

FACULTY OF INDIAN MEDICAL SYSTEM

5¹/₂ Year Full Time Education Program

Bachelor of Ayurvedic Medicine and Surgery (Ayurvedacharya)

With effect from Year 2023

1.1.3 Description of Courses which focus on Competency,Employability, Entrepreneurship and Skill development

1. PROGRAM EDUCATIONAL OBJECTIVES (PEOs)

After completing Bachelor of Ayurvedic Medicine and Surgery, students will be able to:

PEO No.	Education Objective
PEO1	Recognize the importance of ayurvedic principles in the context of the health needs of the community.
PEO2	Diagnose and manage acute and chronic diseases on the basis of clinical assessment and appropriately selected and conducted investigations.
PEO3	Carry out efficient ayurvedic management of all types of ailments after quickly assessing the patient and synthesizing available clinical and investigational information to formulate totality of symptoms
PEO4	Identify social, economic, environmental, biological and emotional determinants of health in a given case, and take them into account while planning therapeutic, rehabilitative, preventive measures/strategies.
PEO5	Keep abreast of the current knowledge and recent advances in the field by self- learning and /or participating in continuing medical education programmes.
PEO6	Critically analyze relevant published research literature and use them appropriately to influence practice of ayurveda.

2. PROGRAM OUTCOME

PO	Attribute	Competency	
No.			
PO1	Professional	Demonstrate comprehensive knowledge and application of the	
	knowledge	Trisutra concept to explore root causes, identify clinical	
		manifestations of disease to treat ailments and maintain healthy	
		status.	
PO2	Clinical/	Demonstrate knowledge and skills in Ayurveda, acquired through	
	Technical skills	integration of multidisciplinary perspectives and keen observation of	
		clinical and practical experiences.	
PO3	Team work	Demonstrate proficiency in holistic, unique assessment of an	
		individual	
		for rational approach and decision-making in management of disease	
		and maintenance of health.	
PO4	Evidence based	Perform procedures and therapeutic maneuvers with skill and	
	practice/learning	dexterity in a variety of situations.	
PO5	Entrepreneurship	Demonstrate knowledge, skills and attitudes to provide holistic	
	, leadership and	quality care and preparedness to practice.	
	mentorship		
PO6	Ethical value &	Demonstrate agility, virtuous and ethical behavior and compassion to	
	professionalism	improve the well-being of individuals and society.	
PO7	Life-long	Demonstrate self-directedness in pursuit of knowledge and skills,	
	learning	which is required for advancing health care and wellbeing of society.	
PO8	Communication	Demonstrate the ability to effectively communicate with patients,	
PO9	Life-long	families, community and peers Demonstrate an understanding of qualities and required skills as a	
	learning	practitioner, researcher and academician and an aspirations to become one.	

CO-PO MAPPING FIRST PROFESSIONAL BAMS

KRIYASHAREERA

SR1 CO No	A1 Course learning Outcomes (CO) AyUG KS At the end of the course AyUG-KS, the student should be able to	B1 Course learning Outcomes matched with program learning outcomes.
CO 1	Explain all basic principles & concepts of Kriya Sharir along with essentials of contemporary human physiology and biochemistry related to all organ systems.	PO1, PO2
CO 2	Demonstrate and communicate normal and abnormal variables pertaining to Kriya Sharir such as Sara, Agni, Koshtha, Srotas etc.	PO2, PO3
CO 3	Differentiate between Prakriti and Vikriti in the individuals after carrying out relevant clinical examinations.	PO1, PO2, PO3, PO5
CO 4	Carry out clinical examination and experiments using equipments withinterpretation of their results	PO4
CO 5	Differentiate the strengths & limitations of Ayurved and contemporarysciences	PO2
CO 6	Present a short project work / research activity covering the role of Kriya Sharir in preventive and promotive healthcare.	PO5, PO6, PO7, PO8, PO9
CO 7	Show a sense of curiosity and questioning attitude towards the life processes and to display compassion and ethical behaviour	PO2, PO5, PO6, PO7, PO9
CO 8	Effectively communicate verbally and in writing preferably using Ayurvedic terminology along with contemporary terminology amongpeers, teachers and community	PO8, PO9

RACHANA SHAREERA

SR1 CO No	A1 Course learning Outcome (CO) AyUG RS At the end of the course AyUG RS, the student should be able to	B1 Course learning Outcome matched with program learning outcomes.
1	Describe the fundamentals of Rachana Sharir, interpret and analyze it in relevant context and recognize its significance in Ayurveda	PO1, PO2
2	Explain Garbha Sharir and Embryology in Ayurveda and modern science respectively with clinical significance	PO1, PO2
3	Describe and demonstrate all the bones and joints with attachments of associated structures and its clinical application	PO1, PO2
4	Explain the concept of Sira-Dhamani-Strotas, their organization in the human body and its applied aspect	PO1, PO2
5	Identify the Marmas and understand its classification along with its importance in preventive and therapeutic aspect	PO1, PO2

6	Explain and demonstrate the gross anatomy of the organs of various systems and their applied anatomy in perspective of Ayurveda and Modern science	PO1, PO2, PO3
7	Explain the Indriva Sharir and Sensory organs with its application in preventive and therapeutic domain.	PO1, PO2
8	Identify and locate all the structures of body and mark the topography of the living Sharir.	PO1, PO3
9	Respect the cadaver and perform dissection with commitment to reiterate the theoretical aspect of Ayurved Rachana Sharir and contemporary sciences.	PO1, PO3, PO5
10	Describe the basic principles of imaging technologies and identify the anatomical structures in the radiograph	PO1, PO2, PO3

SAMSKRIT EVAM AYURVED ITHIHAS

SR1 CO No	A1 Course learning Outcome (CO) AyUG SN & AI At the end of the course AyUG SN & AI, the student should be able to	B1 Course learning outcomes matched with program learning outcomes.
Sanskrit		
CO1	Read and recite Prose (गद्य:) and poem (पद्य:) with the appropriate accent (उच्चारणस्थानानन तथा बाह्याभ्यरप्रयत्नानन). उच्चारणस्थानानाां बाह्यभ्यन्तरप्रयत्नानाां च सहाय्येन पाठने तथा लेखने सामर्थययम्।	PO-5, PO-6, PO-7, PO-8, PO-9
CO 2	Apply various Technical Terms in Ayurveda (पररभाषाशब्दा:), Nouns & Pronouns (नामरूपानण तथा सर्यनामरूपानण), Verbs (धातुरूपानण), suffixes (प्रत्यया:), Grammatical Terms (सांज्ञा), Syntax (सांधी) and Compounds (समासा:) from Sanskrit Grammar for enhanced interpretation of Ayurveda texts (आयर्) ेद सांनहता:). पररभाषाशब्देष नामरूपेष सर्यनामरूपेष प्रत्ययेष सज्ञां ासु सनन्धषु समासेषु च ज्ञानां तद वाराआयर्ेदसनहतासुुां् अथार्य बोधनम	PO-5, PO-7, PO-9

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	्र प्रायोनगकनर्ज्ञानञ्च।	
CO 3	Discriminate and interpret the Cases & meanings (नर्भाक्तत्यथय) used in various verses of Ayurveda texts (आयर्ु ेद सनां हता). कारकनर्भक्तत्यथानय दषु पररज्ञानां तथा आय रेदसनहतासुुां तेषाां प्रयोगपररचयञ्च।	PO-5, PO-7, PO-9
CO 4	Formulate the Prose order (अत्र्यः) of Slokas/Sutras in Ayurveda Textbooks (सांनहता) to derive the meaning (र्ाच्याथय), to determine the Scientific Meaning (शास्त्राथय) and to Translate (Regional or other language). अत्र्यलेखने र्ाच्याथायर्बोधने शास्त्राथायर्बोधने च सामर्थयं अन र्ादनपाटर्ज्यु	PO-5,PO-6, PO-7, PO- 8, PO-9
CO 5	Interpret the Synonyms (पयाययााः) and Derivations (ननरुनि) of Ayurveda Terms using samskrita dictionaries (सांस्कृ त शब्दकोश). कोशग्रन्थानाां सहाय्येन आय र्ेदु नर्द्यमानानाां पदानाां तेषाां पयाययानाञ्च ननरुनक्तिपर्ू यक पररज्ञानां तेषाां प्रयोगे पररचयञ्च।	PO-5, PO-7, PO-9
CO 6	Speak, Write and Summarize and Express in Samskrit (सांस्कृ तम्). सांस्कृ तभाषायाां भाषणे लेखने सङ्कृ निप्य नलखने अथयप्रकाशने च सामर्थययम्।	PO-5,PO-6, PO-7, PO- 8, PO-9
CO 7	Develop the ethical responsibility towards the profession, society and human being. सामानिक- औद्योनकक-मान नषकु धमयबोधता	PO-6 & PO-8
Ayurved Itihas		
CO 8	Analyse and explain the important milestones in the history of Ayurveda	PO-1
CO 9	Appreciate the status of Ayurveda in different time periods and Contributions made by different Acharyas to Ayurveda.	PO-1

PADARTHA VIGYANA

со	Course learning Outcomes (CO) AyUG-PV At the end of the course AyUG-PV, the student should be able to	Course learning Outcome matched with program learning outcomes.
CO 1	Illustrate the scope and utility of Ayurveda	PO1
CO 2	Explain Philosophical foundation of Ayurveda, Principles (Siddhantha) of Darshana along with their similarities and relevance in Ayurveda and contemporary sciences.	PO1, PO2, PO6
CO 3	Analyse and interpret Padartha (Prameya) in Darshana and Ayurveda. Recognize their applications in Ayurveda.	PO1, PO2, PO9
CO 4	Distinguish, analyse and apply concept of Pramana Shastra (Epistemology) in Darshana and Ayurveda. Demonstrate their applications in Ayurveda.	PO1, PO2, PO9
CO 5	Analyse and apply concept of Karya Karana Bhava in Ayurveda.	PO1, PO2, PO9

SAMHITA ADHYAYANA

SR1 CO No	A1 Course learning Outcomes (CO) AyUG SA1 At the end of the course AyUG-SA1, the students should be able to	B1 Course learning Outcomes matched with program learning outcomes.
CO1	Distinguish the different <i>Samhitas</i> , their importance and methodology and familiarize with the tools of <i>Samhita Adhyayan</i> . (eg: <i>tantrayukti</i>)	PO2, PO9
CO2	Interpret and apply the <i>sutras</i> from the <i>Samhitas</i> .	PO1
CO3	Apply and evaluate the <i>Tridosha</i> , <i>Saptadhatu</i> and <i>Mala</i> principles (theory).	PO1, PO3, PO5
CO4	Practice and prescribe <i>Dincharya</i> (daily regimen), <i>Ritucharya</i> (seasonal regimen) and dietary principles for preservation of health.	PO2, PO7, PO8
CO5	Explore and distinguish different types of food, food groups and medicinal <i>dravyas</i> mentioned in <i>Samhitas</i> .	PO1, PO2
CO6	Identify various etiopathological factors and predict different treatment principles	PO1, PO5
CO7	Recognize and explain the fundamentals behind various therapeutics (<i>Shodhan</i> and allied) and parasurgical therapies.	PO2, PO5
CO8	Develop a code of behavior and show mature behaviour in particular to the scientific deliberations.	PO 6, PO 9

3. SECOND PROFESSIONAL BAMS

DRAVYAGUNA VIGYAN

СО	Course learning Outcomes (CO)	Course learning Outcome matched with program learning outcomes
CO1	Demonstrate the principles of <i>Dravyaguna</i> in clinical practice	PO1, PO2, PO8
CO2	Analyze and Justify the fundamental principles of <i>Dravyaguna</i> in relevance to contemporary sciences with recent updates.	PO1
CO 3	Analyze and interpret <i>Rasa Panchaka</i> of <i>Dravya</i> with their application in clinical practice.	PO5, PO9
CO4	Relate the knowledge on Karma (pharmacological actions) with <i>Rasa panchaka</i> and basic contemporary clinical pharmacology	PO2
CO5	Demonstrate and Justify the ability to select the specific <i>Dravyas</i> , Prashata Bheshaja with different dosage forms in different clinical conditions.	PO3, PO7, PO9
CO6	Demonstrate knowledge of quality control methods of drug	PO3
CO7	Demonstrate knowledge and skills about <i>Apamishrana</i> (adulterants), <i>Abhava pratinidhidravya</i> (substitutes),	PO5, PO6
CO8	Identify the medicinal plants and orient about conservation, cultivation and sustainable utilization.	PO4, PO6
CO9	Demonstrate fundamental principles of applied Pharmacology.	PO2

AGADATANTRA

SR1 CO No CO1	 A1 Course learning Outcome (CO) Agad Tantra At the end of the course Agad Tantra the student should be ableto- Comprehend the basic principles of Agad Tantra 	B1 Course learning Outcome matched with program learning outcomes. PO1
CO2	Interpret signs and symptoms of various types of poisoning as per Ayurveda and contemporary science	PO2 PO3
CO3	Diagnose and manage poisonous conditions as per Ayurveda principles	PO2 PO3 PO4
CO4	Identify and comprehend various poisonous entities – living and non-living	PO1
CO5	Comprehend medico-legal aspects of any harm or injury and death	PO1 PO5
CO6	Practice ethics and good communication skills	PO6 PO8
CO7	Record medico-legal events and communicate the same effectively	PO9 PO8
CO8	Practice self-directedness in learning and describing advancements in the field	PO7 PO9

RASASHASTRA EVUM BHAISHAJYA KALPANA

	A1	B1 Course learning
SR1	Course learning Outcome (CO) Rasashastra Evum	Outcome matched with
CO	Bhaishajyakalpana	programlearning
No	At the end of the course Rasashastra Evum	outcomes.
	Bhaishajyakalpana the student should be ableto-	
CO1	Recall and comprehend the basic principles of Rasa shastra	PO1
	evum bhaishajya kalpana along with associated terminologies	
CO2	Describe and perform use of equipment for preparing various	PO2 PO4
	formulations	
CO3	Demonstrate and perform processing and production of rasa	PO2 PO4
	aushadhi	
CO4	Identify and describe raw materials for preparation of herbo-	PO2
	mineral formulations	
CO5	Comprehend norms and regulations related to production,	PO5
	storage and dispensing of drugs	
CO6	Demonstrate ethics in drug manufacturing process	PO6 PO8
CO7	Select formulation of choice based on disease	PO3
CO8	Comprehend advances in the field of Pharmaceutics	PO7

ROGANIDANA

	A1	B1
SR1	Course learning Outcome (CO) AyUG-RN	Course learning
CO	At the end of the course AyUG-RN the student should be ableto-	Outcome matched
No		with program
		learning outcomes.
CO1	Demonstrate (Apply-Cognitive/ Psychomotor domain) Hetu and	PO1
	Linga with reference to dosha, dhatu, mala, agni dushti, ama, sroto	
	dushti, and other facts and concepts of Roganidana and vikruti	
	vigyana.	
CO2	Demonstrate (Apply-Cognitive/ Psychomotor domain) with regard	PO1, PO2
	to nidana panchaka of vyadhi, basic pathology, general pathology	
	during clinical and practical sessions.	
CO3	Demonstrate (Apply-Cognitive/ Psychomotor domain), Investigate	PO3, PO5
	(Affective domain) and Share (Affective domain) clinical decision	
	making through Roga and Rogi pareeksha	
CO4	Order and Practice (Apply – Cognitive) Investigations and Clinical	PO4
	examinations	
CO5	Demonstrate compassion and ethics while approaching patient	PO6
	during clinical decision making	
CO6	Demonstrate (Affective domain) questioning and challenging	PO7
	abilities during clinical decision making	
CO7	Effectively communicate (Affective) during learning, history	PO8
	taking, clinical diagnosis, case and scientific discussions -	
	presentations through Ayurveda terminologies and technical terms	
	with health seekers and common public	
CO8	Demonstrate (Affective domain) advancements in diagnostics and	PO9
	prognostics in daily clinical practice, along with recent regulatory	
	guidelines	

SWASTHAVRITTA EVAM YOGA

SR1 CO	A1 Course learning Outcome (CO) Swasthavrtta At the end of the course Swasthavrtta the student should be ableto-	B1 Course learning Outcome
No		matched with program learning outcomes.
CO1	Comprehend principles of preventive medicine in Ayurveda	PO1
CO2	Explain and demonstrate principles of hygiene	PO1
CO3	Comprehend various National health programs and policies	PO1, PO9
CO4	Formulate diagnosis on Communicable and Non Communicable diseases through principles of Ayurveda	PO3
CO5	Describe management of life style diseases through principles of Ayurveda	PO4

CO6	Recall basics of epidemiology and biostatistics	PO1 PO2
CO7	Describe and perform Yoga asana and various other techniques for	PO3 PO4 PO5
	disease management	
CO8	Demonstrate good communication skills, ethics and self-directedness in	PO6 PO7 PO8
	learning swasthavrtta	
CO9	Describe advancements in the field of preventive medicine and related	PO9
	areas of swasthavrtta	

CHARAK SAMHITA PURVARDHA

SR1CO No	A1 Course learning Outcome (CO) Charaka Samhita Purvardha At the end of the course Charaka Samhita Purvardha the student should be ableto-	B1 Course learning Outcome matched with p rogram learning
CO1	Comprehend trisutra mentioned in Charak Samhita Sutra sthana	outcomes. PO1
CO2	Apply various tools for teaching, learning, and diagnosis in Charak Samhita Vimana sthana	PO2
CO3	Describe anatomical and physiological aspects of human body along with its relation based on Charak Samhita Sharira sthana	PO1
CO4	Comprehend and generate differential diagnosis based on Charak Samhita Nidana sthana	PO3
CO5	Interpret features for prognosis based on Charak Samhita Indriya sthana	PO3 PO4 PO5
CO6	Demonstrate communication skills, ethics and professionalism as mentioned in Charak samhita	PO6 PO8 PO9
CO7	Demonstrate self-directedness in learning Charak Samhita	PO7

4. THIRD PROFESSIONAL BAMS

KAYACHIKITSA

	A1	B1
SR1	Course learning Outcome (CO) Kayachikitsa	Course learning
СО	At the end of the course Kayachikitsa the student should be ableto-	Outcome
No		matched with
110		prog
		ram learning
		outcomes.
CO1	Comprehend and apply various treatment principles mentioned in	PO1 PO2
	Ayurveda	
CO2	Demonstrate ethics and communication skills in practice	PO6 PO8
CO3	Diagnose diseases as per Ayurveda and contemporary science	PO3
CO4	Formulate an effective treatment principle	PO3 PO5
CO5	Perform various therapeutic procedures told in Ayurveda and	PO4
	contemporary science	
CO6	Comprehend about emergency care mentioned in Ayurveda and	PO2
	contemporary science	
CO7	Explain National Health Programs and Health Policies	PO7 PO9

PANCHAKARMA

	A1	B1	
SR1	Course learning Outcome (CO) Panchakarma	Course	learning
CO	At the end of the course Panchakarma the student should	Outcome	matched
No	be ableto-	with	program
		learning of	utcomes.
CO1	Comprehend basic principles of Panchakarma based on	PO1	
	various literature		
CO2	Formulate panchakarma procedures based on the condition	PO2	
CO3	Perform prescribed panchakarma procedures	PO4	
CO4	Comprehend, order and perform physiotherapy procedures	PO3 PO4	
CO5	Prepare formulations for panchakarma procedures	PO4 PO5	
CO6	Identify and describe instruments and techniques utilized to	PO2	
	perform panchakarma procedures		
CO7	Demonstrate ethics and communication skills	PO6 PO8	
CO8	Demonstrate self-directedness and application of	PO7 PO8	
	advancements in technology to panchakarma		

SHALYA TANTRA

SR1 CO No	A1 Course learning Outcome (CO) Shalya Tantra At the end of the course Shalya Tantra the student should be ableto-	B1 Course learning Outcome matched with program learning outcomes.
CO1	Comprehend principles of Shalya Tantra	PO1
CO2	Diagnose surgical cases and plan for further procedure	PO2 PO3
CO3	Comprehend prognosis of surgical diseases	PO3
CO4	Order and interpret investigations related to surgical diseases	PO4 PO5
CO5	Perform various para surgical procedures mentioned in different Ayurveda literature	PO4 PO5
CO6	Perform surgical procedures mentioned in Ayurveda and contemporary science	PO4 PO5
CO7	Demonstrate ethics and communication skills in daily practice	PO6 PO8
CO8	Develop inquisitiveness in learning the subject adding advancements in the field	PO7 PO9

SHALAKYA TANTRA

	A1	B1	
SR1	Course learning Outcome (CO) Shalakya Tantra	Course	learning
СО	At the end of the course Shalakya Tantra the student should	Outcome	matched
No	be ableto-	with	program
		learning of	utcomes.
CO1	Comprehend principles of Shalakya Tantra	PO1	
CO2	Diagnose cases of Urdhwa jatrugata vikara	PO2 PO3	
CO3	Comprehend prognosis of Urdhwa jatrugata vikara	PO3	
CO4	Order and interpret investigations related to Urdhwa jatrugata	PO4 PO5	
	vikara		
CO5	Perform various kriyakalpa mentioned in different Ayurveda	PO4 PO5	
	literature		
CO6	Perform surgical procedures mentioned in Ayurveda and	PO4 PO5	
	contemporary science		
CO7	Demonstrate ethics and communication skills in daily practice	PO6 PO8	
CO8	Develop inquisitiveness in learning the subject adding	PO7 PO9	
	advancements in the field		

PRASUTI TANTRA STRI ROGA

SR1 CO No	A1 Course learning Outcome (CO) Prasuti Tantra Evum Stree Roga At the end of the course Prasuti Tantra Evum Stree Roga the student should be ableto-	B1 Course learning Outcome matched with program learning outcomes.
CO1	Comprehend principles of Prasuti tantra evum stree roga in Ayurveda	PO1
CO2	Describe and perform obstetrical and gynecological practices as per Ayurveda and contemporary science	PO1 PO2 PO3
CO3	Diagnose and manage gynecological disorders through Ayurveda practice	PO3 PO4 PO5
CO4	Demonstrate good communication skills, ethics, and self- directedness in learning and practicing Prasuti tantra evum stree roga	PO6 PO7 PO8
CO5	Comprehend and apply advancements in the field of Prasuti tantra evum stree roga to daily learning and practice	PO9

KAUMARABHRITYA

	A1	B1
SR1	Course learning Outcome (CO) Kaumarabhrtya	Course learning
CO	At the end of the course Kaumarabhrtya the student should be ableto-	Outcome matched
No		with program
		learning outcomes.
CO1	Comprehend principles of Kaumarabhrtya in Ayurveda	PO1
CO2	Describe and perform neonatal care as per Ayurveda and contemporary	PO1 PO2 PO3
	science	
CO3	Diagnose and manage pediatric disorders through Ayurveda practice	PO3 PO4 PO5
CO4	Demonstrate good communication skills, ethics, and self-directedness in	PO6 PO7 PO8
	learning and practicing Kaumarabhrtya	
CO5	Comprehend and apply advancements in the field of Kaumarabhrtya to	PO9
	daily learning and practice	

CHARAKA SAMHITA UTTARARTHA

SR1 CO No	A1 Course learning Outcome (CO) Charak Samhita Uttarartha At the end of the course Charak Samhita Uttarartha the student should be ableto-	B1 Course learning Outcome matched with programlearning outcomes.
CO1	Comprehend principles of treatment as per Charak Samhita	PO1
CO2	Comprehend and interpret nidana as per Charak Samhita	PO1 PO2
CO3	Diagnose and manage diseases as per Charak Samhita	PO2 PO3
CO4	4 Describe procedures of panchakarma along with indication and PO1 PO contraindication	
CO5	Describe preparation of medicines related to panchakarma	PO1 PO5
CO6	Explain rasayana and vajikarana adhyaya along with its utility	PO1
CO7	Communicate effectively the finding of learning Charak Samhita	PO8
CO8	Demonstrating ethics and inquisitiveness in learning with the aid of advancements in medical field	PO7 PO9

RESEARCH METHODOLOGY AND BIOSTATISTICS UNITIZED SYLLABUS

	A1	B1
SR1	Course learning Outcome (CO) Research	Course learningOutcome matched
CO	methodology and biostatistics	with programlearning outcomes.
No	At the end of the course Research methodology	
	and biostatistics the student should be ableto-	
CO1	Comprehend basic principles of research as per	PO1 PO2
	Ayurveda and contemporary science	
CO2	Define terminologies related to research in Ayurveda	PO1 PO2
	and contemporary science	
CO3	Comprehend steps of drafting research proposal	PO2 PO3 PO4
CO4	Practice drafting research proposal	PO1 PO2 PO3 PO4 PO5
CO5	Explain basics of biostatistics	PO1 PO2
CO6	Define terminologies related to biostatistics in	PO1 PO2
	contemporary science	
CO7	Choose appropriate statistical test for drafted	PO1 PO2
	research proposal	
CO8	Demonstrate ethics and communication skills during	PO6 PO8
	the process of research	
CO9	Translate advancements in the field of research to	PO7 PO9
	practice	

