

**Shri Rawatpura Sarkar University,
Raipur**



**Examination Scheme & Syllabus
for
MASTER OF SCIENCE IN OPTOMETRY
SEMESTER-III
CBCS PATTERN**

(Effective from the session: 2019-20)



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Master of Science in optometry
Semester-III
Examination Scheme
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Teaching and Examination Scheme

Outcome Based Education (OBE) and Choice Based Credit System (CBCS)

(Effective from the Academic Year 2022-2023)

S. No.	Course Code	Course Title	Hours / Week			Credits	Maximum Marks			Sem End Exam Duration (Hrs)
			L	T	P		Continuous Evaluation	Sem End Exam	Total	
1.	SMS09301 T	Advance Contact Lens		4		4	30	70	100	3
2.	SMS09302 T	Visual Rehabilitation & Vision training and Sports Vision		4		4	30	70	100	3
3.	SMS09303 T	Medical Law and Ethics		4		4	30	70	100	3
4.	SMS09181P	Practical Advance Contact Lens			4	2	15	35	50	4
5.	SMS09182P	Clinics (specialty)			12	6	50	50	100	4
6.	SMS09183P	Case Presentation			12	6	50	50	100	4
TOTAL				12	16	26	550			



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Title	ADVANCE CONTACT LENS				
Code	MSCOP301				
Credit	L	T	P	TC	
	4			4	
Prerequisite	Basic knowledge of Contact lenses.				
Objective	The objective of Advance contact clinics in this semester is to be able to gets hand-on experience related to diagnosis, interpretation of the reports/findings and management of special contact lenses				
Content	<p>UNIT – I Ability to understand corneal physiology and oxygen needs. Ability to diagnose and management.</p> <p>UNIT – II Complications due to contact lenses, Ability to fit specialized contact lenses, Keratoconus, Rose’K lenses.</p> <p>UNIT – III Ability to fit specialized contact lenses, Mini scleral lenses, Hybrid lenses, Orthokeratology.</p> <p>UNIT – IV Scleral lenses: Dry eyes, SJS, Post PK, Post C3R, Post LASIK Ectasia.</p> <p>UNIT – V Prosthesis and Pediatric contact lenses: Ability to fit custom made ocular prosthesis, Ability to fit pediatric contact lenses.</p>				
Outcomes	<ul style="list-style-type: none">• Ability to understand corneal physiology• Ability to fit specialized contact lenses• The objective of Advance contact clinics is to be able to gets hand-on experience related to diagnosis				



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	<ul style="list-style-type: none"> • Management of specialty contact lenses • Ability to fit pediatric contact lenses
Text books	<ol style="list-style-type: none"> 1. Textbook Of Contact Lenses Paperback – 31 January 2017 by Sinha Rajesh (Author) 2. Contact Lens Primer Paperback – 1 January 2007 by Chaudhry (Author) 3. Contact Lenses Hardcover – 25 September 2006 by Anthony J.
Reference books	<ol style="list-style-type: none"> 1. Clinical Manual of Contact Lenses Paperback – 1 December 1999 by Edward S. Bennett (Author), Vinita Allee Henry (Author) 2. Contact Lens Fitting Guide Paperback – 1 January 2020 by Ajay Kumar Bhootra (Author) 3. Contact Lens Complications: Expert Consult - Online and Print Hardcover – 6 August 2012 by Nathan Efron

Course Title	VISUAL REHABILITATION & VISION TRAINING & SPORTS VISION				
Course Code	SMS09302T				
Course Credits	L	T	P	TC	
	4			4	
Prerequisites	Basic knowledge about Rehabilitation and sports vision.				
Course objective	Vision sports training program can help athletes of all ages and skill sets to hone their abilities and break through their barriers. The program is particularly successful for improving hand-eye coordination, reaction time and peripheral awareness. It has also been shown to reduce injuries and decrease the risk of concussions, keeping you on your feet and on the field.				
Course Contents	UNIT-I Introduction to Optometric Rehabilitation, History of Rehabilitation Optometry, Definition and Principles of Rehabilitation, Symptomatology of Visual Disorders E.g. Poor Balance, Visual Hallucinations, Poor Depth				



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Perception Poor ,TrackingAbility ,Poor Visual memory,Poor Hand –Eyeco-ordination, Approach to Optometric Rehabilitation, Therapeutic Approach to Optometric Rehabilitation.

UNIT-II

Neoplasia Therapeutic Approach to Optometric Rehabilitation, Visual Therapy Training, Orthoptics, Peripheral Nerve Regeneration, The Physiologic / Aspects and Clinical Application of Functional Electrical Stimulation in Rehabilitation, Optometric Rehabilitation Assessments: Actual Case Exposure & Observation, Low Vision, Visual Field Defect Central Visual Field Defect Peripheral Visual Field Defect, Neurology Cerebral Palsy, Cerebrovascular Accidents Head Injury, Motor Neuron Diseases Multiple Sclerosis Muscular Dystrophy Parkinson’s Disease Peripheral Nerve Lesion Spinal Cord Lesion Brain TumorPost – concussion ,Syndrome Others, Special Concerns: Visual Agnoxia, Alexia, Dyslexia, Dementia, LegallyBlind, Down’s Syndrome.

UNIT-III

Optometric Rehabilitation Management, Preliminary Rehabilitative Assessment and Screening, Medical, Orthoptics / Low Vision / Surgical management, Case History, Symptomatology and Expectations

Psychological and Behavioral Assessment, Rehabilitative Evaluation and Diagnosis, Activity analysis and Interest Comprehensive Evaluation of Visual Skills, Diagnosis of Visual Skill Dysfunction, Prescribing of Appropriate Therapy and Enhancement of, Remaining Skills: Visual Skills, Motility, Life Skills Adaptation / Orientation / Environmental Manifestation Counseling and Recommendation Referral System and or Co- Management, Physiatrist, physical therapist, occupational therapist, cognitive therapist, psychologist, neurologist, others.

UNIT-IV

Principles of Vision Training , Introduction to Sports Vision History of Sports Vision Definitions of Terms, Vision and Sports: Vision Performance and Athletics, Equipment List, Sports Terminologies, Sports Vision



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	<p>Examination, Visual Acuity & Contrast Refraction, Color Vision, Stereopsis.</p> <p>UNIT-V</p> <p>Dominant Eye / Hand , Eye Health, Ocular Motility, Cover Test, Visual Field, Visual Field, Glare Sensitivity, Accommodation – Vergence Facility, Dynamic Visual Acuity, Eye–Hand & Eye-Foot Co- ordination, Response Speed, Peripheral Awareness Visual Skills in Sports and Development.</p>
Course outcomes	<ul style="list-style-type: none">• To understand about optometric rehabilitation• Therapeutic Approach to Optometric Rehabilitation• Assessment and Screening• To understand Principles of Vision Training• Awareness Visual Skills in Sports and Development
Text books	<ol style="list-style-type: none">1. Textbook of Rehabilitation Paperback – 1 January 2010 by <u>Sunder</u> (Author)2. Textbook of Rehabilitation Paperback – 1 January 2019 by <u>S Sunder</u> (Author)3. Physical Rehabilitation 6e (O'Sullivan, Physical Rehabilitation) (Old Edition) Hardcover – 1 July 2013
Reference books	<ol style="list-style-type: none">1. Physical Rehabilitation Paperback – 1 January 2014 by <u>O'SULLIVAN</u> (Author)2. Physical Rehabilitation 6e (O'Sullivan, Physical Rehabilitation) (Old Edition) Hardcover – 1 July 20133. Physical Medicine and Rehabilitation Q&A Review, Second Edition (Book + Free App) Paperback – 1 January 2017 by <u>MD Weiss Lyn D. Weiss Harry J. Lenaburg Jay M.</u> (Author)



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Course Title	MEDICAL LAW AND ETHICS				
Course Code	SMS09303T				
Course Credits	L	T	P	TC	
	4			4	
Prerequisites	Basic knowledge about Law and Accountancy.				
Course objectives	This subject includes the discipline and the Law that is required to be followed as a practitioner. Public Relations that are required to be maintained and the setup management for private practice.				
Course Contents	<p>UNIT – I</p> <p>Legal environment and techniques- history law and equity. History and theory of licensure, Indications and contraindications Licensure as a means of internal, International Optometry – important foreign optometry law.</p> <p>UNIT – II</p> <p>The optometrist in court, Malpractice – theory of liability – damages – minimizing malpractice claims, Insurance, Negligence, Ethics – professional ethics.</p> <p>UNIT-III</p> <p>Laws governing practice of medical profession and paramedical profession in India, Registered medical practitioner – laws against practice of medicine of those unregistered. – Medical council of India –Dental council of India – Nursing council, Present rules and regulations – Laws regarding optical</p>				



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	<p>products, manufacturers – dispensing in India.</p> <p>UNIT – IV</p> <p>Accounts- Introduction: Terms used in accounts Principles of accountancy, Journals and journalizing, Ledger and ledger posting, Trial balance, subsidiary books cash book, petty cash book, sales register, and purchase register, Bank reconciliation. Depreciation and other adjustments. Balance sheet and profit and loss account statements. Income tax and sales tax.</p> <p>UNIT – V</p> <p>Public Relations, Defining the Subject – Theory and Practice: Definitions, Public relations- its distinction from publicity, propaganda & Advertising The universe of Public relations– internal and external support, aspects of PR. Phases of P.R: Analysis of the internal and external environment – formulating & implementing PR policy- feedback, research and evaluation. The benefits of PR policy- Image building, promotion, of the product or services, better employee, government & community relations, Methods of Public Relations. Press Relations: Writing and issuing a press release – press conference- facility visit & open house – letters to the editor – assembling press activity.</p>
Course Outcomes	<ul style="list-style-type: none">• This subject includes the discipline and the Law that is required to be followed as a practitioner• To understand negligence and ethics.• To know Present rules and regulations• Accounts- Introduction: Terms used in accounts• Public Relations that are required to be maintained and the setup management for private practice.
	<p>1. Fiske, john – "Introduction to Communication Studies", Rotledge London, 1990.</p>



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Text books	<ol style="list-style-type: none"> 2. Sharma RC & Mohan K – "Business Corresponding and Report Writing", Tata McGraw Hill, New Delhi, 1994. 3. Alok Jain, P S Bhatia & A M Shiekh – "Professional Communication Skills; S. Chand & Company Ltd. 2005.
References	<ol style="list-style-type: none"> 1. Rajendra Pal and JS Korlahalli – "Essentials of Business Communication", Sultan Chand & Sons, 1997. 2. A guide to Correct English – Oxford University Press, Ely House, London W.I., Latest Edition. (For UnitIII) 3. Fiske, john – "Introduction to Communication Studies", Rotledge London, 1990. 4. Geoffrey Leech & Jan Svartvik – "A Communicative Grammar of English", ELBS Longman, England.

Course Title	PRACTICAL ADVANCE CONTACT LENSES				
Course Code	SMS09181P				
Course Credits	L	T	P	TC	
			2	2	
Course Contents	<ul style="list-style-type: none"> - Contact lens materials – RGP and Soft. - Keratometry. - Corneal Topography. - Slit Lamp Techniques. - Fitting in astigmatism. - Fitting in Keratoconus. - RGP Bifocals & fitting in Presbyopes. - Insertion – removal techniques of CL. - Fitting of contact lenses in children. 				



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	<ul style="list-style-type: none"> - Cosmetic contact lenses. - Contact lens –Toric SCL. - Contact lens –bifocals, Multifocals. - Therapeutic lenses/ bandage contact lenses.
Text books	<ol style="list-style-type: none"> 1. Textbook Of Contact Lenses Paperback – 31 January 2017 by <u>Sinha Rajesh</u> (Author) 2. Contact Lens Primer Paperback – 1 January 2007 by <u>Chaudhry</u> (Author) 3. Contact Lenses Hardcover – 25 September 2006 by <u>Anthony J.</u>
Reference books	<ol style="list-style-type: none"> 1. Clinical Manual of Contact Lenses Paperback – 1 December 1999 by <u>Edward S. Bennett</u> (Author), <u>Vinita Allee Henry</u> (Author) 2. Contact Lens Fitting Guide Paperback – 1 January 2020 by <u>Ajay Kumar Bhootra</u> (Author) 3. Contact Lens Complications: Expert Consult - Online and Print Hardcover – 6 August 2012 by <u>Nathan Efron</u>

Title	CLINICS (SPECIALITY)			
Code	SMS09182P			
Credit	L	T	P	Total
			2	2
Prerequisite	Practical Knowledge about Optometry diagnosis and Treatments.			
Objective	The objective of clinics in this semester is to be able to get 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 speciality clinics.			
Content	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			



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	<p>semester with complete management and follow up are mandatory for submission at the end of the semester</p> <ol style="list-style-type: none">1. Important Clinical guidelines and ethics2. Case Presentation where student had done work up should be submitted and presented. <p>Note: The log book needs to be signed by the Faculty during every visit. No case record will be considered without the Faculty's signature .</p>
Outcomes	<p>The objective of clinics in this semester is to be able to gets hand-on Experiences srelated to diagnosis, interpretation of the reports/findings and management of the diseases.</p>
Text books	<ol style="list-style-type: none">1. THE WILLS EYE HANDBOOK OF OCULAR GENETICS (PB 2018) Paperback – 1 January 2018 by LEVIN A.V. (Author)2. Histologic Basis of Ocular Disease – 16 November 2018 by Bruce Grahn (Author), Robert Peiffer (Author), Brian Wilcock (Author)
Reference books	<ol style="list-style-type: none">1. Pharmacologic Therapy of Ocular Disease (Handbook of Experimental Pharmacology) Hardcover – 16 June 20172. Diseases and Disorders of the Orbit and Ocular Adnexa Hardcover – 29 November 2016 by Aaron Fay MD (Author), Peter J Dolman MD FRCS (Author)3. Ocular Pathology (Expert Consult Title: Online + Print) Hardcover – 11 July 2014 by Myron Yanoff MD (Author), Joseph W. Sassani MD MHA (Author)

Title	CASE PRESENTATION
Code	SMS09183P



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Credit	L	T	P	TC	
				2	2
Prerequisite	Practical Knowledge about Optometry diagnosis and Treatments.				
Objective	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 of an research project and introducing to scientific concepts for evidence based practice.				
Content	The focus will be on the specialized research area of interest The project update has to be maintained and mandatory for submission at the end of the semester 1. Literature search, and Research proposal & hypothesis generation 2. Important Research guidelines and ethics 3. Research project work update Presentation where student had should be submitted and presented.				
Outcomes	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 of the diseases.				
Text books	1. Fundamentals of Research Methodology and Statistics Paperback – 1 January 2006 by Y.K. Singh (Author) 2. Research and Statistics Paperback – 9 June 2018 by Sharma Suresh (Author) 3. Research Methodology Paperback – 1 January 2013 by Panneerselvam R (Author)				
Reference books	1. Textbook on Legal Methods, Legal Systems & Research Paperback – 1 January 2015 by Saha Tushar Kanti (Author) 2. Biomedical Research Methodology :Including Biostatistical Applications Paperback – 1 January 2011 by Ranjan Das (Author) 3. How to Write a Research Proposal and Thesis: A Manual for Students				



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	and Researchers (How to Write a Research Proposal and a Thesis) Paperback – 8 March 2013 by Mohamed E. Hamid (Author)
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