



Dr. D. Y. PATIL VIDYAPEETH, PUNE (Deemed to be University)

(Accredited (3rd Cycle) by NAAC with a CGPA of 3.64 on four point scale at 'A++' Grade) (Declared as Category - I University by UGC Under Graded Autonomy Regulations, 2018) (An ISO 9001:2015 and 14001:2015 Certified University and Green Education Campus)

Dr. A. N. Suryakar Registrar

> Ref. No. : DPU/ 325-B/23 Date : 21.04.2023

NOTIFICATION

Whereas in pursuance of the various decisions taken by the Board of Management regarding "Syllabus for Master of Clinical Optometry (M. Optom.) – 2015-16 onwards". This syllabus is hereby repealed for the students admitted to the Second Year of Master of Clinical Optometry (M. Optom.) Programme from Academic Year 2023-2024 and onwards (for batch admitted to the first year in Academic Year 2022-23), however, the same will be continued for the repeater students, till the last student clears his/her Second Year of the Programme.

And whereas in pursuance of the resolution passed by the Academic Council at its meeting held on 15th March, 2023 vide Resolution No. AC- AC-09 (viii)-23 regarding the revision in the syllabus of Second Year of Master of Clinical Optometry (M. Optom.) Programme as per Ministry of Health and Family Welfare Model Curriculum Handbook-Optometry for implementation.

And whereas in pursuance of the resolution passed by the Board of Management at its meeting held on 28th March, 2023 vide Resolution No. BM-05-(v)-23 regarding the revision in the syllabus of Second Year of Master of Clinical Optometry (M. Optom.) Programme as per Ministry of Health and Family Welfare Model Curriculum Handbook-Optometry for implementation.

The Revised Syllabus of Second Year of Master of Clinical Optometry (M. Optom.) Programme, as per Ministry of Health and Family Welfare Model Curriculum Handbook-Optometry, applicable for the following specialties:

- 1. Cornea & Contact Lens
- 2. Low Vision and Rehabilitation

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The Revised Syllabus of Second Year (Semester - III & Semester - IV) of Master of Clinical Optometry (M. Optom.) Programme as per Ministry of Health and Family Welfare Model Curriculum Handbook-Optometry consist for following courses:

S	emester - III	Semester – IV		
MOPT 301 A	Cornea and Contact Lens			
MODT 201 D	Low Vision &	MOPT 401	Special Clinics - II	
MOPT 301 B	Rehabilitation			
MOPT 302	MOPT 302 Vision Therapy		Descent internet	
MOPT 303 Special Clinics - I		MOPT 402	Research project and	
MOPT 304	Research Project - III		Dissertation	

The syllabus will be useful to all the concerned. This will come into force with immediate effect.



Dury (Dr. A. N. Suryakar) (Dr. A. N. Suryakar) Registrar (Dr. A. N. Suryakar) Registrar Dr. D. Y. Patil Vidyapeeth (Deemed to be University) Pimpri, Pune- 18.

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Copy to:

- 1. PS to Chancellor for kind information of Hon'ble Chancellor, Dr. D. Y. Patil Vidyapeeth, Pune.
- 2. PS to Vice Chancellor for kind information of Hon'ble Vice Chancellor, Dr. D. Y. Patil Vidyapeeth, Pune.
- 3. The Dean, Faculty of Allied Medical Sciences, Dr. D. Y. Patil Vidyapeeth, Pune
- 4. The Director, Dr. D. Y. Patil Institute of Optometry & Visual Sciences, Pimpri, Pune
- 5. The Controller of Examinations, Dr. D. Y. Patil Vidyapeeth, Pune.
- 6. Director (IQAC), Dr. D. Y. Patil Vidyapeeth, Pune.
- 7. Web Master for uploading on Website.

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REGULATION FOR THE POST GRADUATE DEGREE PROGRAMME IN OPTOMETRY: MASTER OF CLINICAL OPTOMETRY (M. OPTOM.)

1. Duration of the M. Optom. Program:

This is a two-year (total four semesters) program which involves course work, assignments, patient care in clinics and research through dissertation projects. Educative seminars, hand-on training sessions, workshops and special lectures will be conducted by the Institute of Optometry.

The medium of instruction for this post graduate program in Optometry will be English.

The admission procedure of M. Optom. and the date of commencement of the new academic year will be revised every year accordingly.

2. Specializations:

- 1. Cornea & Contact Lens
- 2. Low Vision & Rehabilitation

3. Eligibility for Admission to First Year M. Optom.

- 1. Candidates should have completed Bachelor's Degree in Optometry or equivalent course with minimum of 50% marks from any Indian University, which is member of Association of Schools and Colleges of Optometry India (ASCO) & Optometry Council of India (OCI)
- 2. Candidates belonging to foreign student's category should have completed Bachelor's Degree in Optometry [B.Optom.], or equivalent course from any University, which is affiliate member of World Council of Optometry (WCO) and / or is recognized by a competent educational body like a national council / association of the country of origin of the candidate / AIU (All India Universities).
- 3. Candidates should have completed 22 years of age as on 31st December of the year of admission.

4. Scheme of Examination

- a) Internal Examinations (Theory + Practical + Viva)
- 1. There shall be two internal examinations (also called internal assessment tests I and II) of one hour duration for each course to be held as per the schedule fixed in the Academic Calendar.

2. A student can take for supplementary re-internal exam of a specific subject or all the subjects for the betterment of performance in case of scoring of less mark in previous internal assessment exams only after successful submission of an application to the class teacher which will be approved by Director/Principal of the institute.

b) Vidyapeeth Examinations:

The External Exams, Viva and practical examinations for first year & second year for both semesters of M. Optom. will be conducted on bi annual basis in the month of June/July/August and December/January end of every year as per the time table to be prepared from time to time. External viva and practical examinations will be conducted by a panel of two examiners for every subject and they will be responsible for checking the theory examination papers for that subject.

Examination & Rules of passing for First and Second Year M. Optom.

Format for term end examination Theory papers -

Each theory examination will be of 100 marks with breakup of 40+10+50 Pattern and 2 Hours duration,

40 Marks University Theory Exam
10 Marks University Practical Exam
50 Marks Internal Assessment ExamTotal 100 Marks

40 Marks Theory University Examinations

Each theory examination paper will have total two Sections Section A of total 20 marks Section B of total 20 marks Total (A+B) = 40 marks

Section A of total 20 marks will have three long answer questions [10 mark each] out of which any two questions to be answered.

Section B of total 20 marks will have five short questions out of which any four questions to be answered.

10 Marks Practical/ Viva Examinations

50 Marks Internal Assessment Examination

5. Standard of Passing:

First Year (I, II, & III Semester) M. Optom. Passing

1. The standard of passing shall be minimum 50% in each subject.

2. The marks of all heads combined (University Theory Exam + Internal Assessment Theory + Practicals/Viva) shall be considered together for Passing of the candidate.

Second Year IV Semester M. Optom. passing:

The internal and external examination marks will be added as the final marks of that subject for each year. Only when the student secures minimum 50% marks (Internal + External = Combined) in all subjects of both the years and has completed the project work and dissertation thesis in all respects, he/she will be declared to have completed the M. Optom. course and will be eligible for post graduate degree of Master in Optometry (M.Optom.)

6. Grading System

Marks	Letter Grade	Grade Point
90 To 100	O : Outstanding	10
80 To 89	A+ : Excellent	9
70 To 79	A : Very Good	8
60 To 69	B + : Good	7
55 To 59	B : Average	6
50 To 54	P : Pass	5
00 To 49	F : Fail	0
-	AB : Absent	0

UGC 10-point Grading Scale

Computation of SGPA and CGPA

The UGC recommends the following procedure to compute the Semester Grade Point Average (SGPA) and Cumulative Grade Point Average (CGPA):

i. The SGPA is the ratio of sum of the product of the number of credits with the grade points scored by a student in all the courses taken by a student and the sum of the number of credits of all the courses undergone by a student, i.e.

SGPA (Si) = Σ (Ci x Gi) / Σ Ci

where Ci is the number of credits of the course and Gi is the grade point scored by the student in the course.

ii. The CGPA is also calculated in the same manner taking into account all the courses undergone by a student over all the semesters of a programme, i.e.

 $CGPA = \Sigma(Ci \times Si) / \Sigma Ci$

where Si is the SGPA of the semester and Ci is the total number of credits in that semester.

iii. The SGPA and CGPA shall be rounded off to 2 decimal points and reported in the transcripts.

Illustration of Computation of SGPA and CGPA and Format for Transcripts

i. Computation of SGPA and CGPA

Course	Credit	Grade	Grade	Credit Point
		letter	point	(Credit x Grade
Course 1	3	Α	8	3 X 8 = 24
Course 2	4	B+	7	4 X 7 = 28
Course 3	3	В	6	3 X 6 = 18
Course 4	3	0	10	3 X 10 = 30
Course 5	3	С	5	3 X 5 = 15
Course 6	4	В	6	$4 \ge 6 = 24$
	20			139

Illustration for SGPA

Thus, SGPA =139/20 =6.95

Illustration for CGPA

Semester 1	Semester 2	Semester 3	Semester 4	Semester 5	Semester 6
Credit : 20	Credit : 22	Credit: 25	Credit : 26	Credit : 26	Credit: 25
SGPA: 6.9	SGPA: 7.8	SGPA : 5.6	SGPA: 6.0	SGPA: 6.3	SGPA : 8.0

Thus, **CGPA** = $\frac{20 \times 6.9 + 22 \times 7.8 + 25 \times 5.6 + 26 \times 6.0 + 26 \times 6.3 + 25 \times 8.0}{144} = 6.73$

ii. **Transcript (Format):** Based on the above recommendations on Letter grades, grade points and SGPA and CCPA, the Institute may issue the transcript for each semester and a consolidated transcript indicating the performance in all semesters.

7. Grace Marks

The grace marks up to a maximum of **Five (5)** marks may be awarded only for theory papers to a student who has failed in not more than two subjects in the respective semester. Provided that these grace marks shall be awarded only if the student passes after awarding these marks.

8. Award of the degree:

A student, who has secured not less than 50%, marks in every subject of all semesters of M. Optom. Examination, will be eligible for the conferment of the "Master of Clinical Optometry (M. Optom.)" post graduate degree by the Dr. D.Y. Patil Vidyapeeth, Pune.

9. ATKT (Allowed-To-Keep-Terms)

A Student can take 2 backlog courses/Subjects/Papers combined for the promotion or Admission in next Semester/ Academic Year. The Details are as Follows:

- 1. A Student who has failed in 2 subjects or courses in Semester I, & II combined shall be allowed to keep term for Semester III & IV respectively.
- 2. A student who failed more than two subjects or courses in whole academic year (Both Semesters Combined) cannot be promoted to next academic year.

10. Dissertation work:

- 1. A candidate is required to carry out a research study in a select area of his subject, under the supervision of a faculty guide. The results of such a study shall be submitted to the College/Vidyapeeth in the form a dissertation as per the prescribed format and within the date stipulated by the Vidyapeeth.
- 2. The dissertation work is aimed at training a postgraduate candidate in research methodology and techniques. It includes identification of the problem, formulation of a hypothesis, review of literature, getting acquainted with recent advances, designing of a research study, collection of data, critical analysis, and comparison of results and drawing conclusions.
- 3. Every candidate shall submit to the Department in the prescribed Performa, a synopsis containing particulars of proposed dissertation/ research project work within six to ten months from the date of commencement of the course on or before the date notified by the Vidyapeeth. The synopsis shall be sent through the proper channel.

- 4. Such synopsis will be reviewed and the College will register the dissertation/ research project topic. No change in the dissertation topic/ research project or guide shall be made without prior approval of the College.
- 5. **Guide:** A Guide is appointed on the basis of 3 years teaching experience. However, a co-guide can be opted wherever required with prior permission of the Institute and Vidyapeeth. The co guide shall also be appointed on the basis of experience recognized by the Vidyapeeth.
- 6. In the event of registered Guide leaving the Institute a change of Guide shall be permitted by the Vidyapeeth, on the specific recommendation of the Institute.
- 7. Ethical clearance: Ethical Clearance should be obtained for a study involving any procedure on human subject. The candidate should apply for the certificate to the Ethics Committee of the Institute/Vidyapeeth, through the Guide and present the study before the Committee for clearance. A copy of the certificate should be attached along with the synopsis forwarded at the time of submission of synopsis. All such clearance should be sought before submission of final report.
- 8. A Research & Recognition Committee shall be constituted by the Vidyapeeth for approving the title of PG program.
- 9. **Submission of synopsis:** The student has to submit the Synopsis to the guide and HOI which will need further approval of Institutional ethical clearance committee. The synopsis should be submitted as per the format on or before one month of starting of second semester, or within the date notified by the college, whichever is earlier. Once the synopsis is approved no change in the topic or Guide shall be made without the prior approval of the Vidyapeeth.
- 10. **Preparation of dissertation:** The written text of dissertation shall be as per the format. It should be neatly typed with 1.5 line spacing on one side of the paper (A4 size: 8.27" x 11.69") and properly bound. Spiral binding should be avoided. E-submission of the dissertation is mandatory.

- 11. Final submission of the dissertation: The dissertation complete in all respects and duly certified by the Guide/Co-guide, Course Co-coordinator/ HOD/ Director should be submitted it to the Controller of Examinations/ College Examination Committee as per the date specified by the Vidyapeeth, generally two months before commencement of Vidyapeeth examinations. Plagiarism of final submitted report should be checked. One research paper be published in Scopus/ Web of Science/ UGC Care Journal.
- 12. **Dissertation Assessment:** The dissertation shall be evaluated by two external and one internal examiners appointed by the Vidyapeeth. Approval of dissertation work is an essential precondition for a candidate to appear for the final examination. The dissertation shall be accepted only after approval of the two examiners out of three examiners appointed by the Vidyapeeth.

If the dissertation is not accepted by two examiners, the same shall be returned to the student with the remarks of the examiners and the student can resubmit the dissertation after making the necessary improvement in the light of examiners report to the Vidyapeeth within a further period of six months or next semester examination.

The dissertation/ research project should be written under the following headings:

- ✓ Introduction
- ✓ Aims or objectives of study
- ✓ Review of literature
- ✓ Material and methods
- ✓ Results
- ✓ Discussion
- ✓ Conclusion
- ✓ Summary
- ✓ References
- ✓ Tables
- ✓ Annexure

Pa per	Course Code	Course Title	Theory/ Lecture (Hours)	Cred its	Practicals / Clinical Rotation (Hours)	Cre dits	Total Contact Hours	Total Credit Points
		М.	Optom. 1	st Year	· 1 st SEM			
	• 6	6 Hours Per Day, 6	6 Days in Week ●	a Weel 36 Hoi	k, 16 Weeks irs x 16 Wee	Per S	Semester	
1	MOPT 101	Ocular Disease and Diagnostics-I	45	3	0	0	45	3
2	MOPT 102	Advance Dispensing Optics	45	3	0	0	45	3
3	MOPT 103	Epidemiology & Community eyecare	30	2	0	0	30	2
4	MOPT 104	Research Methodology	30	2	0	0	30	2
5	MOPT 105 A MOPT	Elective 1 Paediatric Optometry Elective 2	60	4	0	0	60	4
	105 B	Advance glaucoma						
6	MOPT 106	Research Project - I	0	0	180	6	180	6
		Total	210	14	180	6	390	20

CBCS Pattern Syllabus for M. Optometry

	Examination										
Paper	Course Code	Internal	Univers	ity Exam.	Total Manlea						
		Assessment	Theory	Practical	Iotal Marks						
1	MOPT 101	50	40	10	100						
2	MOPT 102	50	40	10	100						
3	MOPT 103	10	40	0	50						
4	MOPT 104	10	40	0	50						
5	MOPT 105 A	50	40	10	100						
	MOPT 105 B	50	40	10	100						
6	MOPT 106	50	0	50	100						
	Total	220	200	80	500						

Pap er	Course Code	Course Title	Theory/ Lecture (Hours)	Cre dits	Practicals/ Clinical Rotation (Hours)	Cre dits	Total Contact Hours	Total Credit Points
		M. 0	ptom. 1 st	Year 2	2 nd SEM			
	• 6	Hours Per Day, 6	Days in a	Week	, 16 Weeks P	er Se	mester	
	• 6x6	5 - 36 Hours Per V	Week • 36	Hour	s x 16 Weeks	s - 57	6 Hours	
1	MOPT 201	Ocular Disease and Diagnostics-2	45	3	0		45	3
2	MOPT 202	Binocular Vision & Advanced Orthoptics	45	3	0	0	45	3
	MOPT 203	Neuro optometry	30	2	0	0	30	2
3	MOPT 204	Business and Clinical aspects in Optometry	30	2	0	0	30	2
4	MOPT 205 A MOPT 205 B	Elective 1 Eye banking Elective 2 Clinical	60	4	0	0	60	4
6	MOPT 206	Psychology Research Project - II	0	0	180	6	180	6
	10	Jiai	210	14	100	U	390	20

	Examination										
Paper	Course Code	Internal	Univers	ity Exam.	Total Manka						
	Course Code	Assessment	Theory	Practical	I Utal Marks						
1	MOPT 201	50	40	10	100						
2	MOPT 202	50	40	10	100						
	MOPT 203	50	40	10	100						
3	MOPT 204	10	40	0	50						
4	MOPT 205 A	10	40	0	50						
4	MOPT 205 B	10	40	0	50						
6	MOPT 206	50	0	50	100						
	Total	220	200	80	500						

Pap er	Course Code	Course Title	Theory/ Lecture (Hours)	Cre dits	Practicals/ Clinical Rotation (Hours)	Cre dits	Total Contact Hours	Total Credit Points
		М. О	ptom. 2nd	Year	3 rd SEM			
	• 6	Hours Per Day, 6	Days in a	Week	, 16 Weeks P	er Sei	nester	
	• 6x6	5 – 36 Hours Per V	Week • 36	Hou	s x 16 Weeks	s – 57	6 Hours	
	MOPT	Cornea and	60	4 0	0		60	
1	301 A	Contact Lens				0		1
1	MOPT	Low Vision &			4	0	0	00
	301 B	Rehabilitation						
2	MOPT	Vision Thomas	60	4	0	0	60	4
2	302	vision Therapy	60	4	0	0	60	4
2	MOPT	Special Clinics -	0	0	190	6	190	6
3	303	I	0	0	180	0	180	0
4	MOPT	Research	0	0	190	6	190	6
4	304	Project - III	U	0	180	0	180	0
	T	otal	120	8	360	12	480	20

	Examination											
Donor	Course Code	Internal	University Exam.		Tatal Maulas							
Paper	Course Code	Assessment	Theory	Practical	Iotal Marks							
1	MOPT 301 A	50	40	10	100							
1	MOPT 301 B	30	40	10	100							
2	MOPT 302	50	40	10	100							
3	MOPT 303	50	0	50	100							
4	MOPT 304	50	0	50	100							
	Total	200	80	120	400							

Pa per	Course Code	Course Title	Theory/ Lecture (Hours)	Cre dits	Practicals/ Clinical Rotation (Hours)	Cre dits	Total Contact Hours	Total Credit Points	
		M. O	ptom. 2 nd	Year 4	4 th SEM				
	• 8	8 Hours Per Day, 6	Days in a	Week	, 16 Weeks P	er Ser	nester		
	• 8 X	6 - 48 Hours Per	Week • 4	8 Hou	rs x 16 Week	s - 76	58 Hours		
1	MOPT 401	Special Clinics - II	0	0	360	12	360	12	
2	MOPT 402	Research project and Dissertation	0	0	360	12	360	12	
	ſ	otal	0	0	720	24	720	24	
	Gra	nd Total	540	36	1440	48	1980	84	
• 1 • 1	• 1 Credit = 15 Hrs. of Theory Lectures • 1 Credit = 30 Hrs. of Proceedings/ OPD/ Possageb Work								
	Sessions								
М.	Optom	Total 84 Credits							

Examination					
Paper	Course Code	Internal	University Exam.		Total
		Assessment	Theory	Practical	Marks
1	MOPT 401	100	0	100	200
2	MOPT 402	100	0	100	200
	Total	200	0	200	400
	Grand Total	840	480	480	1800



MASTER OF OPTOMETRY

2nd YEAR, 3rd SEMESTER

MOPT 301 A: CORNEA AND CONTACT LENS

1. Cornea & Contact Lens

COURSE OBJECTIVES:

Upon completion of the course, the student should be able to understand the corneal oxygen requirements and recommend the best suitable contact lens for a particular condition. Management of ocular complications with contact lenses. Understand contact lens fitting for compromised corneas and keratoconus. The student should also be able to understand the fitting philosophy of orthokeratology and myopia control.

COURSE OUTCOME:

- 1. Ability to fit specialized contact lenses
 - 1.1 Keratoconus
 - 1.2 Rose'Klenses
 - 1.3 Mini scleral lenses
 - 1.4 Hybrid lenses
 - 1.5 Orthokeratology
 - 1.6 Scleral lenses: Dry eyes, SJS, Post PK, Post C3R, Post LASIK ectasia
- 2. Ability to fit custom made ocular prosthesis
- 3. Ability to fit pediatric contact lenses

TEXT/ REFERENCE BOOKS:

- 1. IACLE MODULES
- 2. CONTACT LENSES STONE AND PHILIPS

Course Plan:

- 1. Extended and Continuous wear Lenses
- 2. Scleral Contact lenses
- 3. Bifocal and Multifocal contact lenses

- 4. Orthokeratology
- 5. Keratoconus
- 6. Post keratoplasty contact lens fitting
- 7. Post refractive surgery contact lens fitting
- 8. Pediatric contact lens fitting
- 9. Cosmetic and prosthetic contact lens fitting
- 10. Contact lens for abnormal ocular conditions
- 11. Contact lens and Myopia control
- 12. Legal issues and contact lenses
- 13. Contact lens manufacturing
- 14. Modification's procedures

MOPT 301 B: LOW VISION & REHABILITATION

COURSE OBJECTIVES:

Upon completion of the course, the student should be able to understand the best suitable low vision and functional assistive device for a particular condition and rehabilitation. This course gives both in-depth theoretical knowledge and clinical exposure in low vision care. The outcomes of this course are: Thorough understanding of the causes of the low vision, its functional and psychosocial consequences. Help visually impaired individuals to utilize their residual visual skills optimally and rehabilitate.

COURSE OUTCOME:

- 1. Ability to diagnose and manage patients with vision impairment
- 2. Ability to perform specialized diagnostics for patients with low vision with multiple disabilities
- 3. Ability to train for eccentric viewing and steady eye techniques
- 4. Ability to rehabilitate patients with VI with vocational counselling and activities of daily living

TEXT/ REFERENCE BOOKS:

The lighthouse handbook on vision impairment and Vision rehabilitation: Barbara Silverstone, Mary Ann Lang, Bruce Rosenthal, Faye.

Course Plan:

- 1. Habilitation of Children and Youth with vision Impairment
- 2. Rehabilitation of working -age Adults with Vision Impairment
- 3. Rehabilitation of older Adults with Vision Impairment
- 4. Functional consequences of vision Impairment
- 5. Vision evaluation of Infants
- 6. Educational assessment of visual function in Infants and Children
- 7. Functional Evaluation of the Adult
- 8. Functional orientation and Mobility
- 9. Functional Assessment of Low Vision for Activities of Daily living
- 10. Psychosocial assessment of adults with vision impairment
- 11. Assistive Devices and Technology for Low Vision
- 12. Assistive Devices and Technology for Blind
- 13. Vision and Reading Normal Vs Low Vision
- 14. Clinical Implications of color vision Deficiencies

MOPT 302: VISION THERAPY

COURSE OBJECTIVES:

The course is designed to help expand the student's knowledge base in all aspects of behavioural vision care. Advanced competency is expected in the following principles and procedures for each clinical condition.

COURSE OUTCOME

Principles and Procedures – The student should be able to define and explain:

- 1. The unique qualities, scientific, and clinical principles of each clinical condition.
- 2. The epidemiological and demographic characteristics of each clinical condition.
- 3. The characteristic history, signs and symptoms for each clinical condition.
- 4. How to assess each clinical condition, including specific test protocols and their interpretation.
- 5. The differential diagnosis for each clinical condition.
- 6. The specific treatment and management of each clinical condition including:
 - 6.1 Prognostic indicators
 - 6.2 Treatment options
 - 6.3 Duration and frequency of treatment
 - 6.4 Treatment philosophy and goals
 - 6.5 Specific lens treatment and therapy procedures including rationale for treatment
 - 6.6 Ergonomics and visual hygiene
 - 6.7 Outcomes to determine successful completion of treatment
 - 6.8 Frequency of follow-up care and patient instructions
 - 6.9 Referral criteria (medical, neurological, educational, etc.)

TEXT/ REFERENCE BOOKS:

- 1. Clinical management of binocular vision Mitchell Scheiman and Bruce Wick
- 2. Applied concepts in vision therapy: Leonard Press

Course Plan: (Total - 30 hours)

- 1. Clinical Conditions
 - 1.1 Strabismus and Amblyopia
 - 1.1.1 Amblyopia
 - Anisometropic / Isometropic Refractive Amblyopia
 - o Strabismic Amblyopia
 - o Hysterical Amblyopia
 - o Form Deprivation Amblyopia
 - o Differential diagnoses in childhood visual acuity loss
 - 1.1.2 Strabismus
 - 0 Infantile
 - \circ Accommodative
 - \circ Acquired
 - o Microtropia
 - Sensory
 - Convergence Excess
 - Divergence Insufficiency
 - Non-accommodative
 - o Sensory Adaptations
 - o Exotropia
 - Divergence Excess
 - Convergence Insufficiency
 - o Basic Exotropia
 - Congenital
 - Sensory
 - o Vertical Deviations
 - Noncomitant Deviations (AV Syndrome; Duane's Retraction Syndrome; Brown's Syndrome; III, IV, VI nerve palsy, etc.)
 - Differential diagnoses in strabismus
 - Special clinical considerations
 - o Anomalous Correspondence
 - Eccentric Fixation
 - o Suppression
 - Motor Ranges
 - Stereopsis
 - Horror fusionalis/intractable diplopia

- 1.2 Perception and Information Processing
 - 1.2.1 Neurological / Psychological
 - Ambient / focal systems.
 - Visual perceptual midline
 - Parvo cellular / Magno cellular function
 - Perceptual Style (central, peripheral)
 - o Impact of colored filters
 - o Attention
 - 1.2.2 Intersensory and Sensorimotor Integration
 - o Visual-auditory
 - o Visual-vestibular
 - o Visual-oral
 - o Visual-motor
 - o Visual-tactual
 - 1.2.3 Performance indicators
 - o Laterality and directionality
 - o Visual requirements for academic success
 - o Bilaterality
 - Gross and fine motor ability
 - Form perception/visual analysis
 - Spatial awareness
 - o Visualization
 - Visual memory
 - Visual sequential memory
 - o Form constancy
 - o Visual speed and visual span
 - Visual sequencing
- 1.3 Refractive conditions and visual skills
 - 1.3.1 Refractive Conditions
 - Developmental influence on refraction & emmetropization
 - o Aniseikonia
 - o Myopia
 - o Astigmatism
 - o Hyperopia

- 1.3.2 Ocular Motor Function
 - Eye movements and reading
 - Pursuit dysfunctions
 - 0 Nystagmus
 - Saccadic Dysfunctions
- 1.3.3 Accommodation
 - Role in myopia development
 - Role in computer-related asthenopia
- 1.3.4 Fusion in Non-Strabismic Conditions
 - Fixation disparity
 - Motor fusion
 - \circ Sensory fusion
- 1.4 Special clinical conditions
 - 1.4.1 Acquired brain injury (traumatic brain injury {TBI} and stroke)
 - 1.4.2 Developmental disabilities (Down Syndrome, Developmental delay, etc.)
 - 1.4.3 Visually induced balance disorders
 - 1.4.4 Motor disabilities (Cerebral Palsy, ataxia, etc.)
 - 1.4.5 Behavioral disorders
 - 1.4.6 Autism spectrum disorders
 - 1.4.7 ADD / ADHD
 - 1.4.8 Dyslexia and specific reading disabilities
 - 1.4.9 Learning Disabilities
 - 1.4.10 Computer Vision Syndrome
- 2. Vision Therapy Concepts to Consider
 - 2.1 Peripheral awareness:
 - 2.1.1 focal / ambient roles
 - 2.1.2 Significant findings which are good or poor prognostic indicators of vision therapy and lens application
 - 2.1.3 Development, rehabilitation, prevention, enhancement
 - 2.1.4 Behavioral lens application

- 2.1.5 Yoked prism rationale for treatment and application
- 2.1.6 The relationship between the visual and vestibular systems
- 2.1.7 SILO/SOLI
- 2.1.8 Visual stress and its impact on the visual system
- 2.1.9 Role of posture in vision development, comfort and performance
- 2.1.10 Disruptive therapy: Discuss this type of therapy and how it can be used as a clinical therapeutic tool.
- 2.1.11 Relationship of speech-auditory to vision
- 2.1.12 How television, reading, video gaming might restrict movement, computer work, nutrition, etc., impact vision?
- 2.1.13 Perceptual Style, e.g., spatial/temporal, central/peripheral

MOPT 303: SPECIAL CLINICS - I

OBJECTIVES:

The objective of clinics in this semester is to be able to gets hand-on experience related to diagnosis, interpretation of the reports/findings and management.

An approximate of guided 240 hours needs to be completed in this semester. The students will be by rotation go to community clinics, Campus clinics, and associated hospital and optical / optometric clinics.

The focus will be on the specialized subjects studies in this semester.

The logbook has to be maintained and case sheets of each subject in the semester with complete management and follow up are mandatory for submission at the end of the semester

The log book needs to be signed by the supervisor during every visit. No case record will be considered without the supervisor's signature

MOPT 304: RESEARCH PROJECT – III

OBJECTIVE:

Data Collection, Literature search, Presentation of the progress of the project to the guide.

OUTCOME:

Students will be able to give the project presentation effectively



M. OPTOM 2ND YEAR IV SEMESTER

MOPT 401: SPECIAL CLINICS - II

OBJECTIVES:

The objective of clinics in this semester is to be able to gets hand-on experience related to diagnosis, interpretation of the reports/findings and management.

An approximate of guided 420 hours needs to be completed in this semester. The students will be by rotation go to community clinics, Campus clinics, and associated hospital and optical / optometric clinics.

The focus will be on the specialized subjects studies in this semester.

The logbook has to be maintained and case sheets of each subject in the semester with complete management and follow up are mandatory for submission at the end of the semester

The log book needs to be signed by the supervisor during every visit. No case record will be considered without the supervisor's signature

MOPT 402: RESEARCH PROJECT AND DISSERTATION

OBJECTIVE

Literature search, Data analysis, Interim Analysis, Thesis write-up, Presentation of the

research work in front of the experts, and manuscript write -up for journal (optional)

OUTCOME:

- 1. Students will be able to select the journal according to their article,
- 2. Students will know the steps to write manuscript and the details pertaining to journal's in 'About Us'
