



**Faculty of Life Science
School of Optometry and Vision Science
Bar Ilan University**

**Self-Assessment
Narrative Description of Changes made to Close
Gaps Identified in Preliminary Benchmark**

Introduction

According to estimates from the World Health Organization, approximately 80% of global blindness is avoidable. Screening is essential to detect and remedy vision problems early on, and in many regions optometrists are the primary providers of this service. High prevalence of avoidable blindness and vision impairment are recognized as important public health concerns in India and Israel. One of the barriers that prevents these two countries from achieving better eye care for their citizens is a shortage of well-trained optometrists.

To address this situation, a new project led by a consortium of educators from optometry schools in Europe is looking 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.

OCULUS (**O**ptometry **C**Urriculum for **L**ifelong learning through Erasm**US**) will employ a three-pillar strategy to reform optometric education in India and Israel. Amongst other objectives, the project will also facilitate mobility between the regions.

ECOO's Accreditation Scheme for the European Diploma of Optometry allows for either a full accreditation process or benchmarking for those schools which do not want to undertake the full accreditation scheme but want to find out how their course aligns with the Diploma. In the Oculus project the benchmarking process will be used at the outset to identify gaps in the knowledge and competency base of the programmes in the Indian and Israeli partners and at the end of the project to repeat the process to demonstrate the alignment of the courses.

The Structure of Optometry and Optometric Education in Israel with Specific Reference to Bar Ilan

In Israel, the law recognising optometry dates back to 1991. In 1993 programmes for optometry were established in Bar Ilan University and Hadassah Academic College. As a University Bar Ilan awards Bachelor, Masters and PhD degrees. The programme is regulated by the Ministry of Education which is responsible for approval of the course. The course is four years duration, and the academic year begins in September.

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 two optometrists and two ophthalmologists. There does not appear to be any 'formal' timing/structure to this pre-registration process, which can be taken at any point after graduating with a BSc Optometry. The value of the examination was questioned with pass rates varying from 18% - 90%.

Degrees of graduates from Jordan 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.

Entry to the course is based on achievement in the BAC examination in science, maths and English, a psychometric examination but no interview.

There is no law permitting the use of diagnostic drugs but neither is there a law forbidding it. This is a grey area, which is open to individual interpretation; at Bar Ilan diagnostic drugs are not used. Again the law is unclear about the age at which optometrists can see children but generally there is not an issue conducting eye examinations in children over 6 years of age.

The Department of Optometry of Bar-Ilan University has historically conferred a BSc degree upon graduation. The department is now named Optometry and Visual Science and is part of the Faculty of Life Sciences with a new emphasis on giving a science-based education emphasizing graduate options of professional practice or vision science research leading to and MSc or PhD. There is an intention to introduce an MSc in Optometry. The undergraduate course is four years with basic sciences being taught in the first year. There is an intake of 50/60 students a year.

Students are exposed to the exact sciences, biological sciences, and clinical disciplines pertaining to human body and function. Special attention is given to visual function

Whilst dispensing is taught in lectures and practical laboratories there is no experience with real patients. A new faculty member had been appointed in this subject.

Optical Dispensary

As a first step we had a pre-pilot on the third years students during the second semester (in the 2018 academic year)

Based on the pre-pilot and after meetings with the supervisors' staff and students we identified students' weakness and added more practice to courses 214 and 215 during the second year to provide a proper knowledge and skill to the students .

Currently, starting in the third year second semester, students are required to practice in the optical dispensary. The practice includes fitting, evaluating types of lenses for various needs, and dispensing spectacles to patients. Each student is required to log 10 real patients during the second semester. The student is evaluated by the staff, certified optometrists that are in charge of the dispensary. The evaluations are a mandatory requirement as part of successfully completing the 3rd year Refraction Clinics. We are now in the second year of running this project and have been very successful in exposing students to patients' needs in the optical dispensary. The Refracting Clinic grade is withheld if the student has not met the requirement of seeing 10 patients in the dispensary.

Low Vision

Low vision clinics are performed during the fourth year, second semester and 3/4 low vision patients are seen.

Currently, we expanded the Low vision clinics by adding clinics in the first semester of the fourth year, thus the number of patients has increased to 7 patients per student.

Paediatrics

Children are seen from the age of three years upwards.

Pathology

Pathology teaching is split between optometrists who teach the anterior segment and an ophthalmologist who teaches the posterior segment.

There is no hospital experience embedded in the programme, but in-house clinics involving an ophthalmologist are planned.

Currently we acted to increase the number of patients, number of children and experience of pathology. In addition, we are implementing two new projects in the second semester

Following the mandatory guidelines of the Health Ministry, our semester supposed has been delayed due to the pandemic nature of COVID-19t Therefore, the two projects described below will carried out accordance with the situation. *]**

1. Off Campus Vision Screenings with the "Mobile Clinic of the School of Optometry" Each 4th year student is required to participate in an off campus screening. The screenings are done in elementary schools, middle schools, high schools and Senior Centre Residences . The goal of these off campus screenings is to expose the student to different patient populations that are not tested in the regular clinics. The activity includes screening patients with uncorrected visual problems, binocular dysfunctions and ocular health problems. The performance of each student is evaluated for his/her participation at the screening by the staff optometrist on site.
2. Collaboration with the Department of Ophthalmology at "Wolfson Hospital". The goal of this initiative and project is to expose the 4th year students to gain hospital experience which includes more pathology cases. More importantly, they will be participating in the pediatric unit and will be exposed to cases with children that are

not seen in the in-house clinics. Very importantly, they will be exposed to cases of diagnosis after under cycloplegia and dilation.

Patient numbers

Students undertake eye examinations in approximately 58 patients in total across the programme, some in the third year but mostly in the fourth year.

We expanded the number of patients in the refraction clinics as followed: each student is required to see 10 patients in the 1st semester of the 3rd year, 18 patients in the 2nd semester of the 3rd year, and 4 patients during the summer between 3rd and 4th years. During the 4th year they will test 38 patients in the 1st semester and 40 patients in the 2nd semester. Thus, the total of patients is now increased to 110 patients.

Record keeping

Meditrek is used as a means of feedback to students, but could be extended to include more detailed logs of student information. There is an apparent lack of audit of what students are doing and seeing. There is a reliance on the faculty ensuring that students see a broad range of patients across age and abnormal conditions.

The Meditrek was extended to all clinics. The Student's Patient logs now show much more detail. For example, the age categories of the patients they have examined, what pathology they have diagnosed along with binocular vision assessment and more. This enables the instructors (staff doctors, OD) to implement a requirement that each student should be seeing at least one patient in each category.

Attached is the students patients logs:

Contact lenses:

https://drive.google.com/file/d/1FM3fE3VpaXq9wj1aCUH0_xKiK3ChAlea/view?usp=sharing

Vision Therapy:

https://drive.google.com/file/d/1FM3fE3VpaXq9wj1aCUH0_xKiK3ChAlea/view?usp=sharing

Low Vision:

<https://drive.google.com/file/d/12agr36BjhV-rRn2AFu32VpagKbCiYt/view?usp=sharing>

Refraction:

https://drive.google.com/file/d/1AVc4CJerQWaRkyZ6BiNPcrvEz4VQ_NbW/view?usp=sharing

Optical Dispensary:

https://drive.google.com/file/d/1dk88_iZwK9H67fqWeOihV-k3k31yDCxO/view?usp=sharing

Each student now must present at the end of each semester a matrix detailing the work they have done. This matrix shows how many LV, CL, VT, Optical Dispensary, and Refraction they have seen. If the staff doctor and clinical director confirm that the student has achieved the requirements for the course, they then will receive a grade for the course.

Part of the staff student's evaluation now includes the following topics: Did the student determine an appropriate management plan? Justify to the examiner his/her recommendations? Demonstrate effective communication skills?

Part of the Case management portion of the student grade is calculated as follows:

Criteria ...	Score									
Case Management (plan/assessment)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	N/A
	12	11	10	9	8	7	6	5	4	

Make the correct diagnosis to account for the patient's signs/symptoms? -4 pts

Determine an appropriate management plan? -4 pts

Justify to the examiner his/her recommendations?

Demonstrate effective communication skills?

A binocular or accommodative anomaly missed or misdiagnosed: -6 pts

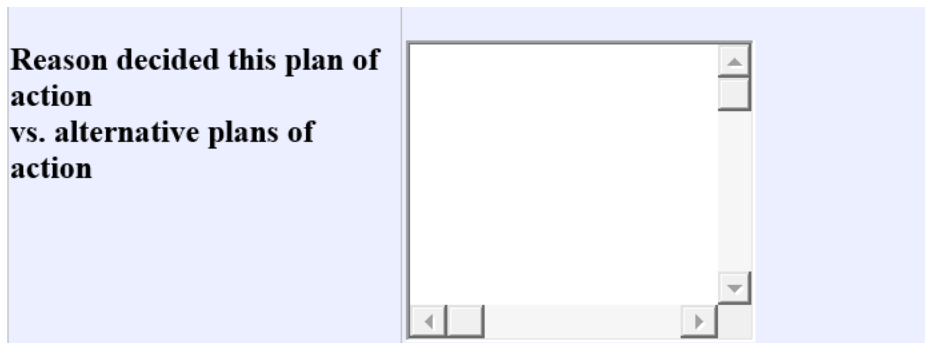
Incorrect treatment suggested: -5 to -10 pts

We also added a MINIMUM level of competency for each section of the evaluation. Failure to meet this minimum level of competency in any section requires the student to get remediation until he has reached the proper level required by the course:

Score table	Excellent	Expected	Minimum	Below	Unsatisfactory
1. Case Hx	8	6	5	4	2
2. Entr. test		6	5	4	2
3. Lensometry		2	2		0
4. Retinoscopy	12	10	9	8	3
5. Subjective	17	15	13	12	8
6. Binocular vision	15	13	9	10	5
7. Slit lamp	10	8	7	6	3
8. Ophthalmoscopy	10	8	7	6	3
9. Case management	12	10	7	8	4

In the student's patient logs the following was also added:

Reason decided this plan of action vs. alternative plans of action



All students' work is reviewed by the staff doctor and clinical director to make sure the above numbers have been achieved. Failure to meet any portion results in no grade being given until the deficiency is corrected.

Instruments

Clinics were equipped with slit lamps including Goldman tonometers. Visual fields analysis is limited to a matrix FDT which did not seem to be used regularly, and was currently out of order. There was no fundus camera or OCT.

Thanks to the Oculus project we now have a Humphrey Visual Field Analyzer (model 850i) and a non-mydratic camera (Eidon). This has allowed us to evaluate and discuss various pathologies with the students.

Self Assessment Document

This was considered in detail. Some errors in the document itself were noted. The numbering of the sub divisions in each section did not always exist. There were a number of subjects which had not been completed. In the clinical/ practical section the same number of patient episodes is repeated for each competency. This suggests that clinic timetable slots were used rather than actual patients seen by each student. More clarity is needed on the final year assessment.

It was agreed that the Self Assessment Document would be reviewed and resubmitted by the end of March with the intention of the benchmark being completed by the end of April

The self-assessment document is submitted thorough the OSAT now. The documents are addressed and have corrected the errors in the previous document. We filled the number of patients in the competency clinical/practical section according to the **minimum** number of patients that the student sees in each competency .

Additional Comments on the completion of the review of the Self Assessment Document.

Knowledge Base

The completion of the review of the Self Assessment Document (SA) has been extremely complicated and time consuming. Generalised headings were used in the '*where in programme?*' column and this has meant that the assessors have had to undertake the full mapping exercise from the modules to the SA themselves and in many cases they have been unable to find a specific reference that matches that in the SA.

Whilst the SA does have some details of the methods of assessment the split of marks is not given, this is not consistent with the modules, which in most cases do not give any details of the assessments.

There is a lack of overarching course structure which would allow better understanding of hours and weighting of modules.

No module specification could be found for 28-214 and 82-215. These were mentioned in the clinical self-assessment document for Part A. These modules may cover some knowledge aspects of Part A.

We viewed these recommendations as an opportunity to perform an in-depth and comprehensive review of all the syllabi in the curriculum. We highlighted and made

sure that the specific reference matched the SA and updated the syllabus to include the methods of assessment and split of grades. This process is written in details in the last section of this letter: Modules 214 and 215 submitted in the new SA.

Competencies

Although specific references to modules have been given, the modules themselves are generalised and there is no detail to allow mapping from them to the SA. Rather than the anticipated number of patients seen by a student, the number of patient episodes reported in the benchmarking exercise should be the minimum that any student will see. There is no indication as to when the final assessment of the competency takes place.

It is realised that the resultant Benchmarking Opinion will be very disappointing but this may be improved if some or all of the issues mentioned above are clarified.

The number of patients in the competency clinical/practical section is according to the **minimum** number of patients that the student has seen in each competency. The clinical assessments updates in Meditrek and is attached to the clinical report using OSAT.

Next Steps

There are two possibilities that we suggest you consider:

1. Given extra time and guidance from the partners and ECOO could BIU revise the SA to meet the standard set out above? This will only be possible if you can demonstrate that the basic structure of the course is sound and the details required in the Self-Assessment do exist but have not been included in the version you have submitted.
2. Is the required information is not available because of the lack of formal structure, detailed module specifications and audited assessments?

If it is 1 then considerable help will be needed with a view to re-submission of the Self-Assessment within an agreed timescale of a few months.

If it is 2 then this fundamental weakness has to be acknowledged. It is not possible to engage with the outcomes-based ECOO scheme without these data.

Identification of these weaknesses is useful for the Erasmus+ project and will facilitate completion of a more successful SA and benchmarking exercise later in the project. However, if BIU wishes to achieve the ED standard in the course of this project then we recommend that the whole structure of the programme should be reviewed, the module specifications, assessment processes, the recording of students' patient

experience etc. over the next 12-24 months and then a new SA submitted. This would give the possibility of achieving the ED standard within the three year timescale of the Erasmus+ project.

Robert Chappell

Adrian Jennings

Julie-Anne Little

After receiving the Opinion, we appreciated the suggestions and we viewed these recommendations as an opportunity to perform an in-depth and comprehensive review of all the syllabi in the curriculum.

In order to enact this strategy and complete the requirements in the document, we established a team for this review process.

During this process we conducted one-on-one meetings with the lecturers of each course in the curriculum. Each lecturer was requested to complete the self-assessment document and the syllabus with emphasis on features that were incomplete in our previous assessment report.

We also asked each lecturer to denote topics that were not included in their courses but which the relevant lecturer is equipped with the expertise to teach if required.

All minutes of these meetings, syllabi and updated course self-assessment have uploaded to an internal drop-box.

The outcomes of these meetings were further discussed in smaller meetings with our Senior Board to take the necessary steps in implementing the revised curriculum.

We also took advantage of this process to conduct additional discussion meetings with several lecturers together in order to identify overlaps and to estimate if the students have sufficient pre-requisite knowledge for successful completion of the courses.

In parallel to this process, and based on your comments, we recognized other gaps unconnected to those of the lack of information provided by us, and planned our pedagogical program and pilots to fill in those self-recognized gaps.

We suggested to submit the SA using the OSAT (previous version) in October 2018. In the original plan, the second benchmarking was supposed to start at 15/02/19 but after consulting it seems reasonable to submit it as the second benchmarking. We didn't anticipate the delay in the second benchmarking.

Detailed regarding Gaps recognize during the process and strategy:

Part A clinical: Occupational Optics competencies: The ability to advise, prescribe and dispense spectacles for eye protective use.

First we contacted a supplier of goggles to have samples in the clinics. We increased the number of patients in the refractive clinics from 58 up to 110 but we still couldn't reach the goal that every student will see at least 1 real patient to prescribe and dispense for eye protective use. In the first semester in this year we started a pre-pilot of our new "Mobile Clinic". We are in the process of using the mobile clinic for screening in relevant industry that might need protective eyewear- Side by side with the knowledge base we updated courses 214, 215 , 213 to place more emphasis on this subject.

Part B Knowledge base: Vision and Ageing LO:
"Normal cognitive and social development in the infant and child "

This LO update in course 332.

"Clinical management of ageing patients with multisensory lost"

This LO update in course 433 the lecture for this LO is our specialist in Low Vision Mr. Noah Rappeport.

Part B clinical: Refraction competencies: The ability to use appropriate ocular diagnostic drugs to aid refraction if and when needed

According to the Israeli law only Ophthalmologists can use ocular diagnostic drugs. We are in the process of collaborating with the Ophthalmology Department at "Wolfson Hospital"- for the 4th year students to gain hospital experience.

Part B clinical :Subject 12: Investigative Techniques -visual fields

At first we tried to implement the visual field in the refractive clinics. Since the visual field examination is time consuming, not every student acquired the skills and the experience. Thus, now the visual field test is implemented in the "Low Vision clinics". In addition, in course 331 part B, a workshop for visual fields is planned.

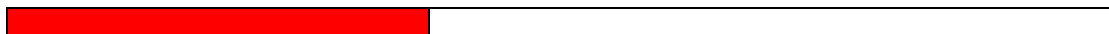
Part C knowledge base : Subject 21: Epidemiology and Biostatistics

In order to answer this gap a new course add to the curriculum . This is updated in the new SA. **Optometry:**

**Benchmarking Opinion against the
Knowledge Base and Competencies of
the European Diploma in Optometry**

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

Red - Inadequate. Amber - Some weaknesses. Green - Satisfactory



Knowledge Base	Knowledge base for European Diploma competencies
Clinical/Practical competencies	Clinical/practical European Diploma competencies

PART A: Optical Technology

European Diploma Examination Sections	Self-Assessment Document Competency Areas	Provisional Opinion	Comments	BIU Strategy:
1 Part A 1. Optics 2. Optical Appliances	Subject 1: Geometrical Optics	Amber	Not just General Optics: Aspects found in 82-109-01; 82-110-01; 82-211-01; 82-213-01 Not clear how assessed	This section update and included courses 82-109-01 , 82-211-01, 82-230-01 , 82-214-01, 82-125-01 , 82-126-01 , 82-304-01 Methods of assessment and split of the marks update in the syllabus.
	Subject 2: Physical Optics	Amber	Content predominantly found in 82-110-01. Not clear if Image quality covered. Not clear how assessed	After meeting the lecture the subject "Image quality" implement in more clear way in the syllabus . Methods of assessment and split of the marks update in the syllabus.
	Subject 3: Visual Optics	Amber	Predominantly found in 82-120-01. Lack of information on Quality of retinal image; entopic phenomena. Also not found eye protection. Radiation: found in 82-330-01 Not clear how assessed	Syllabus update in more detailed . Methods of assessment and split of the marks update in the syllabus.
	Subject 5: Optical Appliances	Red	82-211-01 and 82-213-01 not any mention of frame materials, optical tolerances. Not clear how assessed	Frame materials and optical tolerance are in 214 and 215 respectively Methods of assessment and split of the marks update in the syllabus.
	Subject 6: Occupational Optics	Red		This section update in the new SA.

				Methods of assessment and split of the marks update in the syllabus.
	Subject 5: Optical Appliances	Red	No module specifications available for 214 and 215. Assessment evidence not sufficient	214 , 215 and assessment reference submitted in the new SA
	Subject 6: Occupational Optics	Red	Not taught? Assessment evidence not sufficient	Detailed about protective eyewear mentioned in the section above "Detailed regarding Gaps recognize during the process "

PART B: Management of Visual Problems

European Diploma Examination Sections	Self-Assessment Document Competency Areas	Provisional Opinion	Comments	
Part B 1. Refraction 2. Binocular Vision 3. Contact Lenses 4. Visual Perception	Subject 4: Visual Perception	Amber	Some aspects well covered (1-7) in second year modules 216b and 217. Psychophysics not explicitly covered – perhaps in 205 but not clear. Not clear how assessed	This section update in the new SA. Methods of assessment and split of the marks update in the syllabus.
	Subject 7: Vision and Ageing	Amber	Paediatric optometry coverage seems comprehensive. Some gaps in visual assessment of the ageing patient. Colour vision assessment/advice/referral not clear. Visual Fields covered in Ad Clinical Optom. Not clear how assessed	This section update in the new SA. Detailed about LO that identified as a gaps mentioned in the section above "Detailed regarding Gaps recognize during the process " Methods of assessment and split of the marks update in the syllabus.

	Subject 8: Refraction	Amber	Seems comprehensive, although relevant content found in other modules in addition to optometric methods. (could have been green except for lack of detail on assessment) Not clear how assessed	This section update in the new SA. Methods of assessment and split of the marks update in the syllabus.
	Subject 9: Low Vision	Red	Gaps: epidemiology, non-optical aids, illumination, environmental modifications. No mention of assessment	This section update in the new SA. Methods of assessment and split of the marks update in the syllabus.
	Subject 10: Ocular Motility and Binocular Vision	Amber	LO covered in range of modules: 337-01, 424, 425 and 332 Not clear how assessed (could have been green except for lack of detail on assessment)	This section update in the new SA. Methods of assessment and split of the marks update in the syllabus.
	Subject 11: Contact Lenses	Amber	LO's covered in modules: 304, 305, 403 Mod spec 403 does detail assessments. Not clear how assessed (could have been green except for lack of detail on assessment)	This section update in the new SA. Methods of assessment and split of the marks update in the syllabus.
	Subject 12: Investigative Techniques	Amber	Techniques found in lab and clinical module specifications; however not clear where underpinning theory is taught. All seem covered apart from Gonioscopy. Not clear how assessed	This section update in the new SA. Methods of assessment and split of the marks update in the syllabus.
	Subject 13: Paediatric Optometry	Red	Lack of Paediatric dispensing & some gaps in whether paed ocular disease, paed CLand Paed Low vision is taught Not clear how assessed	This section update in the new SA. Methods of assessment and split of the marks update in the syllabus.
	Subject 14: Refractive Surgery	Amber	Types of refractive surgery are mentioned in CL 334. This was not benchmarked and not clear how assessed	This section update in the new SA. Methods of assessment and split of the marks update in the syllabus.

	Subject 8: Refraction	Amber	Regular clinical experience noted, and students are assessed on Meditrek. Gaps in diagnostic drugs, referral management and communication. Module specifications lack detail on how specific LO's are known to be deemed competent. Supplemental portfolio/ student tracking of competencies needed.	This section update in the new SA. Assessment reference submitted in the new SA Detailed about diagnostic drugs mentioned in the section above "Detailed regarding Gaps recognize during the process "
	Subject 9: Low Vision	Amber	Not clear that all LO's are met and the student would have ability to perform a low vision assessment.... Is it possible that a student may not see a low vision patient? Module specifications lack detail on how specific LO's are known to be deemed competent.	This section update in the new SA. Assessment reference submitted in the new SA
	Subject 10: Ocular Motility and Binocular Vision	Amber	Acknowledgement that lack of consistency in patient episodes in 406 and 409. But vision therapy labs (vision training and orthoptics) may train students in these aspects. Module specifications lack detail on how specific LO's are known to be deemed competent.	This section update in the new SA. Assessment reference submitted in the new SA
	Subject 11: Contact Lenses	Red	This section not completed. C/L clinic in 4 th year under staff supervision - but not clear real patients.	This section update in the new SA. Assessment reference submitted in the new SA
	Subject 12: Investigative Techniques	Red	No diagnostic drugs. No visual fields. Module specifications lack detail on how specific LO's are known to be deemed competent.	This section update in the new SA. Assessment reference submitted in the new SA Detailed about diagnostic drugs and visual fields mentioned in the section above

				"Detailed regarding Gaps recognize during the process "
	Subject 13: Paediatric Optometry	Red	Few (and possibly no) real patient episodes. Module specifications lack detail on how specific LO's are known to be deemed competent.	This section update in the new SA. Detailed about more Paediatric patient in the section above under "Paediatric"

PART C: General Health and Ocular Abnormalities

European Diploma Examination Sections	Self-Assessment Document Competency Areas	Provisional Opinion	Comments	BIU Strategy:
Part C 1. Biology 2. Ocular Biology 3. Ocular Abnormality	Subject 12: Investigative Techniques	Amber	Same as Part B	This section update in the new SA. Methods of assessment and split of the marks update in the syllabus.
	Subject 15: Anatomy and Histology	Amber	LO 2 not in Self-assessment doc. (Cells: membranes, compartments, organelles, stem cells, cell differentiation) Modules 103, 101 Not clear how LOs assessed (could have been green?)	This section update in the new SA. Methods of assessment and split of the marks update in the syllabus.
	Subject 16: Neuroscience	Amber	Module 410. Neurophysiology of the brain. Also 102 covers neuroanatomy of brain? Not clear how LOs assessed (could have been green?)	This section update in the new SA. Methods of assessment and split of the marks update in the syllabus.
	Subject 17: General Physiology and Biochemistry		Learning outcomes: The candidates should demonstrate fundamental knowledge and insight into physiology and biochemistry. Knowledge and	This section update in the new SA. Methods of assessment and split

			<p>understanding should be demonstrated in the areas of: (1) respiration, (2) gastrointestinal activity, (3) muscles, (4) body fluids, (5) renal system, (6) circulatory system, (7) endocrine system, (8) proteins, (9) carbohydrates, (10) lipids, (11) molecular biology, and (12) bioenergetics.</p> <p>Rows not correct on Self-Assessment Doc. But this content is covered in Modules 117, 101 and 102</p> <p>No method of assessment</p>	of the marks update in the syllabus.
	Subject 18: Microbiology and Immunology	Amber	<p>Modules 219,206,411</p> <p>No method of assessment</p>	This section update in the new SA. Methods of assessment and split of the marks update in the syllabus.
	Subject 19: General Pharmacology		<p>420 is headed Phramacology of the Eye. This is neither general nor ocular – no diagnostic drugs – no method of assessment</p>	This section update in the new SA. Methods of assessment and split of the marks update in the syllabus.
	Subject 20: Pathology and General Medical disorders		<p>331 very general unable to find specific references to match SA. No assessment criteria</p>	This section update in the new SA. Methods of assessment and split of the marks update in the syllabus.
	Subject 21: Epidemiology and Biostatistics		<p>Not completed. ? Is this in 331 week 3? No assessment criteria</p>	<p>This section update in the new SA. Methods of assessment and split of the marks update in the syllabus. Detailed in the section above</p> <p>"Detailed regarding Gaps recognize during the process "</p>
	Subject 22: Ocular Anatomy and Physiology		<p>Module: 204/212. ? ocular blood supply and sclera</p>	This section update in the new SA. Methods of assessment and split of the marks update in the syllabus.

	Subject 23: Ocular Pharmacology		No diagnostics	This section update in the new SA. Methods of assessment and split of the marks update in the syllabus.
	Subject 24: Abnormal Ocular Conditions		331 and 431 No specific reference to the orbit, oculomotor neuropathology or sensory neuro-visual pathway	This section update in the new SA. Methods of assessment and split of the marks update in the syllabus.
	Subject 12: Investigative Techniques		309/406/409 are all generalised statements with no reference to specific competencies or their assessment	This section update in the new SA. Assessment reference submitted in the new SA
	Subject 14: Refractive Surgery		As for subject 12	This section update in the new SA. Assessment reference submitted in the new SA
	Subject 24: Abnormal Ocular Conditions		As for subject 12	This section update in the new SA. Assessment reference submitted in the new SA