS

We recommend that the course team should:

- 1. Require every student purchase a 90d loupe (i.e. Volk lens or equivalent) as part of their equipment list.
- 2. Maximise the use of the diagnostic capabilities that students can do as part of their skills performing a comprehensive ocular examination and delivery of primary eye care.
- 3. Increase awareness of the European Diploma in Optometry amongst the students.
- 4. Embed perimetry as a more commonly used clinical procedure in general clinics.
- 5. Ensure students have exposure to the eye examination needs of special populations (i.e., patients with learning and other disabilities), understanding the need for alternative testing techniques and objective techniques, and the importance of effective communication skills.
- 6. Encourage stronger links with the Israel Council of Optometry between graduates and students of HAC and encourage students to become members of their professional association.

COMMENDATIONS We commend the Course team on:

- 1. The diversity and volume of patient experience, cultivating and utilizing links with hospital optometry and ophthalmology to produce a broad range of opportunities for students.
- 2. The dedication and positivity of both staff and students