



Galgotias University

Galgotias University Vision

- To be known globally for value-based education, research, creativity and innovation"

Galgotias University Mission

- Establish state-of-the-art facilities for world class education and research.
- Collaborate with industry and society to align the curriculum,
- Involve in societal outreach programs to identify concerns and provide sustainable ethical solutions.
- Encourage life-long learning and team-based problem solving through an enabling environment.



School of Medical & Allied Sciences (SMAS)

School Vision


To be known globally as a Centre of excellence for medical & allied science education, innovation, interdisciplinary research and practice for enhancing health.

School Mission

M1- Establish state of art facilities for excellent medical & allied education and interdisciplinary research

M2- Collaborate with health care sector professionals to align curriculum and develop strong foundation for fundamental & practice health

M3- Involve students in community health programmes to develop lifelong learning and communication skills


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SCHOOL OF MEDICAL
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* UTTAR PRADESH *



SMAS/Paramedical/optometry/111/32/46



Galgotias University
School of Medical & Allied Sciences (SMAS)
Department of Paramedical and Allied Health Sciences
Programme :B.Optomety

Vision

To be recognized globally as a premier department of Optometry for imparting value based education involving interdisciplinary research and innovation..


Mission

M1- Establish state of art facilities for excellence in the field of Optometry and interdisciplinary Research and innovation.

M2- Collaborate with health care professionals to prepare curriculum with strong foundation for Optometry.

M3- Involve students in community Optometry and Eye health programmes to develop patient care.




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School of Medical & Allied Sciences (SMAS)

Department of Paramedical and Allied Health Sciences

Programme :B.Optomety

PROGRAM OUTCOMES

1) Clinical Care (Optometry Practice and Clinical Care)

K3

Using a patient/family centred approach, to organize investigation and management of treatment plans and follow-up services. It enables the students to:

- Apply the principles of basic science
- Possess basic knowledge associated with the profession of optometry, including vision sciences, cognitive sciences, binocular vision, low vision, contact lens and management of refractive errors.
- Identify the indications for basic procedures
- Do relevant investigations in an appropriate manner as needed
- Provide care to patients – efficiently and in a cost-effective way
- Identify the influence of biological, psychosocial, economic, and spiritual factors on patients' well-being and act in an appropriate manner
- Incorporate strategies for health promotion and disease prevention for their patients

2) Communication

K3

The student will learn how to communicate with patients/clients, care-givers, other health professionals and other members of the community effectively and appropriately. Communication is a fundamental requirement in the provision of health care services. Program objectives should enable the students to:

- Provide sufficient information to ensure that the patient/client can participate as actively as possible and respond appropriately to the information




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- Clearly discuss the diagnosis and treatment plans with the patient.
- Explain the proposed healthcare service
- Use effective communication skills to gather data and share information including attentive listening, open-ended inquiry, empathy and clarification to ensure understanding
- Provide relevant information to, other stakeholders
- Communicate effectively with reader or listener
- Develop efficient techniques for all forms of written and verbal communication

3) **Membership of a multidisciplinary health team**

Develop ability to work in a team, having transparency about aims, decisions, uncertainty and mistakes:

- Develop mutual trust for shared achievement
- Creating an environment of general and specific understanding
- Recognize outcomes, and timely feedback about team's functioning and the achievement of their goals.

4) **Ethics and accountability**

K3

Students will understand core concepts of clinical ethics and law. Program objectives should enable the students to:

- Describe and apply the basic concepts of clinical ethics to actual cases and situations
- Demonstrate an understanding basics of legal concepts relevant to the practice
- Demonstrate respect for each patient's individual rights of autonomy, privacy, and confidentiality

5) **Commitment to Professional excellence**

K3

The student will execute professionalism to develop technical competence, appearance, image, confidence level, empathy, compassion, understanding, patience, manners, verbal and non-verbal communication, appropriate physical contact to ensure safe, effective delivery of healthcare. Program objectives will aim at making the students being able to:

- Understand, analyze and communicate the value of their professional roles in society (e.g. clinical Optometrist, promoters of health, educators, managers, employers, employees).
- Demonstrate high quality practice that leads to excellence
- Demonstrate the quality of being answerable for all actions and omissions to all,
- Demonstrate humanity in the course of everyday practice by virtue of having respect (and dignity), compassion, empathy, honour and integrity

6) **Leadership skill and mentorship**

K4

The student must take on a leadership role where needed in order to ensure clinical productivity and patient satisfaction. They must be autonomous and confident and should be able to manage themselves and others effectively. Program objectives should enable the students to:



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- Course curriculum of B.Optomety helps in developing planning ability in student to Organise Eye OPD, eye camp, Optical shop etc
- Act as agents of change and be leaders in quality improvement and service development.
- Identify priorities and effectively manage time and resources to ensure the quality of care
- Actively do personal and professional development and should learn from experience (through supervision, feedback, reflection and evaluation)

7) Social Accountability and Responsibility

K3

The students will understand the need to serve the community, region and the nation and will direct all research and service activities towards betterment of health of all. Program objectives should enable the students to:

- Demonstrate knowledge of the determinants of health at local, regional and national levels and respond to the population needs
- Establish and promote innovative practice to meet individual and community needs in a more effective manner
- Develop a shared vision of an evolving and sustainable health care system
- Optimal patient care

8) Scientific attitude and scholarship

K3

The student will utilize scientific principles during interactions with patients and peers, research activities and in all other aspects of their professional lives. Program objectives should enable the students to:

- Engage in ongoing self-assessment and structure their continuing professional education to address the specific needs of the population
- Practice evidence-based scientific methods
- Acquire basic skills such as presentation skills, giving feedback, patient education and the design and dissemination of research knowledge
- Utilize the principles of scientific enquiry, thinking analytically, clearly and critically, while solving problems and making decisions during daily practice in making diagnosis, correcting the refractive errors and vision abnormalities

9) Lifelong learning

K3

The student should be committed to continuous improvement in skills and knowledge while harnessing modern tools and technology. Program objectives will aim at making the students being able to:

- Perform objective self-assessments of their knowledge and skills; learn and refine existing skills; and acquire new skills to improve patient care
- Enhance their personal and professional growth and learning by constant introspection and utilizing experiences




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- Evaluate medical literature to improve patient care
- Develop a research question and be familiar with basic, clinical and translational research in its application to patient care
- Identify appropriate, professionally fulfilling career pathway
- Usages and implementation of knowledge of Optometry for betterment of society and self growth




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School of Medical & Allied Sciences (SMAS)
Department of Paramedical and Allied Health Sciences
Programme :B.Optomety

Program Educational Objectives- PEO's


Graduates of Optometry shall,

PEO 1:- Engage in experiential entrepreneurship opportunities.

PEO2:- Collaborate with other health care professionals to serve and do patient care.

PEO3:- Pursue higher studies in an institution of repute.




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Name of The Course	BINOCULAR VISION -I			
Course Code	BOPT5004			
Prerequisite				
Corequisite				
Antirequisite				
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	3	0	0	3

Course Objectives: This course provides theoretical aspects of Binocular Vision and its clinical application. It deals with basis of normal binocular vision and space perception, Gross anatomy and physiology of extraocular muscles, various binocular vision anomalies, its diagnostic approaches and management.

Course Outcomes

CO1	will be able demonstrate an in-depth knowledge of the gross anatomy relating the extraocular muscles.
CO2	will be able demonstrate an in-depth knowledge of the gross physiology relating the extraocular muscles.
CO3	will be able demonstrate and Provide a detailed explanation of, and differentiate between the etiology and investigation of binocular vision anomalies.
CO4	will be able demonstrate provide a detailed explanation of the management of binocular vision anomalies.
CO5	will be able demonstrate and adapt skills and interpret clinical results following investigation of binocular vision anomalies appropriately and safely.
CO6	will be able demonstrate and about recent advancements in binocular vision anomalies

Text Book (s)

Pradeep Sharma: Strabismus simplified, New Delhi, First edition, 1999, Modern publishers.
 Fiona J. Rowe: Clinical Orthoptics, second edition, 2004, Blackwell Science Ltd
 Gunter K. V. Mosby Company

Reference Book (s)

Mitchell Scheiman; Bruce Wick: Clinical Management of Binocular Vision Heterophoric, Accommodative, and Eye Movement Disorders, 2008, Lippincot Williams & Wilkins publishers

Unit-1 Introduction	6 hours
1. Binocular Vision and Space perception. 1.1 Relative subjective visual direction. 1.2 Retino motor value 1.3 Grades of BSV 1.4 SMP and Cyclopean Eye 1.5 Correspondence, 1.6 Fusion, Diplopia, Retinal rivalry 1.7 Horopter 1.8 Physiological Diplopia and Suppression 1.9 Stereopsis, Panum's area, BSV. 1.10 Stereopsis and monocular clues - significance. 1.11 Egocentric location, clinical applications. 1.12 Theories of Binocular vision. 2. Anatomy of Extra Ocular Muscles. 2.1 Rectii and Obliques, LPS.	

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2.2 Innervation & Blood Supply.	
Unit-2	8 hours
3. Physiology of Ocular movements. 3.1 Center of rotation, Axes of Fick. 3.2 Action of individual muscle. 4. Laws of ocular motility 4.1 Donder's and Listing's law 4.2 Sherrington's law 4.3 Hering's law 5. Uniocular & Binocular movements - fixation, saccadic & pursuits. 5.1 Version & Vergence. 5.2 Fixation & field of fixation	
Unit-3	8 hours
6. Near Vision Complex Accommodation 6.1 Definition and mechanism (process). 6.2 Methods of measurement. 6.3 Stimulus and innervation. 6.4 Types of accommodation. 6.5 Anomalies of accommodation – aetiology and management. 7. Convergence 7.1 Definition and mechanism. 7.2 Methods of measurement. 7.3 Types and components of convergence - Tonic, accommodative, fusional, proximal. 7.4 Anomalies of Convergence – aetiology and management.	
Unit-4	9 hours
8. Sensory adaptations 8.1 Confusion 9. Suppression 9.1 Investigations 9.2 Management 9.3 Blind spot syndrome 10. Abnormal Retinal Correspondence 10.1 Investigation and management 10.2 Blind spot syndrome	
Unit-5	8 hours
11. Eccentric Fixation 11.1 Investigation and management 12. Amblyopia 12.1 Classification 12.2 Aetiology 12.3 Investigation 12.4 Management	
Unit-6 13.1 Recent advances in Binocular Vision 13.2 Vision therapy and the recent trend 13.3 Neuro-optometry, a glimpse	8 hours

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Continuous Assessment Pattern

Internal Assessment (IA)	Mid Term Test (MTE)	End Term Test (ETE)	Total Marks
10	20	70	100

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