(Formerly West Bengal University of Technology)

## Syllabus for Master of optometry (Effective for Students Admitted in Academic Session 2018-2019)

## **Curriculum Structure**

1<sup>st</sup> Year 1<sup>st</sup> Semester:

### Theory:

SIN o.	Code	Paper name	Contact periods Per week			Total Contact	Credits
0.			L	T	P	Hrs	
1	MO-101	Applied Optometric Optics	3	1	0	4	4
2	MO-102	Advanced ophthalmic diagnostic procedures & instrumentation	3	1	0	4	4
3	MO-103	Epidemiology and Community optometry	3	1	0	4	4
4	MO-104	Research Methodology & Biostatistics	3	0	0	3	4
5	MO-105	Business aspects in optometry	3	0	0	3	4
		Total of Theory				20	20
Prac	tical:						
SIN o.			Contact periods Per week			Total Contact	Credits
			L	Т	Р	Hrs	
1	MO-191	Applied Optometric Optics	0	0	3	3	2
2	MO-192	Advanced ophthalmic diagnostic procedure & instrumentation	0	0	3	3	2
		Total of Practical				6	4
		Total of Semester				24	24

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## 1 Semester:

### Theory:

SI No.	Code	Paper name	Contact periods Per week			Total Contact	Credits
			L	Т	Р	Hrs	
1	MO-201	Applied clinical optometry	3	0	0	3	3
2	MO-202	Advanced contact lens practice -I	3	1	0	4	4
3	MO-203	Geriatric optometry & Low vision rehabilitation -I	3	1	0	4	4
4	MO-204	Ocular diseases & Therapeutics	3	0	0	3	3
5	MO-205	Paediatric Optometry and binocular Vision I	3	1	0	4	4
		Total of Theory				18	18
Prac	tical/Session	al:			1		
SIN o.	· '			ntact peri Per week		Total Contact	Credits
			L	T	P	Hrs	
1	MO-291	Advanced contact lens practice -I	0	0	3	3	2
2	MO-281	Geriatric optometry & Low vision rehabilitation- I	0	0	3	3	2
3	MO-282	Pediatric Optometry & Binocular vision I	0	0	3	3	2
		Total of Practical				9	6
		TOTAL OF SEMESTER			9	27	24

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## 2<sup>nd</sup> Year 1<sup>st</sup> Semester: Theory:

SI No.	Code	Paper name	Contact periods Per week			Total Contact	Credits
			L	T	Р	Hrs	
2	MO-302	Occupational optometry	3	0	0	3	3
3	MO- 303	Geriatric optometry and low vision rehabilitation II	3	1	0	4	4
4	MO-304	Pediatric optometry & binocular vision II	1	0	4	4	
5	MO -305	Advance contact lens practice II	3	1	0	4	4
		Total of Theory					15
Prac	tical/Session	al:					
SIN	Code	Paper name	Contact periods			Total	Credits
Ο.			Per week			Contact	
			L	Т	Р	Hrs	
1	MO-391	Geriatric optometry and low vision rehabilitation II	0	0	3	3	2
2	MO-392	Pediatric optometry & binocular vision II	0	0	3	3	2
3	MO-393	Advance contact lens practice II	0	0	3	3	2
4	MO-381	Recent advances in Optometry	0	0	3	3	3
		Total of Practical				9	9
		TOTAL OF SEMESTER			9	27	24

## 2<sup>nd</sup> Year 2<sup>nd</sup> Semester:

#### Practical/Sessional:

SI No.	Code	Paper name	Contact periods Per week			Total Contact	Credits
			L	T	Р	Hrs	
1	MO-491	Speciality Clinics	0	0	0	15	10
2	MO-481	Dissertation	0	0	0	15	14
		Total of Practical				30	24

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#### **CURRICULUM DETAIL**

Subject: Applied Optometric Optics (MO-101)

#### **Clinical Optics**

- 1. The eye as an optical system
- 2. Measurements of the optical constants of the eye.
- 3. Correction of Ametropia.
- 4. Applied visual optics.
- 5. Aberration and ophthalmiclens.
- 6. Clinical aberrometry. Optics of refractive surgery. Wave front-guided refraction and treatments.
- 7. Optical principles of Low vision and contact lens

#### **Dispensing Optics**

- 1. Measuring Monocular & binocular PDs both distance & near with PD Ruler, Pupillometer, Dot method
- 2. Spectacle lenses (characteristics of lens materials, ISI standards for ophthalmic lens, Lens design)
- 3. Prism (Properties & uses in optometry)
- 4. Lens surfacing & quality (principles of lens surface generation, glass assessment, faults in lens materials & lens surface, inspection of lens quality)
- 5. New generation ophthalmic lens materials.
- 6. Lens for special uses- Fresnel lenses, thinlite lenses, aspheric, hi-index, absorptive & protective & photochromatic lenses, high refractive error lenses.
- 7. Anisometropia and aniseikonia.
- 7. Absorptive lenses and coatings.
- 8. Progressive addition lenses (designs, marking & fitting, trouble shooting)
- 9. Spectacle frames (designs, materials, types, measurements & marking)
- 10. Dispensing aids (latest instruments, organisation of dispensing counter, cosmetic & functional dispensing, final checking, adjustments & dispensing prescription spectacle, patient education on handling of spectacle lenses, trouble shooting)
- 11. Ophthalmic Prisms and decentration.

#### Suggested Books:

1. Optics of human eye – Smith Etchision. Butterworth Heinemann

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- 2. Clinical optics BUDD APPLETON. Butterworth Heinemann
- 3. Spectacle Lenses Theory and practice Coling Fowler, Butterworth Heinemann.
- 2. Ophthalmic Lenses and dispensing M.Jalie, Butterworth Heinemann.

#### Subject Code: MO-102

#### Subject: Advanced Ophthalmic diagnostic procedures & Instrumentation

- 1. Refraction instruments (designs & features of standard test charts, trial frame & Phoropter unitsmanual & automated)
- 2. Slit lamp Biomicroscope (designs & features, application).
- 3. Tonometers (designs & features, application)
- 4. Anterior segment diagnostics-Corneal topography (videokeratography, Specular microscopy, Corneal Histerisis, Aberometry & Pentacam, ORB scan)
- 5. Glaucoma diagnostics Gonioscopy, computerized Visual field analysis (Perimetry)
- 6. Electro diagnostics
- 7. Orthoptic instruments used in assessment & management of binocular vision disorders.
- 8. Posterior segment diagnostics (ERG, EOG, VER, FFA, OCT, HRT, GDx, ONH evaluation, fundus photography)
- 9. Lensometer (designs & features)
- 10. Binocular indirect Ophthalmoscopy
- 11.cataract evaluation
- 12. Colour vision devices
- 13. Ultrasonography
- 14. SPECIAL INSTRUMENTS & TESTS: Brightness acuity test, Vision analyzer, Pupilometer, Video acuity test, Potential Acuity Meter, Abberometer

#### **Suggested Books:**

Optometric Instrumentation: David Hensen

Diagnostics and imaging techniques in Ophthalmology: Amar Agarwal

James Wolffsohn: Eye Essentials Ophthalmic Imaging,

Mark Brezinski,: Optical Coherence Tomography: Principles and Applications Benjamin F.Boyd: Wavefront analysis aberrometers and corneal topography Arun D.singh: Ophthalmologic Ultrasound, An Issue of Ultrasound Clinics, vol 3

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## Syllabus for Master of optometry (Effective for Students Admitted in Academic Session 2018-2019)

Subject Code: MO-103

#### Subject: Epidemiology & Community Optometry

- Epidemiology of Blinding Eye Diseases, Skills for Field Projects in Eye Care,
- Eye Care Programmes,
- Basic Epidemiology, Methodology, Basics of Epidemiology study methods, Types of study designs, Screening for visual disorders, Childhood blindness, Refractive errors and presbyopia, Age related cataract, Low Vision, Diabetic retinopathy, glaucoma, Age related Macular Degeneration, Vitamin A deficiency.
- · Corneal and external diseases- Prevention strategies
- Introduction to Health Economics.
- Childhood Eye Disease and Ocular Infections
- How to Plan and Implement a VISION 2020: The Right to Sight project
- Skills, Resources and Technology for VISION 2020: The Right to Sight, Proposal Development,
- Analysing Survey & Population Data; Health Systems;
- Sociological, Approaches to Health.
- Comparative studies of health care system
- · Optometry in a multi disciplinary health care system
- Quality assurance in health care
- Roles & responsibilities of community health optometrist.
- Demography & Epidemiology of occupational eye disease & injuries
- Communicable & Non-communicable Eye diseases, modes of disease transmission.
- Health problems in India (types, cause, management)
- Social issues & optometric involvement, law & ethics
- National Health Programs & role of optometrist.
- Various national health & community eye programmes.
- National health & eye care policies- Vision 2020 The Right to Sight
- Role of optometrist in national health programs for prevention of blindness.

### Suggested Books:

- 1. GVS Murthy, S K Gupta, D Bachani: The principles and practice of community Ophthalmology, National programme for control of blindness, New Delhi, 2002
- 2. Newcomb RD, Jolley JL: Public Health and Community Optometry, Charles C Thomas Publisher, Illinois, 1980
- 3. KPark: Park's Text Book of Preventive and Social Medicine, 19th edition, Banarsidas Bhanot publishers, Jabalpur, 2007
- 4. MC Gupta, Mahajan BK, Murthy GVS, 3rd edition. Text Book of Community Medicine, Jaypee Brothers, New Delhi, 2002
- 5. Epidemiology of eye diseases: Johnson and Gordon

#### Subject Code: MO-104

#### Subject: Research methodology & Biostatistics

- Introduction to research design (definition, characteristics, purpose, types, ethics & statement of the problem & research proposal)
- Conducting a literature review ,Sampling methods , Data collection and data collection tools , Data analysis: Quantitative and Qualitatively , Issues in Research .Writing skills for students.
- Introduction and method of collecting and presenting of statistical data

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- Methods of data collection & research proposal (techniques & instruments including questioning,
- observation & measurement, writing a research proposal)
- Implementation of research plan (collection of data, organisation, and summarization, structure of statistical methods, interpretation & presentation of data.)
- Research report (composition & format, critical analysis of each report & publication.
- Introduction to statistics, Calculation and interpretation of various measures like mean, median, standard deviations, Skewness and Kurtosis
- Probability distribution
- Correlation and regression
- Significance tests and confidence intervals
- Parametric tests Test for single proportion, Test for Equality of proportions, Test for single mean, Test for equality of means
  - ANOVA:- One way, Two way
  - Non parametric tests Chi-square tests, Fisher's exact test, McNemar test, Mannwhitney U-test, Median test, Sign test, Wilcoxon test

#### **Suggested Books:**

 $Methods in Biostatistics\hbox{-}B.K\,Mahajan$ 

Probability and Statistics - Murray

Research Methodology - SM Israni

Research Methodology - Methods & Techniques - C.R. Kothari, 2 Edition (1992), Eastern limited publication.

#### .Subject Code: MO-105

#### **Subject : Business Aspects in Optometry**

- 1. Training in business, marketing & management skills
- 2. Understanding financial management
- 3. Understanding & evaluating potential target markets.
- 4. Reviewing & Optimising products/service mix for target markets
- 5. Business set up, product development, retail sales, marketing
- 6. Systems & procedures in human resources.
- 7. Making a business project report & maintaining accounts for an optometric or optical establishment.

- Business Aspects of Optometry John Classe, Donald Lakin, Butterworth Heinemann
- Business Awareness for Optometry Nizar Hirji, Butterworth Heinemann
- Management of Eye Care Practitioner Irving Bennett, Butterworth Heinemann
- Management for Opticians Thomas Appler, Raymond Dennis, Eric Muth, Butterworth Heinemann.
   Marketing, Managing and Contact Lenses Robert Koetting, Butterworth Heinemann

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## Syllabus for Master of optometry (Effective for Students Admitted in Academic Session 2018-2019)

### Semester-II

### Subject Code: MO-201

#### Subject- Applied Clinical optometry

- Accommodation & Convergence measurements (Amplitude of accommodation, Accommodative facility, NRA-PRA, AC/A ratio, CA/C ratio, vergence facility, NPC, PRC-NRC), Phorometry
- Objective & Subjective refraction techniques.
- Extra ocular motility techniques (distance & near) Cover test, Alternating cover test, Hirschberg test, Modified Krimsky methods
- Pupil Examination
- External examination of eye
- Tear film tests- Schirmer's, TBUT, tear meniscus level, NIBUT
- Colour Vision & stereopsis
- Confrontation test
- Photostress test
- Slitlamp biomicroscopy
- Direct & Indirect Ophthalmoscopy
- ROPLAS
- Amsler test
- Corneal Sensitivity test
- Saccades and Pursuits

#### **Suggested Books:**

- 1. Borish's Clinical Refraction-William Benjamin, Butterworth Heinemann
- 2. Clinical procedures in primary eye care- David. Elliott. 4<sup>th</sup> Ed. Elsevier 2013

#### Subject Code: MO-202

#### Subject- Advanced Contact Lens Practice I

- Anatomy and Physiology of the Cornea and related Structures
- Latest trends in contact lens materials & manufacturing methods
- Optics of contact lens & design
- Microbiology, Lens Care and Maintenance
- Tears and contactlenses
- Clinical Instrumentation in contact lens practice
- Rigid Gas Permeable corneal lens fitting
- Soft contact lens fitting
- Toric Contact lens fitting
- Lens care regimen
- Contact lens standards

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- · Lens verification and modification : Soft and Rigid
- Contact lens complications
- Special types of Contact lenses diagnosis, surgery, protective, therapeutic, sports, partially sighted
- Practice management in contact lens
- Researches in contact lens

#### **Suggested Books:**

- 1.IACLE Modules- 1-10
- 2. Contact Lens Practice- Nathan Efron, Elsevier Sciences, Third Edition
- 3. Contact Lenses-Philips Stone
- 4. Fitting guide for Rigid & soft contact lens: A practical Approach: Slatt & Stein

#### Subject code: M0-203

#### Subject: Geriatric Optometry & Low vision rehabilitation I

Structural changes in eye during old age.

- Vision & Aging
- Physiological changes in eye during old age.
- Optical & refractive changes in eye due to ageing.
- Genetics & low vision
- The Epidemiology of Vision Impairment
- Vision Impairment in the pediatric population
- Ocular Diseases: Age Related Cataract, Glaucoma ARMD Diabetic retinopathy Corneal Disorders, Ocular Trauma, Sensory Neuro-ophthalmology and Vision Impairment, Refractive Disorders
- Visual Disorders The Functional Perspective
- Visual Functioning in Pediatric Populations with Low Vision, Perceptual correlates of Optical Disorders, Functional aspects of Neural Visual Disorders of the eye and Brain, Visual Disorders and Performance of specific Tasks requiring vision, Visual Disorders, Developmental perspectives – Youth, Vision Impairment and Cognition, Spatial orientation and Mobility of people with vision impairments, Social skills Issues in vision impairment, Communication and language: Issues and concerns, Developmental perspectives on Aging and vision loss

Vision and cognitive Functioning in old age, Interactions of Vision Impairment with other Disabilities and sensory Impairment, Children with Multiple Impairment, Dual Vision and Hearing Impairment, Diabetes Mellitus and Vision Impairment, Vision Problems associated with Multiple Sclerosis, Vision Impairment related to Acquired Brain Injury, Vision and Dementia, Low Vision and HIV infection

### The Environment and Vision Impairment: Towards Universal Design

- Indian Disabilities act, Children's Environments
- Environments of Olderpeople
- Outdoor environments
- Lighting to enhance visual capabilities
- Signage and way finding: Accessible Environments through Technology

#### Suggested Books:

Vision and Aging – A.J.ROSSENBLOOM Jr. & M.W.MORGAN, Butterworth Heinemann 1993. Low Vision principles & Practice-Christine Dickinson Butterworth-Heinemann, 1998

The art and Practice of Low Vision- Paul .B. Freeman & Randall.T.Jose, Butterworth-Heinemann, 1991

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Subject Code: MO-204

Subi	ect	· Ocu	lar Disea	Ses & T	Theran	eutics
3uv	CCL	. Ocu	iai vis <del>c</del> o	ises a	ı ii <del>c</del> i av	cutics

1. Basi	c principle of pharmacokinetics & Pharmacodynamics
2. Com	monly used ocular drugs, mechanism, indications, contraindications, drug dosage and
	Diagnosis, management & therapy of anterior ocular surface disease (infection & inflammation of the
	conjunctiva, cornea, eyelids, ocular adnexa)
	Inflammatory disease of the uvea, lacrimal system, glaucoma
	Posterior segment - Congenital & acquired retinal disease, diabetic retinopathy, age related maculopathy
	Ocular injuries, trauma
	Neuro- ophthalmic disorders
	Co-management of systemic and ocular diseases
inflamm system <b>Princip</b> effects of	al Pharmacology Basic principles of pharmacology. Mechanisms of action and side effects of: anti- natory, autonomic, cardiovascular, autocoid, respiratory, CNS, anti-diabetic, chemotherapeutic, immune , and Gl drugs.  oles and application of ocular pharmacology - Medications used in treatment of ocular disease. Ocular of systemic medications. Classification of ophthalmic drugs (parasympathomimetics, parasympatholytics, homimetics, sympatholytics, Antibiotics, anti inflammatory).  Mode of administration  Management of (Allergic Eye Disease, Lid Margin Disease, Dry eyes, corneal injuries)  Case Studies  Medical Management of Glaucoma  Contraindications and adverse effects  Role of Pharmacology in clinical optometry  Diagnostic drugs in optometry  Newer trends in ophthalmic drugs
Sugges	sted Books:
	Ocular Disease: Clinical Ophthalmology: Jack J Kanski
	Ophthalmology- Yanoff & Duker. Elsevier Saunders, 2014
	T J Zimmerman, K S Kooner: Text Book of Ocular Pharmacology, Lippincott-Raven, 1997
	K D Tripathi: Essentials of Medical Pharmacology. 5th edition, Jaypee, New Delhi, 2004
	Ashok Garg: Manual of Ocular Therapeutics, Jaypee, New Delhi, 1996
•	Advanced ophthalmic diagnostic & Therapeautics – 1992, Susan C.Benes, Jaypee publishers

#### Subject Code: MO-205

### Subject: Paediatric optometry & Binocular vision I

 $\label{lem:paediatricv} PAEDIATRICE ye \& Vision Examination-Assessment of paediatric vision refractive status, binocular vision \& ocular motility.$ 

Clinical evaluation of efficient visual function, strabismus & amblyopia.

Assessment & management of special needs patients including those with genetic conditions, developmental disabilities & traumatic brain injury.

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Diagnosis of paediatric eye movement disorders-

Compensatory treatment & remedial therapy for refractive errors & all types of strabismus.

Amblyopia & its implication on learning process. Clinical practice in Amblyopia Dyslexia & learning disabilities.

Relation between learning & vision.

Treatment & management of learning disabilities in children.

pediatric ocular disease

Dispensing for th Child patient

Pediatric Contact Lens Practice

Dyslexia and Optometry Management

Strabismus and Amblyopia

Nonstrabismic Binocular Vision Anomalies, Convergence insufficiency, Convergence excess, Fusional vergence dysfunction. Functional Ocular Motor Dysfunction Disorders of accommodation Esodeviations, Exodeviations, Mechanically restrictive strabismus, Paralytic strabismus, Horizontal gaze disturbances, Vertical gaze disturbances, Ocular myasthenia gravis, Diagnostic techniques.

#### Suggested Books:

- 1. Clinical manag<mark>ement of binocular vision Mitchell Scheimann and Bruce Wick. 4<sup>th</sup> Edition. Lipincott Wilia</mark>ms & Wilkins. 2014
- 2. Applied concepts in vision therapy: Leonard Press
- 3. Pediatric optometry: Harvey Gilmartin Butterworth-Heinemann; 1 edition.2004
- 4. Pickwells Binocular Vision Anomalies- Bruce JW Evans. 5<sup>th</sup> Edition
- 5. Binocular Vision & Ocular Motility- Gunter V. K. Noorden- Sixth Edition Mosby Publication.

#### Subject code: M0-381

#### Subject: Recent Advances in Optometry

In this course latest articles published in optometry and vision science journals will be discussed. This will enable the students to keep abreast of latest developments in the field of optometry and vision science. Evidence based optometry

Research protocol - I

Aim and literature review.

Suggested Reading: Literature review of National and International optometry Journals.

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## Syllabus for Master of optometry (Effective for Students Admitted in Academic Session 2018-2019)

Subject code: M0-302

### **Subject: Occupational Optometry**

- 1. Visual performance & vision efficiency
- 2. Visual standards & vision screening
- 3. Ocular injuries (incidence & their prevention, mechanical & non mechanical) and hazards
- 4. Eye protection (regulations & standards). Protective eyewear.
- 5. Lighting and visual performance
- 6. Ergonomics Visual display units (aesthenopia, radiation, precautions & significance of correction)
- 7. Ultra violet radiation & its hazards in & around eye.
- 8. Sunglasses & sports vision eye wear
- 9. Color vision & color coding
- 2. Sports Vision-Introduction to Sports Vision Sports and Vision, Visual Task Analysis in Sports, Visual Information Processing In Sports, Visual Performance Evaluation. Sports Vision Screening and Report Strategies Ocular Injuries in Sports: Assessment and Management, Enhancement of Visual skills in Sports, Visual Needs in different kind of sports
- (a) Vision screening of athletes
- (b) Contactlenses&sports
- (c) Eye protection in sports
- (d) Prescribing for sport vision patients
- (e) Vision enhancement for participation in sports

- 1.R V North: Work and the eye, Second edition, Butterworth Heinemann, 2001 Sports Vision D.F.C. Loran, C.J.Mac Eween, Butterworth Heinemann
- 2. G Carson, S Doshi, W Harvey: Eye Essentials: Environmental & Occupational Optometry, Butterworth-Heinemann, 2008

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## Syllabus for Master of optometry (Effective for Students Admitted in Academic Session 2018-2019)

Subject code: M0-303

#### Subject: Geriatric Optometry & Low vision rehabilitation II

- 1. Rehabilitation 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 Vision Rehabilitation:

#### In Western Countries

In Asia

Personnel preparation in Vision Rehabilitation

Psychological and social factors in visual Adaptation and Rehabilitation

The Role of psychosocial Factors in adaptation to vision Impairment and Habilitation outcomes for Children and Youth

The Role of psychosocial Factors in adaptation to vision Impairment and Habilitation outcomes for Adults and Older adults

Social support and adjustment to vision Impairment across the life span

The person – Environment perspective of vision impairment

Associated Depression, Disability and rehabilitation

Methodological strategies and issues in social research on vision Impairment and rehabilitation

Management & rehabilitation of elderly persons with limited visual acuity.

Introduction to Orientation and mobility

Low vision assessment and intervention Assessment Diagnostic procedures in low vision cases

Prescribing, demonstrating & teaching the patient to use low visual aids.

Clinical low vision practice

- 1. Vision and Aging A.J.ROSSENBLOOM Jr. & M.W.MORGAN, Butterworth Heinemann 1993.
- 2. Low Vision principles & Practice- Christine Dickinson Butterworth-Heinemann, 1998
- 3. The art and Practice of Low Vision- Paul .B. Freeman & Randall.T. Jose Butterworth-Heinemann, 1991

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## Syllabus for Master of optometry (Effective for Students Admitted in Academic Session 2018-2019)

Subject code: M0-304

#### Subject: Pediatric Optometry and Binocular Vision II

- Vision therapy- introduction & general concepts, latest techniques & office & home therapies.
- Training with VTInstruments
- Practice management issues in vision therapy.
- Non strabismic binocular vision anomalies Instrumentation used in vision therapy
- Computer vision syndrome (CVS) Diagnosis and Management
- Perception and perceptual anomalies
- Visual information processing disorders and therapy
- Neuro optometric rehabilitation
- Post trauma vision syndrome and therapy
- Visual midline shift syndrome and therapy
- Learning disorders and therapy
- Special clinical conditions
- Acquired brain injury and therapy
- Developmental disabilities Therapy
- Motor disabilities therapy
- Behavioral disorders and therapy

- 1. Clinical management of binocular vision Mitchell Scheimann and Bruce Wick. 4<sup>th</sup> Edition. Lipincott Wiliams & Wilkins. 2014
- 2. Applied concepts in vision therapy: Leonard Press. OEPF
- 3. Pediatric optometry: Harvey Gilmartin Butterworth-Heinemann; 1st edition.2004
- 4. Pickwells Binocular Vision Anomalies- Bruce JW Evans. 5<sup>th</sup> Edition

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## Syllabus for Master of optometry (Effective for Students Admitted in Academic Session 2018-2019)

Subject code: M0-305

#### Subject: Advanced contact lens practice-II

- 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 lensfitting
- 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) Ocular Prosthesis

#### **Suggested Books:**

- 1.IACLE Modules- 1-10
- 2. Contact Lens Practice- Nathan Efron. Elsevier Sciences. Third Edition
- 3. Contact Lenses-Philips Stone
- 4. Fitting guide for Rigid & soft contact lens: A practical Approach: Slatt & Stein

#### M.O PTOM, 2<sup>ND</sup> YEAR

#### Subject code: MO-491

• Speciality Clinics (Lab and Industry faculty guided)

### Subject code: MO-482

Team of students will be doing a research project under the guidance of a supervisor (who could be optometrists/vision scientists/ ophthalmologist). Student will get the experience of doing a research in systematic approach – identifying the primary question, literature search, identifying the gaps in the literature, identifying the research question, writing up the research proposal, data collection, data analysis, thesis writing and presentation.

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#### Dissertation

- 1. Introduction
- 2. Aims/ Objectives for study
- 3. Review of literature, material & methods.
- 4. Results, discussions, conclusions
- 5. Summary, references, tables, annexure

#### **ANNEXURE-I**

#### List of laboratories/Clinic for M.Optom Programme

### 1<sup>st</sup> Year 1<sup>st</sup> semester

Lab/clinic Name: Optics

Lab/clinic Name: Ophthalmic Instruments

Lab /clinic Name: Orthoptics

## 1st Year 2nd semester

Lab/clinic Name: Clinical Refraction

Lab/clinic name: Contact Lens

Lab/clinic name: Low Vision

# MAULANA ABUL KALAM AZAD UNIVERSITY OF TECHNOLOGY, WB (Formerly West Bengal University of Technology)

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