

**VEER NARMAD SOUTH GUJARAT UNIVERSITY, SURAT.**  
**SYLLABUS TOPICS FOR BACHELOR IN CLINICAL OPTOMETRY**

**Third Year Term Five**

<b>Topic hours Code</b>	<b>Lectures by</b>	<b>Number of Lectures</b>
<b>Practical</b>		
T501 90	Contact Lenses (1) Optometric faculty	100
T502 90	Binocular Vision & Ocular motility Optometric faculty	100
T503	Systemic disease and the eye Ophthalmic faculty	30
T504 90	Major Eye disease Ophthalmic faculty	30
T505	Nutrition Medical faculty	20
T506 30	Public health & Com.Optometry Optometry faculty	20
	Total hours of teaching	300

**Pattern of Examination at end of Fifth term**

<b>Paper marks No.</b>	<b>Name of</b>	<b>= Topics included</b>	<b>Total marks</b>	<b>Passing</b>
P 1	Contact Lenses	= T501	100	50
P 2	Binocular Vision	= T 502	100	50
P 3	Diseases & Optometry	= T503+T504+T505+T506	100	50
Viva 1	Contact Lenses	= T501	100	50
Viva 2	Binocular Vision	= T 502	100	50
Viva 3	Diseases & Optometry	= T503+T504+T505+T506	100	50
	Total marks Examination		600	300

**Third Year Term Six**

<b>Topic Code</b>	<b>Lectures by</b>	<b>Number of hours</b>	
		<b>Lectures</b>	<b>Practical</b>
T601	Contact Lenses (II) Optometric faculty	100	90
T602	Advanced Orthoptics Optometric faculty	75	90
T603	Applied & Clinical Optometry Optometric faculty	75	120
T604	Optometry & Law in India Optometric faculty	25	
T605	Basic Accountancy & Public relations Management faculty	25	
	Total hours of teaching	300	300

**Pattern of Examination at end of Sixth Term**

<b>Paper marks No.</b>	<b>Name of Paper</b>	<b>= Topics included</b>	<b>Total marks</b>	<b>Passing</b>
P 1	Contact Lenses	= T601	100	50
P 2	Advanced Orthoptics	= T602	100	50
P 3	Applied & Clinical Optometry	= T 603 + T604	100	50
Viva 1	Contact Lenses	= T601	100	50
Viva 2	Advanced Orthoptics	= T602	100	50
Viva 3	Applied & Clinical Optometry	= T 603 + T604	100	50
	Total marks Examination			

**VEER NARMAD SOUTH GUJARAT UNIVERSITY, SURAT.**  
**BACHELOR OF OPTOMETRY (B.OPTOM)**  
**THIRD YEAR TERM FIVE**

**T501 CONTACT LENS PART (1)**

1. **Scope and Objective** = The subject covers all basic aspects of Contact Lenses. With a revision of Ocular Anatomy & Physiology, Visual Optics, the course will also deal with Optics of Contact Lenses, raw materials and pre-fitting examination.
2. **Text and reference books**
  - a. Contact Lenses – Dr.V.K.Dada
  - b. Contact Lenses Practice – MONTAGUE RUBEN

**Lecture Topics**

1. History of Contact lenses
2. Related ocular anatomy and physiology
3. Related Visual Optics
4. Contact Lens materials, terminology, classification
5. Optics of contact Lenses, comparison spectacles
6. Indications and contraindications
7. Advantages and disadvantages of types of Contact lenses
8. Manufacturing Rigid and Soft Contact lenses – various methods
9. Pre-Fitting examination – steps, significance, recording of results
10. Instruments used for examination
11. Special Investigations in pre-fitting examinations
12. Keratometry and Cornea; topography
13. Slit Lamp examination
14. Discussion with patient, choice of lens type
15. Fitting philosophies of contact Lenses – general outline
16. Fitting Rigid Contact lenses
17. Using trial lenses – calculations involved
18. Methods of assessment of Contact Lens fit.
19. Types of fit – Steep, Flat, Optimum – on spherical cornea.
20. Types of fit – Steep, Flat, Optimum – on Toric cornea with spherical lenses
21. Types of fit – Steep, Flat, Optimum – on Toric cornea with toric lenses
22. Calculation and finalizing of Contact Lens parameters
23. Ordering Rigid verifying Contact Lens – writing a prescription to the Laboratory.
24. Checking and verifying Contact Lens from Laboratory
25. Modifications possible with Rigid lenses
26. Components of Lens Care systems for Rigid lenses
27. Contact lens solutions- composition necessity advantages.
28. Teaching the patient to insert and remove Rigid lenses.
29. Common handling instructions to first time wearers
30. Special instructions to the patient wearing Rigid Gas Permeable Contact Lenses.

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**T502 BINOCULAR VISION AND OCULAR MOTILITY**

1. **Scope and Objective** = A sound theoretical knowledge of the binocular vision paves the way for clear understanding of the physiology of the eye in the clinics. The theories of binocular vision and basics of Orthoptics included in the theory, forms the background for the student to understand binocular vision and ocular motility disorders.
2. **Text and reference books**
  - a. Ocular Motility - VIRGINIA CARLSON HANSEN
  - b. Practical Orthoptics in the treatment of the squint – T. KETHLYLE & KANETH W.HYPER
  - c. Handbook of Orthoptics principles = G.T. Wilonghby Cashell, Isobel Durran, Churchill Living stone.

**Lecture Topics**

1. General introduction
2. Binocular vision and space perception development
  - a. Fusion, diplopia, correspondence
  - b. Stereopsis, Panum's area. BSV
  - c. Stereopsis and monocular due - significance
  - d. Egocentric location, clinical applications
  - e. Theories of Binocular vision
  - f. Relative subjective visual direction
  - g. Alternation – theory of Binocular Vision
  - h. Projection theory of Binocular Vision
  - i. Motor theory of visual orientation
3. Summary of Anatomy of Extra Ocular Muscles
  - a. Rectli and Obliques, PLS
  - b. Innervation & Blood supply
4. Physiology of Ocular movements
  - a. Center of rotation, Axes of Fick
  - b. Action of individual muscle
5. Laws of ocular motility
  - a) Donder's and Listing's law
  - b) Sherrington's law
  - c) Hering's law
6. Uniocular & Binocular movements – fixation, saccadic & pursuits
  - a. Version & Vengence
  - b. Fixation & field of fixation
  - c. Nystagmus

- 7.** Near vision complex
  - a) Accommodation
    - i) Definition and mechanism (process)
    - ii) Methods of measurement
    - iii) Stimulus and innervations
    - iv) Types of accommodations
    - v) Anomalies of accommodation – aetiology and management
  - b) Convergence
    - i) Definition and mechanism
    - ii) Methods of measurement
    - iii) Types and components of convergence – Tonic, accommodative fusional proximal
    - iv) Anomalies of Convergence – aetiology and management
- 8.** Pupillary Construction
  - a) Relation to Accommodation and convergence
  - b) Physiologic significance
  - c) Reaction to fusion
- 9.** Visual Acuity
  - i) Definition and basic concepts
  - ii) Factors of affecting visual acuity
  - iii) Optical effects of spectacles
  - iv) Aniseikonia
- 10.** Sensory adaptations
  - a. Confusion
  - b. Suppression
  - c. Abnormal Retinal Correspondence
  - d. Blind spot syndrome
- 11.** Amblyopia
  - a. Definition and types
  - b. Investigations
  - c. Management

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**T503 SYSTEMIC DISEASES AND THE EYE**

1. **Scope and Objective** = The course aims at acquainting the students with certain common medical ailments which have serious ocular involvement. Basic fact the patho-physiology of the diseases, the clinical features, essentials of diagnosis and basic management will be emphasized with the special reference to the eye.
2. **Text and reference books**
  - a. Parson's Diseases of the eye – Stephen J.H.Miller, 17<sup>th</sup> edition, Churchill Livingstone.
  - b. Clinical Ophthalmology – Jack Kanski (JKK), 1<sup>st</sup> edition, Butterworths
  - c. Principles and practice of ophthalmology – Vol.1& 3 – Peyman, Sanders, Goldberg Jaypee publishers 1<sup>st</sup> Ed.
  - d. System of ophthalmology Vo. XV- Sir Stewart Duke Elder 1976, Henry Kimpton – London.
  - e. Modern Ophthalmology – Arnold Sorsby , systemic aspects – Vol 2. 2<sup>nd</sup> Ed. 1977 R.J. Acford Ltd.

**Lecture Topics**

1. **ARTERIAL HYPERTENSION**
  - Pathophysiology, classification, clinical examination, diagnosis, complications and management.
  - Hypertension and the eye
2. **DIABETIS MELLITUS**
  - Pathology, classification, clinical features, diagnosis, complications and management.
  - Diabetes mellitus and the eye
3. **ACQUIRED HEART DISEASE – EMBOLISM**
  - Rheumatic fever – pathophysiology, classification, diagnosis, complications and management.
  - Embolism
  - Subacute bacterial endocarditis
4. **CANCER – INTRODUCTION**
  - Definitions, nomenclature, characteristics of benign and malignant neoplasm.
  - Grading of staging of cancer, diagnosis principles of treatment.
  - Neoplasia of the eye.
5. **CONNECTIVE TISSUE DISEASE**
  - Anatomy and pathophysiology : Arthritis
  - Eye and connective tissue disease.

6. **THYROID DISEASE**
  - Anatomy and physiology of thyroid gland, Classification of thyroid disease.
  - Diagnosis, complications, clinical features, management, thyroid disease of the eye
7. **TUBERCULOSIS**
  - Etiology, pathology, clinical feature, pulmonary tuberculosis, diagnosis, complications, treatment, tuberculosis and the eye
8. **HELMINTHIASIS**
  - Classification of helminthic disease, schistosomiasis, principles of diagnosis and management.
  - Helminthic disease and the eye (Taenia, echinococcus, larvae migrans)
9. **COMMON TROPICAL ILLNESSES, (Malaria, leprosy, etc.)**
  - Introduction to tropical diseases : Malaria.
  - Tropical diseases and the eye – leprosy, toxoplasmosis, syphilis, trachoma.
10. **MALNUTRITION**
  - Etiology, protein energy malnutrition, water electrolytes, minerals, vitamins, nutritional disorders and the eye.
11. **INTRODUCTION TO IMMUNOLOGY**
  - Introduction, components of the immune system, principle of immunity in health.
  - Immunology in disease, Immunology and the eye.
12. **NEUROLOGICAL DISORDERS-STROKE/CVA**
  - Disseminated sclerosis and subacute combined degeneration
  - Anatomy and patho-physiology
  - Disseminated sclerosis, subacute combined degeneration
  - Eye and connective tissue disease.
13. **GENERAL, MEDICAL EMERGENCIES – FIRST AID**
  - Ocular and first aid
14. **GENETICS**
  - Introduction to genetics
  - Organisation of the cell
  - Chromosome structure and cell division
  - Gene structure and basic principles of genetics
  - Genetic disorders and their diagnosis
  - Genes and the eye
  - Genetic counselling and engineering

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**T504 MAJOR EYE DISEASES**

1. **Scope and Objective** = To learn in details of the etiology, differential diagnosis, management aspects of major eye diseases which are main causes of blindness in India. The scope of the course should cover how an Optometrist can play a vital role in diagnosis and management of such diseases when he is working as part of a medical team or eye in private clinic. Points about urgent, emergency and routine referral of patients with diagnosed to have such diseases should be understood by the student.
2. **Text and reference books** =
  - a. Manual of Ocular fundus examination – Theo Dorion - Butterworth Heinemann
  - b. Cataract – William Douthwaite, Butterworth Heinemann
  - c. Glaucoma – A colour manual for diagnosis and treatment, 2<sup>nd</sup> edition – Kanski, Salim, Butterworth Heinemann
  - d. The Glaucoma handbook – Anthony Litwak, Butterworth Heinemann
  - e. Macular Disorders – Anthony Cavallerano, Butterworth Heinemann

**Lecture Topics**

1. Cataract
2. Glaucoma
3. Retinal detachment
4. Cornea ulcer & opacities
5. Visual loss – ophthalmic lesion
6. Diabetic Retinopathy
7. Macular degeneration
8. Chemical burns

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**T505 NUTRITION**

1. **Scope and Objective** = the course is designed to bring out the role of nutrition in 'EYE CARE' Highlighting the role of various nutrients. Emphasis is on malnutrition related eye disorders and the role of therapeutic nutrition in Ophthalmology.
2. **Text and reference books**
  - a. Normal and Therapeutic Nutrition – Corinne H. Robinson & Harilyn R. Lawrence 1988.
  - b. Introductory nutrition : Helen A.Guthine – 1986.
  - c. Nutrition & dietetics : Dr.M.Swaminathan
  - d. Manual of practical pediatric Nutrition : Dr.Gnana Sundaram
  - e. Essentials of Nutrition and Diet Therapy : Sue Rodwell Williams
  - f. Nutritive Value of Indian Foods-National Institute of Hyderabad.

**Lecture Topics**

1. INTRODUCTION

History of Nutrition, Nutrition as science. Food groups, RDA Balanced diet, diet planning.

ENERGY

Units of energy, Measurement and energy value of food, Energy expenditure Total energy / calorie requirement for different age groups and disease  
Satiety value, Energy imbalance – obesity, starvation

PROTEINS

Sources and functions, Essential and non-essential amino acids, incomplete and complete proteins, supplementary foods, PEM and the eye, Nitrogen balance, changes in the protein requirement.

FATS

Functions and sources, Essential fatty acids, Excess and deficiency, Lipids and the eye Hyperlipidemia, Heart diseases, atherosclerosis.

MINERALS

General functions and sources, Macro and micro minerals associated with the eye deficiencies and excess ophthalmic complications (eg.) iron, calcium, iodine, etc.,

VITAMINS

General functions food sources, vitamin deficiencies and associated eye disorders with particular emphasis on vitamin 'A'.

MISCELLANEOUS

Measles and associated eye disorders, low birth weight.

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**T506 PUBLIC HEALTH AND COMMUNITY OPTOMETRY**

1. **Scope and Objective** = The objective of the course is to enable the student to identify and manage the common and important ocular problems in the community and to investigate an epidemic of ocular diseases and to institute control measures. It is also to assess the effect of social, cultural, and economic characteristic of the community on its health status with special reference to ocular diseases.  
To organize health education programs in the community.  
To elicit participation in national program of prevention of blindness.  
To apply the principles of community screening for the diagnosis of visual disorders.  
To apply the epidemiological principles to assess the risk factors and for the control of the diseases.
2. **Text and reference books**
  - a. Oxford Text Book of Public Health & Preventive Medicine (Vol.1 to IV)
  - b. MAXCY AND ROSENAU: Text Book of Public Health & Preventive Medicine
  - c. NEWCOMB R.D. & JOLLEY J.L. Public health & Community Optometry, 1980.
  - d. Text Book of Public and Preventive Medicine (J.E.PART)
  - e. Environmental Vision – Donald Pits - Butterworth Heinemann
  - f. Work and the eye – Richard North - Butterworth Heinemann
  - g. Ocular immunology in health and disease – Steven Koevary - Butterworth Heinemann
  - h. Ophthalmic research and epidemiology – Stanley Hatch - Butterworth Heinemann
  - i. Professional communication in eye care – Carolyn Bergley - Butterworth Heinemann

**Lecturer Topics**

1. **PHYLOSOPHY OF PUBLIC HEALTH**
  - a) History of public health
  - b) History of public health optometry (including epideology, man power, projections, community reimbursement mechanisms)
2. **HEALTH CARE SYSTEMS**
  - a) Organisations of health services (principles of primary, secondary and tertiary care)
  - b) Detriments of health care delivery system
  - c) Planning of health services (including revelent legislation and implications to optometric practice)
  - d) Health economics
  - e) Health manpower protection and in the practice of ophthalmology
  - f) Third party involvement in financing health care services (including both governmental and non governmental programme)
  - g) Quality assurance
3. **MODES OF HEALTH ANDVISION CARE DELIVERY**
  - a) Solo and group practice modes
  - b) Multidisciplinary and institutional practice modes
  - c) Optometry's role as a care primary care profession

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**T601 CONTACT LENSES (II)**

1. **Scope and Objective** = The subject covers all basic aspects of Contact Lenses, With a revision of Ocular Anatomy & Physiology, Visual Optics, the course will also deal with Optics of Contact Lenses, raw materials and pre-fitting examination.
2. **Text and reference books**
  - a. Contact Lenses – Dr.V.K.Dada
  - b. Contact Lenses Practice – MONTAGUE RUBBEN

Lecturer Topics

1. Soft contact lens – Law materials, classification, terminology, etc.
2. Manufacturing Soft Contact Lenses –various methods- advantages & disadvantages
3. Various designs Soft Contact Lenses - advantages & disadvantages
4. Pre- Fitting examination – steps, significance, recording of result
5. Special points for in pre-fitting examination of Soft Contact Lenses
6. Discussion with patient choice of lens – type
7. Fitting Soft Contact Lenses general outline
8. Fitting Soft Contact Lenses – methods –Trial set method
9. Using trial lenses . calculations involved
10. Fitting Soft Contact Lenses methods first fit method
11. Methods of assessment of Soft Contact Lenses fit.
12. Types of fit – steep , Flat, Optimum – on spherical cornea
13. Types of fit – steep , Flat, Optimum – on Toric cornea with spherical lenses
14. Types of fit – steep , Flat, Optimum – on Toric cornea with toric lenses
15. Calculation and finalizing of Soft Contact Lenses parameters
16. Ordering Soft Contact Lenses – writing a prescription to the Laboratory
17. Fitting Soft Contact Lenses from stock – advantages, limitations, precautions
18. Checking and verifying Soft Contact Lenses
19. Components of Lens care systems for Soft Contact Lenses
20. Contact lens solutions – composition, necessity, advantages
21. Teaching the patient to insert and remove soft lenses
22. Common handling instruction to first time wearers
23. Special instructions to the patient for using soft lenses
24. Special soft lenses – cosmetics, Disposable , Toric
25. Special Rigid Lenses and designs – Toric, Keratoconus, etc.
26. Special considerations for fitting Contact Lenses, - Children, irregular cornea, Univocal Aphakia, sports one eyes patients post RK, post PRK
27. Ortho – keratology and myopia
28. Fitting Bifocal and multifocal – RGP & Soft lenses
29. After care and follow up for all Contact Lens patients.
30. Patient Problems – identification, differential diagnosis and management

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**T602 ADVANCED ORTHOPTICS**

1. **Scope and Objective** = A sound theoretical knowledge of the binocular vision paves the way for clear understanding of the physiology of the eye in the clinics. The theories of binocular vision and basic of Orthoptics included in the theory, form the background for the student to understand binocular vision and ocular motility disorders.
2. **Text and reference books**
  - a. Ocular motility = VIRGUNIA CARLSON HANSAN
  - b. Practicle Orthoptics in the treatment of a squint = KETHLYLE & KENNTH WYPER
  - c. Handbook of Orthoptic principles – G.T.Willonghby Cashell, Isobel Durran Churchill Livingstone.

Lecturer Topics

- 1) Orthoptic check up and special instruments
  - a. Routine Orthoptic examination
  - b. Special Orthoptic investigation
  - c. Instruments used in Orthoptics
  - d. Diagnosis, prognosis & management methodologies
- 2) Neuro muscular anomalies
  - a. Classification
  - b. Hetrophoria & hetrotopia
  - c. Orthophoria
  - d. Concomitant & non concomitant
  - e. Paralytic squint
- 3) Aetiology
- 4) Factors responsible
- 5) Role of accommodation & convergence
- 6) Genetics and occurrence of squint and binocular vision problems.
- 7) Outline of Routine Orthoptics examination
- 8) Subjective symptoms – description and significance
- 9) History – recording and significance
- 10) Measurement of angles of deviation
- 11) Sensory signs of patients
- 12) Clinical picture of types of squint
  - a) Accommodative
  - b) Intermittent
  - c) Altemate
  - d) A & V. Phenomenon
- 13) Paralytic squint
- 14) Special forms of squint

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**T603 APPLIED & CLINICAL OPTOMETRY**

**Pediatric Optometry**

1. **Scope and Objective** = The scope of the subject is to train the optometrists to develop a systematic way of dealing with children below 12, so as to implement primary eye care and have better, specialized management of anomalies.
2. **Text and reference Books**
  - a. Pediatric Optometry – JEROME ROSNER, Butterworth, London 1982.
  - b. Binocular Vision and Ocular Motility – VON NOORDEN G.K. Burian Von Noorden's 2<sup>nd</sup> Ed. C.V. Mosby Co. St. Louis, 1980
  - c. Assessing children's vision – Susan Leat - Butterworth Heinemann
  - d. Clinical Pediatric optometry – Leonard Press, Bruce Moore, Butterworth Heinemann
  - e. Pediatric Neuro-ophthalmology – Robert Tomsak - Butterworth Heinemann
  - f. Vision Problems in childhood – Terry Buckingham, Butterworth Heinemann

**Lecturer Topics**

1. History - Genetic factors, Prenatal factors, Perinatal factors, Postnatal factors
2. Measurement of visual acuity
3. Normal appearance, pathology and structural anomalies of:
4. Orbit, Eyelids, Lacrimal system, Conjunctiva, Cornea, Sclera
5. Anterior chamber, uveal tract, pupils
6. Lens, vitreous, fundus
7. Oculomotor system
8. Measurement of the refractive system
9. Determining binocular status
10. Determining sensory motor adaptability
11. Compensatory treatment and remedial therapy for
12. Myopia, Pseudomyopia, Hyperopia, Astigmatism, Anisometropia, Amblyopia.
13. Remedial and compensatory treatment for strabismus and nystagmus
14. Vergence and accommodation
15. Delayed development

## Occupational Optometry

1. **Scope and Objective** – The objective is to prepare the student to know the visual requirements of various jobs, effects of physical, chemical, and other hazards on eye and vision. The Optometrists should be able to identify occupational causes of visual and eye problems, to be able to prescribe suitable corrective lenses and eye protective wear and be able to set visual requirements, standards for different jobs.
2. **Text and reference books**
  - a. Encyclopedia of Occupational Health and Safety, ILO Publication, 1983, Vol. I & II.
  - b. IES Lighting Handbook (LH) 1984, IES Publication, NY 1985.
  - c. IES Lighting Education introductory lighting (LE) 1985, IES Publication N.Y. 1985
  - d. Guide to Occupational and other Visual needs – HOLMES C. JOLLIES H. & GREGG J. 1958.
  - e. Occupational eye diseases and injuries – JOSEPH MINTON, William Heinemann Medical Book Ltd., 1949.
  - f. Environmental Vision – Donald Pitts - Butterworth Heinemann
  - g. Work and the eye – Rachel North - Butterworth Heinemann
  - i. Ophthalmic research and epidemiology – Stanley Hatch - Butterworth Heinemann
  - j. Professional communication in eye care – Carolyn Begley - Butterworth Heinemann
  - k. Sports Vision – D.F.C. Loran, C.J. Mac Eween, Butterworth Heinemann

### Lecturer Topics

1. Introduction to occupational health, hygiene and safety International Bodies like ILO, WHO, National bodies like Labor institutes, National institute of occupational health, National Safety Council etc.
2. Acts and Rules  
Factories Act, and Rules  
Workmen's compensation  
ESI Act, etc.
3. Occupational diseases/occupational related diseases caused by-physical agents, chemical agents and biological agents
4. Occupational hygiene, environmental monitoring, Recognition, evaluation, control of hazards.  
Illumination – definition, measurements, standards.
5. Occupational safety.  
Causes of accidents. Vision, Lighting, color and their role.  
Accident analysis. Accident prevention
6. Ocular and visual problems of occupation  
Electromagnetic radiation  
Ionising Non-ionising-infrared, Ultra violet, Microwave laser  
Injuries-mechanical, chemical

Toxicology – metals, chemicals

7. Prevention of occupational diseases  
Medical examination / medical monitoring  
Pre-employment / pre placement  
Periodic
8. Personal protective equipment  
General  
Goggles, face shields etc.  
Selection and use  
Testing for standards
9. Standards  
Visual standards for jobs.
10. Problems of special occupational groups  
Drivers, pilots and others
11. Field work – submission of reports  
Visits to : Regional Labour Institute selected industries
12. Visual display units (terminals) VDU/VDT  
Contact lens and work  
Pesticides - general and visual and ocular defects

### **Geriatric Optometry**

1. **Scope and Objective** – The Optometric examination and management of senior citizens requires different approach. The purpose of the course is to provide comprehensive instructions, which will guide the students to take appropriate Visual Care of the elderly.
2. **Text and reference books.**
  - a. Vision of the Aging Patient – HIESCH M.J. & WICK R.E. (An Optometric Symposium ) 1960.
  - b. Vision and Aging – A.J.ROSSENBLUM Jr. & M.W.MORGAN, Butterworth Heinemann 1993.
  - c. Clinical Geriatric Eye Care – Sheree Aston, Joseph Maino- Butterworth Heinemann
  - d. Clinical Decision making in Optometry – Eileen Ettinger, Michael Rouse, Butterworth Heinemann

### **Lecturer Topics**

1. Structural changes of the eye
2. Physiological changes of the eye
3. Optical and refractive changes of the eye
4. Aphakia, – its correction
5. Ocular diseases common in the old eye, with special reference to cataract, glaucoma  
Macular disorders, vascular diseases of the eye etc.

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**S604 LAW AND OPTOMETRY**

1. **Scope and Objective** = A presentation of the responsibilities and rights of the Optometrist in a factual context, enabling him to understand his place in society and in the health care team. The method which make for effective practice.
2. **Text and reference books** =
  - a. Business Aspects of Optometry –John Classe, Donald Lakin, Butterworth Heinemann
  - b. Business Awareness for Optometry – Nizar Hirji, Butterworth Heinemann
  - c. Management of Eye Care Practitioner – Irving Bennett, Butterworth Heinemann
  - d. Management for Opticians, 2<sup>nd</sup> edition, Thomas Appler, Raymond Dennis, Eric Muth, Butterworth Heinemann
  - e. Marketing, Managing and Contact Lenses – Robert Koetting, Butterworth Heinemann
  - f. Ophthalmic research and epidemiology – Stanley Hatch, Butterworth Heinemann

Lecturer Topics

1. Various laws governing medical and para medical profession in the country
2. The Consumer Act with respect to Optometry and dispensing of Optical aids
3. Legal processes of direct interest to optometry
4. International Optometry
5. National legislation for optometry
6. Important foreign optometry laws
7. Management in industry and commerce
8. Personal and professional insurance
9. Partnership and alternatives
10. Employment and contracts
11. Examples of difficulties found in practice
12. Negligence
13. Ethics – general and special Optometric
14. The nature of the professions
15. The optometrist as a profession person

Practical work = The following should be included

1. Library reference to legal documents
2. Perusal of specimens of balance sheet and account
3. Visit to varied types of firms to view organization and methods
4. Visits to office of optical organization
5. Mock trials involving optical subjects

**Discussions should include**

1. Legal environment and techniques-history law and equity
2. History and theory of licensure
3. Licensure as a means of internal and external discipline-unprofessional conduct –

- Incompetence – gross immorality
4. International Optometry – important foreign optometry law
  5. The optometrist in court
  6. Malpractice –theory of liability- damages-minimizing malpractice claim
  7. Insurance & Negligence
  8. Ethics – professional ethics
  9. Laws governing practice of medical profession and paramedical profession in India
  10. Registered medical practitioner – laws against practice of medicine of those unregistered – Medical council of India-Dental council of India-Nursing council
  11. Present rules and regulations – Laws regarding optical products manufacturers – dispensing in India.
  12. Opticians – Are they registered? Dispensing Opticians – Rules in U.K.

**VEER NARMAD SOUTH GUJARAT UNIVERSITY, SURAT.**  
**BACHELOR OF OPTOMETRY (B.OPTOM)**  
**THIRD YEAR TERM SIX**

**S605 BASIC ACCOUNTANCY & PUBLIC RELATIONS**

1. **Scope and Objective** – The Optometrist is a professional and a businessman. He should be made aware of the needs of small business in terms of basic accounting procedures like cash book, bank book, daily ledger, accounts statements. Income Tax laws, sale tax and shop act provisions which may be applicable to his business in future. He should also be made aware about the possibilities of making a project report for any new business activity sources of getting loans from banks, financial institutions etc.

**ACCOUNTANCY**

**Lecture Topics**

1. Introduction
2. Terms used in accounts, Principles of accountancy
3. Journal and journalizing
4. Ledger and ledger posting
5. Trial balance
6. Subsidiary books, Petty cash book, Sales register, Purchase register, Stock register
7. Bank reconciliation
8. Depreciation and other adjustments
9. Balance sheet and profit and loss accounts statements.
10. Preparation of Final accounts
11. Income tax and Sales tax (general ideas only)
12. Project report and financial viability of a project.
13. Costing in practice (Buying, stock keeping, assessment of proper fees (honorarium) and costing of appliances)
14. Banking procedures

**PUBLIC RELATIONS**

**DEFINING THE SUBJECT – THEORY AND PRACTICE**

1. Definitions
2. Public Relations – its distinction from publicity propaganda and advertising
3. The universe of Public Relations – internal and external aspects of PR.
4. Phases of P.R. – Analysis of the internal and external environment – formulating and implementing PR policy feedback, research and evaluation.
5. The benefits of PR – Image building, promotion of product or services, better employee, government and community relations.

## **METHODS OF PUBLIC RELATIONS**

1. Press Relations: Writing and issuing a press release-press conference-facility visit and open house-letters to the editor-assembling press activity.
2. The printed word: Style, color, and design-knowledge, of topography and layouts-direct mails, publicity material and house journal. Use of photographs for publications and special events.
3. The spoken word: Public speaking-microphone techniques
4. Radio and other Audio media: communicating by cassettes-radio interview, discussion and other programs.
5. Film and television: Publicity and educational use of these media-production and distribution.
6. Research in P.R: Opinion and panel research – drawing up of a Questionnaire – interpreting the results.

## **PUBLIC RELATIONS IN ACTION**

1. The employee public: The working relationship-labour management relations-Establishing effective leadership-high cost of breakdowns and alienation-planned effort at P.R.
2. The customer public: Needs of customers-efficiency and effectiveness of Customer service-feedback and suggestion system.
3. The government public: Knowledge has and interaction with the central government-state government and municipal government.
4. The community public: Community opinion-community relations-open house and volunteer activities

## **SPECIALISED PUBLIC RELATIONS**

1. Public relations for welfare agencies
2. Public relations for health agencies
3. Public relations for hospitals
4. The perspective: rising demands-escalating costs-charitable heritage-public opinion consciousness-growing consumer movement
5. The P.R. program, employee relations –volunteer groups-medical staff, patients sensitivity to the press and other media.