



**स्वामी राम हिमालयन विश्वविद्यालय**  
**Swami Rama Himalayan University**

## **Criterion 1 - Curricular Aspects**

### **1.1.1 Outcome Analysis of POs, COs** **MS Ophthalmology (2019-2022)**

**Himalayan Institute of Medical Sciences**

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**Swami Rama Nagar, Jolly Grant, Dehradun 248016, Uttarakhand, India**

## A. Program Outcomes

After successful completion of the program, the student will be able to:

<b>PO1</b>	To attain basic knowledge of the structure, function, development and common eye diseases and their epidemiology
<b>PO2</b>	To practice and handle day-to-day problems independently in ophthalmology including diseases in rural areas. The student should recognize the limitations of his/her own clinical knowledge and know when to seek further help.
<b>PO3</b>	To be able to integrate the preventive methods with the curative and rehabilitative measures in the comprehensive management of the disease including working of mobile ophthalmic unit.
<b>PO4</b>	To be familiar with the current developments in ophthalmic sciences, medico-legal aspect and patient counselling.
<b>PO5</b>	To be able to plan research project and educational programmes in ophthalmology in association with senior colleagues and be familiar with the modern methods of research, teaching and evaluation.

  


## B. Course-wise CO-PO Mapping

Mapping factor or Correlational level between Course Outcome (CO) and Program Outcomes (PO) indicates to what extent the teaching and assessment method of CO correlates/contributes the PO at the level defined below:

Corelation Level	Particulars
3	Substantial/high contribution of CO towards PO
2	Moderate contribution of CO towards PO
1	Slight/low contribution of CO towards PO

Course Name		Ophthalmology				
Course Outcomes (COs)		CO-PO Mapping (Articulation Matrix)				
At the end of the course the students will be able to:		PO-1	PO-2	PO-3	PO-4	PO-5
CO1	Demonstrate sufficient understanding of the basic sciences relevant to ophthalmology specialty through a problem based approach.	3		2		1
CO2	Describe the principles of ocular emergency, its mechanism, clinical presentation, medicolegal implication and plan & interpret appropriate laboratory and radio diagnostic imaging investigations & institute appropriate management including rehabilitation of patient.	3	2	1		3
CO3	Discuss the aetiopathogenesis, clinical presentation of congenital, developmental, inflammatory, Infective, metabolic, neuromuscular, degenerative and oncological ocular disorders and plan & interpret appropriate laboratory and radio diagnostic imaging investigations & institute appropriate management including rehabilitation for the same	3	2	2	3	2
CO4	Demonstrate sufficient knowledge regarding the recent advances taking place in the field of Ophthalmology.				3	



<b>CO5</b>	Identify a problem, prepare a research protocol, conduct a study, record observation, analyses data, interpret result, discuss and disseminate the finding.	2				3
<b>CO6</b>	Elicit and record from the patient, and other relevant sources including relatives and caregivers, a history that is complete and relevant to ophthalmology.	2	3	2		1
<b>CO7</b>	Perform and demonstrate effective clinical problem solving, judgment, ability to interpret and integrate available data in order to address patient for disease identification, prevention and health promotion.	3	3	3	3	3
<b>CO8</b>	Diagnosis and develop individualized management plans that include preventive, promotive & therapeutic goals for Ophthalmology disease.	3	2	1	2	3
<b>CO9</b>	Perform basic ophthalmology procedures & surgeries as applicable to a primary, secondary care centres and assist advance and complex ophthalmic surgeries as applicable to secondary and tertiary care centres.	3	3			2
<b>CO10</b>	Demonstrate ability to communicate adequately, sensitively, effectively and respectfully with patients in a language that the patient understands and in a manner that will improve patient satisfaction and health care outcomes.		1	3	1	2
<b>CO11</b>	Work effectively and appropriately with colleagues in an inter-professional health care team respecting diversity of roles, responsibilities and competencies of other professionals.		3		2	2
<b>CO12</b>	Understands the importance of medical ethics, integrity & responsibility in the profession as well as professional boundaries between patient's colleagues and society as proposed by the National Medical Commission of India.		2		2	3
<b>Course-wise PO Average</b>		<b>1.833</b>	<b>1.750</b>	<b>1.167</b>	<b>1.333</b>	<b>2.083</b>





### C. Program outcome Target Value:

Following table calculates the overall average of all POs of the Courses and is referred as average PO Reference values.

Course Title	PO-1	PO-2	PO-3	PO-4	PO-5
Ophthalmology	1.833	1.750	1.167	1.333	2.083
<b>Combined Average PO Reference values</b>	<b>1.833</b>	<b>1.750</b>	<b>1.167</b>	<b>1.333</b>	<b>2.083</b>

### D. Assessment of CO and PO Attainment Value

The attainment of the course outcome is measured at the level of 3 as follows:

Attainment Levels	Criteria
3	If <b>80%</b> of student achieves marks <b>greater</b> than threshold percentage of the total score of assessment
2	If <b>70%</b> of student achieves marks <b>greater</b> than threshold percentage of the total score of assessment
1	If <b>60%</b> of student achieves marks <b>greater</b> than threshold percentage of the total score of assessment
0	If <b>60%</b> of student achieves marks <b>less</b> than threshold percentage of the total score of assessment

Attainment level of COs is measured through direct attainment of COs depending on the performance of the students in University Examination (UE) individually. For the MS program the threshold percentage is set at 50% for University Examination.



Course Title	Attainment of COs	Derived Attainment of POs Course-wise				
		PO-1	PO-2	PO-3	PO-4	PO-5
Ophthalmology	3.00	1.833	1.750	1.167	1.333	2.083
<b>Average PO Achievement Through Results</b>		<b>1.833</b>	<b>1.750</b>	<b>1.167</b>	<b>1.333</b>	<b>2.083</b>
<b>Average PO Reference values</b>		<b>1.833</b>	<b>1.750</b>	<b>1.167</b>	<b>1.333</b>	<b>2.083</b>
<b>Percentage Attainment of PO's</b>		<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

From the Attainment level of CO, the Derived PO's value for course is calculated as follows:

$$\text{Derived PO Value} = \frac{\text{CO attainment} \times \text{respective PO average}}{3}$$

Depending on derived PO values of the courses, calculate the average PO achievement for each PO.

Calculate the percentage attainment of PO's as follows:

$$\text{Percentage attainment of PO's} = \frac{\text{Average PO Attainment through}}{\text{average PO reference value}} \times 100$$

  
