

## M.A. / M.Sc. Anthropology

The Master of Science/Art in Anthropology program is a two-year, four-semester program premeditated to endow with students with a wide-ranging thoughtful of sophisticated anthropological doctrine and their applications in overall development of humankind. Anthropology is a holistic science and its nature is bio-cultural or bio-social it shapes anthropology as a unique science. This uniqueness of anthropology provides its multidisciplinary nature and it's also provides student to multiple job opportunities. Through a balanced curriculum covering diverse areas, students learn a well-built foundational knowledge of anthropology during the preliminary semesters. As the program progresses, students have the suppleness to upgrade their learning by choosing electives specialized course i.e., Biological and Social-Cultural Anthropology that make strengthen with their interests and career targets. At the completion of the programme, students will be able to be well prepared for diverse career paths including education, research, administration, technology and non-governmental organization (NGO) sectors. Through a concrete anthropological background, they will be skilled at as efficient policy planner, executer, thinker, and advocates of marginalized and tribal peoples and social doctor and contribute effectively to various fields of betterment of humankind. Being a transdisciplinary subject, anthropology permeates among every discipline with definite modes of applications. It is only for the sake of convenience that the subject matter is divided into branches. Anthropology has a role to play in promoting communal harmony, tolerance, co-existence and world peace by using the instrument of culture and concept of cultural relativism.

### Program Outcomes:

Upon successful completion of the Master of Science/ Art in Anthropology program, students will be able to:

PO-1	<b>Knowledge:</b> Demonstrate and deliver deep understanding of advanced anthropological concepts, theories, methods, and laboratory and field techniques in various branches, field and subfield of Anthropology. Anthropology is a discipline for the future since it draws linkages between past, present and future, and has predictive ability.
PO-2	<b>Critical Thinking and Reasoning:</b> Spread over analytic thought to a body of knowledge, analyse and evaluate evidence, arguments, claims, beliefs on the basis of empirical evidence of anthropological philosophy, establish the ability to evaluate the reliability and relevance of evidence, identify logical flaws and holes in the arguments of others, analyse and synthesise data from a variety of sources, draw valid conclusions and support them with evidence and examples, and addressing opposing viewpoints.
PO-3	<b>Problem Solving:</b> Express capacity to extrapolate from what one has learned and apply their competencies to solve different kinds of non-familiar problems, rather than replicate curriculum content knowledge and apply one's learning to real life situation. Utilize the anthropological concepts, theories, methods and processes to eradicate contemporary social pathological problems and conflicts. Especially remove the backwardness and marginalization among the downtrodden peoples of the society by the using anthropological doctrine.

PO-4	<b>Advanced Analytical and Computational Skills:</b> Demonstrate the ability to evaluate the reliability and relevance of evidence, identify logical flaws and holes in the arguments of others, analyse and synthesise data from a variety of sources, draw valid conclusions and support them with evidence and examples to addressing opposing viewpoints. Possess advanced skills in computation, including proficiency in using advance software for quantitative data analysis.
PO-5	<b>Effective Communication:</b> The student of anthropology has able to rapport-building with not only the common citizen but unknown tribal and rural societies as well because the students of anthropology are trained with fieldwork techniques. Express thoughts and ideas effectively in writing and orally, communicate with others using appropriate media, confidently share one’s views and express herself/himself, demonstrate the ability to listen carefully, read and write analytically, and present complex information in a clear and concise manner to different groups.
PO-6	<b>Interdisciplinary Interaction:</b> Demonstrate ability to work effectively and respectfully with diverse teams, facilitate cooperative or coordinated effort on the part of a group, and act together as a group or a team in the interests of a common cause and work efficiently as a member of a team. Establish knowledge of the values and beliefs of multiple cultures and a global perspective, effectively engage in a multicultural society, interact respectfully with diverse groups.
PO-7	<b>Self-directed and Life-long Learning:</b> Determine the ability to acquire knowledge and skills, including ‘learning how to learn’ that are necessary for participating in learning activities throughout life, through self-paced and self-directed learning aimed at personal development, meeting economic, social and cultural objectives, and adapting to changing trades and demands of work place through knowledge/skill development/reskilling.
PO-8	<b>Effective Citizenship: Leadership and Innovation:</b> Prove capability for mapping out where one needs to go to "win" as a team or an organization, and set direction, formulate an inspiring vision, build a team who can help achieve the vision, motivate and inspire team members to engage with that vision, and use management skills to guide people to the right destination in a smooth and efficient way.
PO-9	<b>Ethics:</b> Demonstrate the ability to embrace moral/ethical values in conducting one’s life, formulate a position/argument about an ethical issue from multiple perspectives, and use ethical practices in all work. Demonstrate the ability to identify ethical issues related to one’s work, avoid unethical behaviour such as fabrication, falsification or misrepresentation of data or committing plagiarism, not adhering to intellectual property rights, appreciate environmental and sustainability issues, and adopt objective, unbiased and truthful actions in all aspects of work.
PO-10	<b>Further Education or Employment:</b> Engage for further academic pursuits, including Ph.D. programs in anthropology or other related bio-social fields. Get employment in academia, research institutions, industry, non -government organisation (NGOs), government, international agencies like WHO, UNICEF, UNESCO, UNFAP, USAID etc., and other sectors.

PO-11	<p><b>Global Perspective:</b> As we know “anthropology is the study of man and his work” therefore their recognition is global nature because where man there is anthropology. Anthropology understands the changing scenario in the wake of information technology leading to explosion of knowledge, and the shrinking world, and forces of globalisation threatening diversities and identities. Anthropology has a potential to develop its identity as Queen of all Sciences since it is sitting on the gold mine of rich data, created and being created by dynamic human endeavour.</p>
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**PROGRAMME SPECIFIC OUTCOMES (PSOs):** At the end of the program, the student will be able to:

PSO1	Understand fundamental and systematic or coherent thoughtful of the academic field of Anthropology, its different branches and applications, and its linkages with related disciplinary areas/subjects procedural knowledge that creates different types of professionals related to the disciplinary/subject area of Anthropology, including professionals engaged in research and development, teaching and government/public service, and NGOs.
PSO2	Utilize the knowledge of Anthropology in formulating and tackling Anthropology-related problems and identifying and applying appropriate anthropological principles and methodologies to solve a wide range of problems associated with humankind.
PSO3	Pursue research in challenging areas of pure/applied anthropology. Plan and execute Anthropology-related experiments or field investigations, analyse and interpret data/information collected using appropriate methods, including the use of appropriate software such as programming languages and purpose-written packages. Report accurately the findings of the experiment/field investigations while relating the conclusions/findings to relevant theories of Anthropology.
PSO4	Reveal professional behaviour such as being objective, unbiased and truthful in all aspects of work and avoiding unethical behaviour, identify the potential ethical issues in work-related situations, appreciation of intellectual property, environmental and sustainability issues, and promoting safe learning and working environment
PSO5	Qualify national level tests like NET, selected through UPSC, State level PCSs/PSCs; establish NGOs, research institutes etc.

**M.A./M. Sc. ANTHROPOLOGY**

<b>Semester</b>	<b>Specification of Course</b>	<b>No. of Courses (T+P)</b>	<b>Credits</b>
I	Core	4+2	25
II	Core	4+2	25
III (Group A)	Core	2+2	25
	Elective	2	
III (Group B)	Core	2+2	25
	Elective	2	
IV (Group A)	Core	2+2	25
	Elective	2	
IV (Group B)	Core	2+2	25
	Elective	2	
<b>Total</b>			<b>100</b>
<b>Additional Courses</b> (Qualifying in nature, for Students admitted in School of Studies only)			
<b>Generic Elective Courses:</b> (Offered to PG students of other Departments/ SoS only)	II, III	02	04
<b>Skill Enhancement/Value Added Courses:</b> (Offered to the PG students of SoS in Anthropology)	I, III	02	04

## M.A./M. Sc. ANTHROPOLOGY

Specialization	Core		Elective		Total	
	Paper	Credit	Paper	Credit	Paper	Credit
<b>M.A./M. Sc. ANTHROPOLOGY</b> (Group-A)	20	80	04	20	24	100
<b>M.A./M. Sc. ANTHROPOLOGY</b> (Group-B)	20	80	04	20	24	100

**M.A./M.Sc. ANTHROPOLOGY****PROGRAMME STRUCTURE****Semester-I**

Semester	Course Nature	Course Code	Course Title	Course Type (T/P)	Hrs/ Week (L+T+P)	Credits	Marks		
							CIA	ESE	Total
Semester-I	Core	ANTH 110	Fundamentals of Social-Cultural Anthropology	T	5+1	5	25	75	100
	Core	ANTH 120	Fundamentals of Biological Anthropology	T	5+1	5	25	75	100
	Core	ANTH 130	Prehistoric Archaeology & Palaeo-Anthropology	T	5+1	5	25	75	100
	Core	ANTH 140	Research Methods in Anthropology	T	5+1	5	25	75	100
	Core	ANTH 150	Practicals in Craniology and Craniometry	P	4	2	25	75	100
	Core	ANTH 160	Practicals in Osteology and Osteometry	P	6	3	25	75	100
<b>Total</b>				<b>4/2</b>	<b>20+4+10</b>	<b>25</b>	<b>150</b>	<b>450</b>	<b>600</b>

## M.A./M.Sc. ANTHROPOLOGY

### Semester-II

	Course Nature	Course Code	Course Title	Course Type (T/P)	Hrs/ Week (L+T+P)	Credits	Marks		
							CIA	ESE	Total
<b>Semester-II</b>	Core	ANTH 210	Medical Anthropology	T	5+1	5	25	75	100
	Core	ANTH 220	Fundamentals of Human Genetics	T	5+1	5	25	75	100
	Core	ANTH 230	Indian Archaeology	T	5+1	5	25	75	100
	Core	ANTH 240	Biostatistics and Computer Application	T	5+1	5	25	75	100
	Core	ANTH 250	Practicals in Archaeology	P	4	2	25	75	100
	Core	ANTH 260	Compulsory Field Work	P	6	3	25	75	100
	<b>Total</b>				<b>4/2</b>	<b>20+4+10</b>	<b>25</b>	<b>150</b>	<b>450</b>

## M.A./M.Sc. ANTHROPOLOGY

### Semester-III Group A (Biological Anthropology)

	Course Nature	Course Code	Course Title	Course Type (T/P)	Hrs/ Week (L+T+P)	Credits	Marks			
							CIA	ESE	Total	
<b>Semester-III Group A (Biological Anthropology)</b>	Core	ANTH 310	Applied Anthropology (Group- A & B)	T	5+1	5	25	75	100	
	Core	ANTH 320	Advanced Human Biology	T	5+1	5	25	75	100	
	Core	ANTH 330	Practicals in Applied Biological Anthropology	P	6	3	25	75	100	
	Core	ANTH 340	Practicals in Human Growth, Nutrition and Physiology	P	4	2	25	75	100	
	Elective -1 (Select any one)	ANTH 351	Human Growth & Nutrition	T	5+1	5	25	75	100	
		ANTH 352	Anthropological Demography	T	5+1	5	25	75	100	
		ANTH 353	Anthropology of Ageing	T	5+1	5	25	75	100	
	Elective -2 (Select any one)	ANTH 361	Human Molecular Genetics	T	5+1	5	25	75	100	
		ANTH 362	Human Physiological Anthropology	T	5+1	5	25	75	100	
		ANTH 363	Human Variation and Adaptations	T	5+1	5	25	75	100	
	<b>Total</b>				<b>4/2</b>	<b>20+4+10</b>	<b>25</b>	<b>150</b>	<b>450</b>	<b>600</b>



## M.A./M.Sc. ANTHROPOLOGY

### Semester-III Group B (Social-Cultural Anthropology)

	Course Nature	Course Code	Course Title	Course Type (T/P)	Hrs/ Week (L+T+P)	Credits	Marks			
							CIA	ESE	Total	
<b>Semester-III Group B (Social-Cultural Anthropology)</b>	Core	ANTH 310	Applied Anthropology (Group- A & B)	T	5+1	5	25	75	100	
	Core	ANTH 370	Theory and Methods in Social –Cultural Anthropology	T	5+1	5	25	75	100	
	Core	ANTH 380	Practicals in Museology	P	4	2	25	75	100	
	Core	ANTH 390	Fieldwork based report and seminar on Ethno-museology and Visual Anthropology	P	6	3	25	75	100	
	Elective-1 (Select any one)	ANTH 401	Museological Anthropology and Visual Anthropology	T	5+1	5	25	75	100	
		ANTH 402	Linguistic Anthropology	T	5+1	5	25	75	100	
		ANTH 403	Anthropology of Food	T	5+1	5	25	75	100	
	Elective-2 (Select any one)	ANTH 411	Tribal Development	T	5+1	5	25	75	100	
		ANTH 412	Symbolic Anthropology	T	5+1	5	25	75	100	
		ANTH 413	Indian Diaspora	T	5+1	5	25	75	100	
	<b>Total</b>				<b>4/2</b>	<b>20+4+10</b>	<b>25</b>	<b>150</b>	<b>450</b>	<b>600</b>

## M.A./M.Sc. ANTHROPOLOGY

### Semester-IV Group A (Biological Anthropology)

	Course Nature	Course Code	Course Title	Course Type (T/P)	Hrs/ Week (L+T+P)	Credits	Marks			
							CIA	ESE	Total	
<b>Semester-IV Group A (Biological Anthropology)</b>	Core	ANTH 420	Ecological Anthropology (Group-A & B)	T	5+1	5	25	75	100	
	Core	ANTH 430	Medical Genetics	T	5+1	5	25	75	100	
	Core	ANTH 440	Dissertation (Fieldwork/Laboratory Based Data Collection, Analysis and Report Writing)	P	6	3	25	75	100	
	Core	ANTH 450	Power Point Presentation of Dissertation and Viva-Voce	P	4	2	25	75	100	
	Elective-1 (Select any one)	ANTH 461	Forensic Anthropology	T	5+1	5	25	50	100	
		ANTH 462	Ethnomedicine (Group A & B)	T	5+1	5	25	50	100	
		ANTH 463	Human Growth and Development	T	5+1	5	25	75	100	
	Elective-2 (Select any one)	ANTH 471	Sports Anthropology	T	5+1	5	25	75	100	
		ANTH 472	Human Reproduction and Reproductive Health (Group A & B)	T	5+1	5	25	75	100	
		ANTH 473	Human Population Genetics	T	5+1	5	25	75	100	
	<b>Total</b>				<b>4/1</b>	<b>20+4+10</b>	<b>25</b>	<b>150</b>	<b>450</b>	<b>600</b>

## M.A./M.Sc. ANTHROPOLOGY

### Semester-IV Group B (Social-Cultural Anthropology)

	Course Nature	Course Code	Course Title	Course Type (T/P)	Hrs/ Week (L+T+P)	Credits	Marks			
							CIA	ESE	Total	
Semester-IV Group B (Social-Cultural Anthropology)	Core	ANTH 420	Ecological Anthropology (Group A & B)	T	5+1	5	25	75	100	
	Core	ANTH 470	Indian Anthropology	T	5+1	5	25	75	100	
	Core	ANTH 440	Dissertation (Fieldwork/Laboratory Based Data Collection, Analysis and Report Writing)	P	6	3	25	75	100	
	Core	ANTH 450	Power Point Presentation of Dissertation and Viva-Voce	P	4	2	25	75	100	
	Elective-1 (Select any one)	ANTH 481	Development Anthropology	T	5+1	5	25	50	100	
		ANTH 482	Ethnomedicine (Group A & B)	T	5+1	5	25	50	100	
		ANTH 483	Human Reproduction and Reproductive Health (Group A & B)	T	5+1	5	25	75	100	
	Elective-2 (Select any one)	ANTH 491	Anthropology of Disaster Displacement & Rehabilitation	T	5+1	5	25	75	100	
		ANTH492	Anthropology of Communication	T	5+1	5	25	75	100	
		ANTH493	Anthropology of Gender	T	5+1	5	25	75	100	
	<b>Total</b>				<b>4/1</b>	<b>20+4+10</b>	<b>25</b>	<b>150</b>	<b>450</b>	<b>600</b>

#### Note:

1. In place of Elective Course Student can choose paper(s) from MOOC Courses (Swayam Portal) subject to the following conditions:
  - a. The chosen paper will be other than the papers offered in the current course structure.
  - b. The paper will be PG level with a minimum of 12 weeks' duration.
  - c. The list of courses on SWAYAM keeps changing, the departmental committee will finalize the list of MOOC courses for each semester.
  - d. The paper(s) may be chosen from Swayam Portal on the recommendation of Head of the Department.
2. The candidates who have joined the PG Programme in School of Studies (University Teaching Department), shall undergo Generic Elective Courses (only qualifying in nature) offered by other departments/SoS in Semester II and Semester III.

3. The candidates, who have joined the PG Programme in School of Studies (University Teaching Department), shall undergo Skill Enhancement Course/Value Added Course (only qualifying in nature) in Semester I and Semester II.

### Anthropology (Semester-I)

**Skill Enhancement/Value Added Courses: (Offered to the PG students of SoS in Anthropology)**

Semester	Course Code	Course Title	Course Type (T/P)	Hrs/Week	Credits	Marks		
						CIA	ESE	Total
I	ANTH 510	Indian Knowledge System (IKS)	T	4	2	25	75	100

### Anthropology (Semester-IV)

**Skill Enhancement/Value Added Courses: (Offered to the PG students of SoS in Anthropology)**

Semester	Course Code	Course Title	Course Type (T/P)	Hrs/Week	Credits	Marks		
						CIA	ESE	Total
IV	ANTH 520	Applications of Social-cultural and Biological Anthropological Theories and Methods	T	4	2	25	75	100

### Anthropology (Semester-II)

**Generic Elective Courses: (Offered to PG students of other Departments/ SoS only)**

Semester	Course Code	Course Title	Course Type (T/P)	Hrs/Week	Credits	Marks		
						CIA	ESE	Total
II	ANTH 530	Anthropology of Crime & Criminology	T	2	1	15	50	100
			P	2	1	10	25	

### Anthropology (Semester-III)

**Generic Elective Courses: (Offered to PG students of other Departments/ SoS only)**

Semester	Course Code	Course Title	Course Type (T/P)	Hrs/Week	Credits	Marks		
						CIA	ESE	Total
III	ANTH 540	Dermatology & Dermatoglyphics	T	2	1	15	50	100
			P	2	1	10	25	

## Programme Articulation Matrix for MA/M.Sc. GROUP-A

Following matrix depicts the correlation between all the courses of the programme and Programme Outcomes

Course Code	POs											PSO				
	1	2	3	4	5	6	7	8	9	10	11	1	2	3	4	5
ANTH110	√	×	√	√	√	√	√	√	√	√	√	√	√	√	√	√
ANTH120	√	×	√	√	×	√	√	×	√	√	√	√	√	√	√	√
ANTH130	√	√	√	√	√	√	√	×	√	√	√	√	√	√	√	√
ANTH140	√	√	√	√	√	√	√	×	√	√	√	√	√	√	√	√
ANTH150	√	√	√	√	×	×	√	×	×	√	√	√	√	√	√	√
ANTH160	√	√	√	√	×	×	√	×	×	√	√	√	√	√	√	√
ANTH 210	√	√	√	√	√	√	√	×	√	√	√	√	√	√	√	√
ANTH 220	√	√	√	√	×	×	√	×	√	√	√	√	√	√	√	√
ANTH 230	√	√	√	√	√	√	√	×	√	√	√	√	√	√	√	√
ANTH 240	√	√	√	√	√	√	√	×	√	√	√	√	√	√	√	√
ANTH 250	√	√	√	√	√	√	√	×	√	√	√	√	√	√	√	√
ANTH 260	√	√	√	√	√	√	√	×	√	√	√	√	√	√	√	√
ANTH 310	√	√	√	√	√	√	√	×	√	√	√	√	√	√	√	√
ANTH 320	√	√	√	√	×	√	√	×	√	√	√	√	√	√	√	√
ANTH 330	√	×	√	√	√	√	√	×	√	√	√	√	√	√	√	√
ANTH 340	√	×	√	√	√	√	√	×	√	√	√	√	√	√	√	√
ANTH 351	√	×	√	×	√	√	√	×	√	√	√	√	√	√	√	√
ANTH 352	√	√	√	×	√	√	√	×	√	√	√	√	√	√	√	√
ANTH 353	√	×	√	×	√	√	√	√	√	√	√	√	√	√	√	√
ANTH 361	√	√	√	√	×	√	√	×	√	√	√	√	√	√	√	√
ANTH 362	√	×	√	×	√	√	√	×	√	√	√	√	√	√	√	×
ANTH 363	√	√	√	√	×	√	√	×	√	√	√	√	√	√	√	√
ANTH 420	√	√	√	×	√	√	√	×	√	√	√	√	√	√	√	√
ANTH 430	√	√	√	×	√	√	√	×	√	√	√	√	√	√	√	√
ANTH 440	√	√	√	√	√	√	√	×	√	√	√	√	√	√	√	√

ANTH 450	√	√	√	√	√	√	√	×	√	√	√	√	√	√	√	√
ANTH 461	√	√	√	√	×	√	√	×	√	√	√	√	√	√	√	√
ANTH 462	√	×	×	×	×	√	√	×	√	√	√	√	√	√	√	√
ANTH 463	√	√	√	×	√	√	√	×	√	√	√	√	√	√	√	√
ANTH 471	√	√	√	√	√	√	√	×	√	√	√	√	√	√	√	×
ANTH 472	√	√	√	×	√	√	√	×	√	√	√	√	√	√	√	×
ANTH 473	√	√	√	√	×	√	√	×	×	√	√	√	√	√	√	√
No. of courses mapping The PO/PSO	32	24	31	23	22	29	32	02	29	32	32	32	32	32	32	29

**Programme Articulation Matrix for MA/M.Sc. GROUP-B**

Following matrix depicts the correlation between all the courses of the programme and Programme Outcomes

Course Code	POs											PSO				
	1	2	3	4	5	6	7	8	9	10	11	1	2	3	4	5
ANTH110	√	×	√	√	√	√	√	√	√	√	√	√	√	√	√	√
ANTH120	√	×	√	√	×	√	√	×	√	√	√	√	√	√	√	√
ANTH130	√	√	√	√	√	√	√	×	√	√	√	√	√	√	√	√
ANTH140	√	√	√	√	√	√	√	×	√	√	√	√	√	√	√	√
ANTH150	√	√	√	√	×	×	√	×	×	√	√	√	√	√	√	√
ANTH160	√	√	√	√	×	×	√	×	×	√	√	√	√	√	√	√
ANTH 210	√	√	√	√	√	√	√	×	√	√	√	√	√	√	√	√
ANTH 220	√	√	√	√	×	×	√	×	√	√	√	√	√	√	√	√
ANTH 230	√	√	√	√	√	√	√	×	√	√	√	√	√	√	√	√
ANTH 240	√	√	√	√	√	√	√	×	√	√	√	√	√	√	√	√
ANTH 250	√	√	√	√	√	√	√	×	√	√	√	√	√	√	√	√
ANTH 260	√	√	√	√	√	√	√	×	√	√	√	√	√	√	√	√
ANTH 310	√	√	√	√	√	√	√	×	√	√	√	√	√	√	√	√
ANTH 370	√	√	√	×	√	√	√	×	√	√	√	√	√	√	√	√

ANTH 380	√	×	√	√	×	√	√	×	√	√	√	√	√	√	×	
ANTH 390	√	×	√	×	√	√	√	×	√	√	√	√	√	√	×	
ANTH 401	√	×	√	×	√	√	√	×	√	√	√	√	√	√	√	
ANTH 402	√	√	√	×	√	√	√	×	√	√	√	√	√	√	×	
ANTH 403	√	√	√	×	√	√	√	×	√	√	√	√	√	√	√	
ANTH 411	√	√	√	×	√	√	√	×	√	√	√	√	√	√	√	
ANTH 412	√	√	√	√	√	√	√	×	×	√	√	√	√	√	√	
ANTH 413	√	√	√	×	√	√	√	√	√	√	√	√	√	√	×	×
ANTH 420	√	√	√	×	√	√	√	×	√	√	√	√	√	√	√	√
ANTH 470	√	√	√	×	√	√	√	×	√	√	√	√	√	√	√	√
ANTH 440	√	√	√	√	√	√	√	×	√	√	√	√	√	√	√	√
ANTH 450	√	√	√	√	√	√	√	×	√	√	√	√	√	√	√	√
ANTH 481	√	√	√	×	√	√	√	×	√	√	√	√	√	√	√	√
ANTH 482	√	×	√	×	×	√	√	×	√	√	√	√	√	√	√	√
ANTH 483	√	√	√	×	√	√	√	×	√	√	√	√	√	√	√	×
ANTH 491	√	√	√	×	√	√	√	×	√	√	√	√	√	√	√	×
ANTH 492	√	√	√	×	√	√	√	×	√	√	√	√	√	√	√	×
ANTH 493	√	√	×	×	√	√	√	√	√	√	√	√	√	√	√	√
No. of courses mapping The PO/PSO	32	26	31	17	26	29	32	03	29	32	32	32	32	32	31	25



## M.A/M.Sc. (Anthropology) Semester-I

Program	Subject	Year	Semester
M.A/M.Sc.	Anthropology	1	I
Course Code	Course Title		Course Type
ANTH110	Fundamentals of Social-Cultural Anthropology		Core
Credit	Hours Per Week (L-T-P)		
	L	T	P
5	5	1	-
Maximum Marks	CI A	ESE	
100	25	75	

\* L- Lecture, T- Tutorial, P- Practical

### Learning Objective (LO):

The course aims to equip students with a comprehensive understanding of Anthropology and Social Anthropology, covering diverse aspects of human culture, society, and organization. Understand the interplay between language, culture, and society.

### Course Outcomes (CO):

CO No.	Expected Course Outcomes	CL
	At the end of the course, the students will be able to:	
1	Learn and define the basic concepts of Anthropology, its branches, culture, society, social organizations etc.	R
2	Understanding of the scope and divisions of anthropology, with a specific focus on Social-Cultural Anthropology. Explore and examine the theoretical aspects of culture and various social concepts that are crucial for comprehending the complexities of human societies.	U
3	Explain a comprehensive exploration of the economic and political dimensions of human societies, from early stages of economic evolution to various forms of political organization and legal systems.	Ap
4	Explore the diversity of beliefs, practices, and expressions across different societies, as well as the ways in which these aspects contribute to the formation and maintenance of cultural identity and social cohesion.	An

CL : Cognitive Levels (R-Remember; U-Understanding; Ap-Apply; An-Analyze; E-Evaluate; C-Create).

## CO-PO/PSO Mapping for the course:

PO CO	POs											PSO				
	1	2	3	4	5	6	7	8	9	10	11	1	2	3	4	5
CO1	3	-	1	-	2	3	3	3	3	1	1	3	3	2	3	3
CO2	3	-	1	-	2	3	3	3	3	1	1	3	3	2	3	3
CO3	3	-	1	-	2	3	3	3	3	1	1	3	3	2	3	3
CO4	3	-	1	-	2	3	3	3	3	1	1	3	3	2	3	3

"3"-Strong; "2"-Moderate; "1"-Low; "-"No Correlation

## Detailed Syllabus: ANTH110 - Fundamentals of Social-Cultural Anthropology

Unit No.	Topics	No. of Lectures	CO No.
I	<p><b><i>Anthropology and Social Anthropology:</i></b></p> <ul style="list-style-type: none"> <li>• Meaning and Scope of Anthropology.</li> <li>• Divisions of Anthropology.</li> <li>• Scope of Social-Cultural Anthropology.</li> <li>• Social-Cultural Anthropology and its relation with other social sciences, life sciences, medical sciences and humanities.</li> </ul> <p><b><i>Culture and Institutions:</i></b></p> <ul style="list-style-type: none"> <li>• Theory of Culture: attributes of Culture, culture traits, culture complex, culture area, integration of culture, paradoxes of culture.</li> <li>• Some basic concepts: Civilization, Society, Social structure, Social Organization, Community, Social Institutions, Groups and Status &amp; Role.</li> </ul>	5+1	I
II	<p><b><i>Social Organizations:</i></b></p> <ul style="list-style-type: none"> <li>• Family: Theory of Origin of Family: Meaning &amp; Definition. Typology, Residence, Functions.</li> <li>• Marriage: Theory of Origin of Marriage: Meaning &amp; Definition. Typology, Mate selection, Cross-cousin, Sororate, Dowry and bride price.</li> <li>• Kinship: Meaning and Definition of Kinship, Characteristics and Functions of kinship. <ul style="list-style-type: none"> <li>➤ Kin: consanguineous, Affinal.</li> <li>➤ Kinship terminology: classificatory and descriptive, Terms of reference and address.</li> <li>➤ Kinship behavior: Joking and avoidance relationship.</li> <li>➤ Kinship system and its importance in Social structure, Descent Groups.</li> </ul> </li> <li>• Moiety and Phratry.</li> <li>• Social Stratification.</li> <li>• Status of women (Gender).</li> <li>• LGBT Groups.</li> <li>• Caste Tribe and Class.</li> </ul>		II
III	<p><b><i>Stages of Economic:</i></b> An evolutionary perspectives, sources of livelihood in the primitive life.</p> <p><b><i>Economic organization:</i></b></p>		III

	<ul style="list-style-type: none"> <li>• Property: Individual and Collective.</li> <li>• Concept of Primitive communism.</li> <li>• Concept of value in primitive economy.</li> <li>• Stages of Economy: collection, hunting, fishing, pastoralism, Cultivation (Shifting cultivation and Settled Subsistence)</li> <li>• Surplus and market economy.</li> <li>• Systems of trade-exchange: Reciprocity, Redistribution, barter and markets.</li> </ul> <p><b>Political organization:</b></p> <ul style="list-style-type: none"> <li>• Meaning and Definition of Law, Customary Law, Attributes of Customary Law</li> <li>• Law and social control.</li> <li>• Concept of authority and leadership.</li> <li>• Types of political organization: Band, Tribe, State, Kingship and chiefdom.</li> <li>• Primitive law and Justice.</li> <li>• Types of Punishment.</li> <li>• Ethnicity and Nationality.</li> </ul>		
IV	<p><b>Religion and Magic:</b></p> <ul style="list-style-type: none"> <li>• Meaning and Definition of Religion</li> <li>• Anthropological approaches to the study of religion: Evolutionary, Psychological and Functional.</li> <li>• Primitive Religion: Animism, Animatism, Bongaism, Totemism.</li> <li>• Magic: function and types.</li> <li>• Magico-religious functionaries: Shaman and Shamanism, Priest, Medicine man, Sorcerer, witch.</li> <li>• Symbolism in religion and rituals.</li> <li>• Religion, Magic and Science.</li> </ul> <p><b>Arts:</b></p> <ul style="list-style-type: none"> <li>• Meaning and definition of Art, Types of Art.</li> <li>• Art and Aesthetics: Forms of music, dance forms, musical instruments.</li> <li>• Painting: Ritualistic and Symbolic.</li> <li>• Artifacts: Carvings, Mould, Masks etc.</li> </ul> <p><b>Human Language:</b></p> <ul style="list-style-type: none"> <li>• Human Language: Origin and evolution of human language.</li> <li>• Language, culture and society.</li> </ul>		IV

### Recommended Readings:

1. Barnouw, V. 1979. Anthropology: A General Introduction, The Dorsey Press, Illinois.
2. Holmes, L. D. Anthropology: An Introduction, The Ronald Press Company, New York.
3. Sharma and Sharma. 1997. Anthropology, Atlantic Publishers and Distributors, New Delhi.
4. Hunter & Whitten. The Study of Cultural Anthropology, Harper & Row Publishers, New York.
5. Moore, A. 1978. Cultural Anthropology, Harper & Row Publishers, New York.

6. Kaplan, D. & Manners, R. A. Culture Theory, Prentice Hall of India Private Ltd., New Delhi.
7. Herskovitz, M. J. Cultural Anthropology, Oxford & IBH Publishing Co., New Delhi.
8. Mair, L. 1965. An Introduction to Social Anthropology, Clarendon Press, Oxford.
9. Majumdar, D.N. & Madan, T. 1986. An Introduction to Social Anthropology, National Publishing House, New Delhi.
10. Mishra, U. S. Samajik Sanskritik Manavshastra, Palka Prakashan, Delhi.
11. Shrivastava, A. R. N. Samajik Manav Vigyan Vivechan (in Hindi), Madhya Pradesh Hindi Granth Academy, Bhopal.
12. Evans-Pritchard, Social Anthropology.
13. Honnigmann, J. Handbook of Social and Cultural Anthropology.
14. Fox, Robin. Kinship and Marriage.
15. Sahlins & Service. Evolution and Culture. The University of Michigan Press, Ann Arbor.
16. Barth, F. Ethnic Group and Boundaries.
17. Barnet, H.G. Innovation. The Basis of Culture Change.
18. Rogers E.M. & Schmacher, F.F. Communication of Innovation.
19. Rogers, E.M. Diffusion of Innovation.
20. Rad-cliffe Brown, A.R. Structure and Function in Primitive Society.
21. Harris, Marvin. Cultural Anthropology.
22. Malinowsky, B.K. Scientific Theory of Culture and Other Essay.
23. Foster, G.M. Tradition, Cultures and Impact of Technological Change.
24. Dalton, George. Tribal and Peasant Economics: Readings in Economic Anthropology.
25. Kluckhohn, C. Mirror for Man.
26. Herskovits, M.J. Man and His Works.
27. Ember and Ember, Anthropology
28. Nas, Manning. Primitive and Peasant Economic Systems
29. Bohannan, Paul. Social Anthropology
30. Jacob, Awsrern. General Anthropology
31. Levi Strauss, Elements of Kinship
32. Schumachr, E.F. Small is Beautiful
33. Evans- Pritchrd, E.E. Primitive Religion
34. Norbeck. Primitive Religion
35. Lowie, R.H. Primitive Social Organization
36. Lowie, R.H. Social Organization

## M.A/M.Sc.(Anthropology) Semester-I

Program	Subject	Year	Semester
M.A/M.Sc.	Anthropology	1	I
Course Code	Course Title		Course Type
ANTH120	Fundamentals of Biological Anthropology		Core
Credit	Hours Per Week (L-T-P)		
	L	T	P
5	5	1	-
Maximum Marks	CIA		ESE
100	25		75

\* L- Lecture, T- Tutorial, P- Practical

### Learning Objective (LO):

The course aims to apply acquired knowledge to analyze and interpret human biological diversity. Demonstrate the ability to critically evaluate the complexities of racial classification and its relevance in anthropological studies.

### Course Outcomes (CO):

CO No.	Expected Course Outcomes	CL
	At the end of the course, the students will be able to:	
1	Explore the relationships between Physical Anthropology and other scientific disciplines, as well as the specific historical and contemporary context of Physical Anthropology in India. The inclusion of "New Physical Anthropology" suggests a focus on recent advancements, emphasizing the dynamic and evolving nature of the field.	U
2	Deep understanding of the theories that explain the processes of organic evolution, from historical perspectives to contemporary insights also emphasizes the evolutionary position of humans in the animal kingdom and delves into the behavior of primates.	U
3	Understanding of the comparative anatomy between humans and apes, focusing on skeletal and anatomical features. They will explore the evolutionary history of hominids, including the crucial transition to bipedalism and provides insights into the adaptations and evolutionary trends that shaped the human form over time.	U
4	Describe the concept of race, the models used to explain human variation, and the criteria and challenges associated with racial classification. Explore the multifaceted causes of human variation, recognizing the intricate nature of the factors that contribute to the diversity observed among human populations.	An

CL : Cognitive Levels (R-Remember; U-Understanding; Ap-Apply; An-Analyze; E-Evaluate; C-Create )

## CO-PO/PSO Mapping for the course:

PO CO	POs											PSO				
	1	2	3	4	5	6	7	8	9	10	11	1	2	3	4	5
CO1	3	-	1	-	-	2	3	-	2	3	3	3	3	2	3	3
CO2	3	-	1	-	-	2	3	-	3	3	3	3	3	2	3	3
CO3	3	-	1	-	-	2	3	-	3	3	3	3	3	2	3	3
CO4	3	-	1	-	-	2	3	-	3	3	3	3	3	2	3	3

"3"-Strong; "2"-Moderate; "1"-Low; "-"No Correlation

## Detailed Syllabus: ANTH120 - Fundamentals of Biological Anthropology

Unit No.	Topics	No. of Lectures	CO No.
I	<p><b>Physical Anthropology:</b></p> <ul style="list-style-type: none"> <li>History, Definition, Meaning and Scope of Physical Anthropology.</li> <li>Relationship of Physical Anthropology with Physical, Biological and Medical Sciences.</li> <li>History and Development of Physical Anthropology in India.</li> <li>New Physical Anthropology.</li> </ul>	5+1	I
II	<p><b>Organic Evolution &amp; Primate behavior:</b></p> <ul style="list-style-type: none"> <li>Theories of Organic Evolution: Lamarckism, Darwinism, Synthetic Theory, Neutral Theory of molecular evolution, concept of clad genesis and anagenesis.</li> <li>Man's place in Animal Kingdom.</li> <li>Primate behavior (With reference to Higher Primates).</li> </ul>		II
III	<p><b>Comparative anatomy &amp; Evolution:</b></p> <ul style="list-style-type: none"> <li>Comparative anatomy of Man and Apes.</li> <li>Hominid Evolution.</li> <li>Erect posture and Bipedalism.</li> <li>Evolution of Teeth, Chin, Foot and Pelvis.</li> </ul>		III
IV	<p><b>Human Variation:</b></p> <ul style="list-style-type: none"> <li>Concept of Race</li> <li>Modern Human Variation: Typological Model, Population Model and Clinal Model; overview of Classification proposed by Blumenbach, Deniker, Hooton, Coon, Garn and Birdsell.</li> <li>Criteria of Racial classification- Skin, Hair and eye colour, Stature, Eyes, Lips and Ears, Face and Lower Jaw, Blood Groups, Dermatoglyphics.</li> <li>Distribution and Characteristics: Caucasoid, Negroid, Mongoloid.</li> <li>Racial classification of Indian Population –Risley, Guha. &amp; S. S. Sarkar</li> <li>Causes of Human Variation.</li> </ul>		IV

## Recommended Readings:

1. Comas, J. 1960. Manual of Physical Anthropology, Springfield, Charles C. Thomas.
2. Sarkar, R. M. 1976. Fundamentals of Physical Anthropology. Blackie (India).
3. Das, B. M. 1985. Outlines of Physical Anthropology, Kitab Mahal, New Delhi.
4. Shrivastav, A. R. N. 1994. Sharirik Manav Vigyan (in Hindi), Gyandeeep Prakashan, Allahabad.
5. Barnouw, V. 1979. Anthropology: A General Introduction, The Dorsey Press, Illinois.
6. Hooton, E. A. Up from the Ape, The Macmillan Co., New York.
7. Lasker, G.B. and Tyzzer, R.N. Physical Anthropology, Holt Rinechart & Winston, New York.
8. Shukla, B.R.K. and Rastogi, S. Physical Anthropology and Human Genetics: An Introduction, Palka Prakashan, Delhi.
9. Buettner-Janusch, J. Origins of Man, Wiley Eastern Pvt. Ltd. New Delhi.
10. Montagu, M.F.A. The Concept of Race, The Free Press, New York.
11. Montagu, M.F.A. An Introduction to Physical Anthropology, Charles C Thomas, Springfield  
1. Illinois.
12. Harrison, G.A., Weiner, J.S., Tanner, J.M. and Barnicot, N.A. Human Biology: An Introduction to Human Evolution, Variation And Growth, Clarendon Press, Oxford.
13. Ashley, Montague. Concept of Race.
14. Backer, P.T. & Weiner (eds.). Biology of Human Adaptability.
15. M. Ember and Ember. Anthropology.
16. Harrison, G.A. and Boyce, J. The Structure of Human Population.
17. Sarkar S.S. Aboriginal races of India.
18. Sahlins and Service. Evolution and Culture.
19. Simpson, G.G. The Meaning of Evolution.
20. Williams B.J. Evolution and Human Origin

## M.A/M.Sc. (Anthropology) Semester-I

Program	Subject	Year	Semester
M.A/M.Sc.	Anthropology	1	I
Course Code	Course Title		Course Type
ANTH130	Prehistoric Archaeology & Palaeo-Anthropology		Core
Credit	Hours Per Week (L-T-P)		
	L	T	P
5	5	1	-
Maximum Marks	CIA		ESE
100	25		75

\* L- Lecture, T- Tutorial, P- Practical

### Learning Objective (LO):

These learning outcomes collectively provide students with a comprehensive understanding of Archaeology, from foundational concepts to the detailed study of different archaeological periods and human fossils, including their discoveries, distribution, chronology, salient features and phylogeny.

### Course Outcomes (CO):

CO No.	Expected Course Outcomes	CL
	At the end of the course, the students will be able to:	
1	Appreciate the interdisciplinary nature of archaeology, exploring its connections with other branches of anthropology and various scientific disciplines. The tools and perspectives needed to conduct archaeological research and contribute to the broader understanding of human history and culture.	U
2	Comprehensive understanding of the methods and techniques used in archaeological research, with a focus on chronological frameworks, climatic influences, tool technologies, and dating methodologies.	Ap
3	Understanding of the cultural sequences, tool technologies, assemblages, and associated human fossils in European prehistory from the Lower Paleolithic to the Mesolithic. Provides insights into the evolution of human cultures and technologies over time in the European context.	U
4	Understanding of the hominid fossil record, including the characteristics, evolutionary relationships, and geographic distribution of key species and provide insights into the complexity of human evolution	An

CL : Cognitive Levels (R-Remember; U-Understanding; Ap-Apply; An-Analyze; E-Evaluate; C-Create).



## CO-PO/PSO Mapping for the course:

PO CO	POs											PSO				
	1	2	3	4	5	6	7	8	9	10	11	1	2	3	4	5
CO1	3	2	3	3	3	2	3	-	2	3	3	3	3	2	3	3
CO2	3	2	3	3	3	1	3	-	2	3	3	3	3	2	3	3
CO3	3	2	3	3	2	3	3	-	1	3	3	3	3	2	3	3
CO4	3	2	3	3	2	1	3	-	1	3	3	3	3	2	3	3

"3"-Strong;"2"-Moderate;"1"-Low;"-"No Correlation

## Detailed Syllabus: ANTH130 - Prehistoric Archaeology & Palaeo-Anthropology

Unit No.	Topics	No. of Lectures	CO No.
I	<ul style="list-style-type: none"> <li>Introduction: Definition, Subject matter, Branches, Aims and Applications.</li> <li>Framework of Archaeological Cultures.</li> <li>Relationship with Other Branches of Anthropology, Earth Sciences, Physical sciences,</li> <li>Life Sciences and Social Sciences.</li> </ul>	5+1	I
II	<ul style="list-style-type: none"> <li>Geological Time Scale.</li> <li>Pleistocene Epoch: Glacial-interglacial; Pluvial-Inter-Pluvial Climatic Cycles,</li> <li>Impact on Cultural Development.</li> <li>Climatic Markers: Moraines, Terraces, Sea-level Changes, loess, Soil, Dune &amp; Fossils.</li> <li>Tool Technology: Flaking (Primary &amp; Secondary), Grinding and Polishing Techniques used during Stone Age.</li> <li>Dating Techniques:</li> <li>Relative Dating: Stratigraphy, River Terraces, Raised Sea-Beaches, Typo-technology, Fluorine Dating, Pollen Dating.</li> <li>Absolute dating: Radio-active Carbon, Potassium-Argon, Uranium- Thorium, Dendrochronology, Thermoluminescence, Fission-Track &amp; Obsidian Hydration.</li> </ul>		II
III	<ul style="list-style-type: none"> <li>Lower Palaeolithic of Europe: Distribution, Chronology, Stratigraphy, Assemblage, Abbevillian, Acheulian, Associated Human Fossils.</li> <li>Middle Palaeolithic of Europe: Distribution, Chronology, Stratigraphy, Assemblage, Traditions, Associated Human Fossils.</li> <li>Upper Palaeolithic of Europe: Perigordian, Aurignasian, Solutrean, Magdalenian; Prehistoric Art (Home Art and Cave Art).</li> <li>Mesolithic Culture of Europe: Azilian, Tardenoisean, Austerian, Maglamosean, Kitchen Midden, Campegnian.</li> </ul>		III
IV	<ul style="list-style-type: none"> <li>Australopithecus Species: Discoveries, Distribution, Chronology, Salient features, Phylogeny.</li> <li>Homo erectus: Discoveries, Distribution, Chronology,</li> </ul>		IV

	<p>Salient features, Phylogeny.</p> <ul style="list-style-type: none"> <li>• Homo sapiens neanderthalensis: Discoveries, Distribution, Chronology, Salient features, Phylogeny.</li> <li>• Homo sapiens sapiens (Cro-Magnon, Chancelade, Grimaldi): Discoveries, Distribution, Chronology, Salient features, Phylogeny.</li> </ul>		
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### Recommended Readings:

1. Agrawal, D.P. & M.G. Yadava. 1995. Dating the human past.
1. Bhattacharya, D.K. 1977. Palaeolithic Europe.
2. Bordes, F. 1968. The Old Stone age. Weidenfeld and Nicolson.
3. Burkitt, M.C. 1969. Old Stone Age: Study of Palaeolithic Times.
4. Campbell, B. C. 1979. Humankind emerging, II edition.
5. Clark, W. E. L. 1964. The Fossil Evidence for Human Evolution, The University of Chicago Press, Chicago.
6. Coles, J. M. & E. S. Higgs. The Archaeology of early man. Faber and Faber.
7. Grazioli, P. Paleolithic Art.
8. Howell, W. Mankind in the making.
9. Johanson, D & E. Maitland. 1981. Lucy- The beginnings of humankind.
10. Knudson, S.J. 1978. Culture in retrospect: An introduction to Archaeology.
11. Oakley, K.P. 1972. Man the tool maker
12. Roe, Derek 1970. Prehistory: An introduction.
13. Sankalia, H.D. 1964. Stone age tools: their techniques, names and probable functions, Pune, Deccan College.
14. Sankalia, H.D. 1974. Prehistory and Protohistory of Early India and Pakistan.
15. Allchin and Allchin, 1982. The rise of civilization in India and Pakistan, Select Book Service Syndicate, New Delhi.
16. Zeuner, F.E. Pleistocene Period.
17. Agrawal, D.P. The Archaeology of India, Curzon Press.
18. Ashley, Montague. Physical Anthropology and Archaeology.
19. Barmown, Victor. Physical Anthropology and Archaeology, Illinois, The Dorse Press Home Wood.
20. Banerjee. Iron Age in India. Munshiram Manoharlal.
21. Brothwell D. & Higgs E. (ed.). Science in Archaeology. Thames and Hudson.
22. Budtzer, K.W. Environment and Archaeology.
23. Clark, D.L. Analytical Archaeology. Methuen and Co. Ltd.
24. Das, B.M. Outlines of Physical Anthropology. Kitab Mahal.
25. James, J. Hester, Introduction to Archaeology. Holt, Rinehart and Winston.
26. Michel, J.W., Dating Method in Archaeology. Seminar Press.
27. Sakalia, H.D., New Archaeology – Its Scope and Application to India, Ethnographic and Folk Culture Society.
28. Zeuner, F.E. Pleistocene Period. Hutchinson.

## M.A/M.Sc. (Anthropology) Semester-I

Program	Subject	Year	Semester
M.A/M.Sc.	Anthropology	1	I
Course Code	Course Title		Course Type
ANTH140	Research Methods in Anthropology		Core
Credit	Hours Per Week (L-T-P)		
	L	T	P
5	5	1	-
Maximum Marks	CI A	ESE	
100	25	75	

\* L- Lecture, T- Tutorial, P- Practical

### Learning Objective (LO):

The significance of this course for students is with a comprehensive understanding of research methods in Anthropology, covering everything from the fundamentals of research to advanced data analysis techniques. Understand the principles and methodologies involved in social research.

### Course Outcomes (CO):

CO No.	Expected Course Outcomes	CL
	At the end of the course, the students will be able to:	
1	Foundational understanding of research methodologies in anthropology. Choose appropriate methods, and apply these methods in the field, with a specific focus on the ethnographic approach. This knowledge is essential for aspiring to conduct anthropological research and contribute to the field's body of knowledge.	U
2	Practical knowledge and skills in designing and conducting anthropological research. Learn of variety of data collection techniques, ranging from traditional methods to modern technologies like GIS.	An
3	The preparation of reports and the use of visual representations contribute to effective communication of research findings. This knowledge equips with the tools needed to conduct rigorous and meaningful research in anthropology and effectively communicate their findings to both academic and broader audiences.	An
4	The inclusion of scaling techniques enhances their ability to measure and interpret anthropological data in a quantitative manner. This knowledge equips with the skills necessary to critically engage with and apply statistical methods in anthropological research.	Ap

CL : Cognitive Levels (R-Remember; U-Understanding; Ap-Apply; An-Analyze; E-Evaluate; C-Create).

## CO-PO/PSO Mapping for the course:

PO CO	POs											PSO				
	1	2	3	4	5	6	7	8	9	10	11	1	2	3	4	5
CO1	3	3	3	3	3	3	3	-	3	3	3	3	3	3	3	3
CO2	3	3	3	3	2	3	3	-	3	3	3	3	3	3	3	3
CO3	3	3	3	3	2	3	3	-	2	3	3	3	3	3	3	3
CO4	3	3	3	3	2	3	3	-	2	3	3	3	3	3	3	3

"3"-Strong; "2"-Moderate; "1"-Low; "-"No Correlation

## Detailed Syllabus: ANTH140 - Research Methods in Anthropology

Unit No.	Topics	No. of Lectures	CO No.
I	<ul style="list-style-type: none"> <li>Research: Meaning and Definition. Types of Research, Qualitative and Quantitative Research.</li> <li>Field work tradition in Anthropology: Covering all branches of Anthropology to gain holistic perspective.</li> <li>Social research and Social survey.</li> <li>Hypothesis: Sources, characteristics, importance and types of hypothesis.</li> <li>Methods: Logical, Historical, Comparative, Philosophical and Scientific method.</li> <li>Ethnographic method.</li> </ul>	5+1	I
II	<ul style="list-style-type: none"> <li>Research design : Body of a research design, how to prepare a good research design Characteristics of the research design, types of research design</li> <li>Techniques of data collection- Primary data collection: Observation, Questionnaire, Interview, Schedule, Case study, Audio-visual recording, Genealogy.</li> <li>Grounded Theory, Exploration and Excavation, Introduction to GIS.</li> <li>Secondary Data collection: Census, National Sample Survey, Models and Paradigms.</li> <li>Data collection: Choice of Suitable Technique.</li> <li>Participatory Methods: Rapid Rural Appraisal (RRA), Participatory Rural Appraisal (PRA), Rapid Participatory Appraisal (RPA), Focus Group.</li> </ul>		II
III	<ul style="list-style-type: none"> <li>Data: Definition and characteristics.</li> <li>Types of Data: Geographical, Chronological, Qualitative and Quantitative, Nominal, Ordinal, Ratio and Interval.</li> <li>Sources of Data: Primary and Secondary sources.</li> <li>Tabulation: General, Special purpose &amp; Machine tabulation.</li> <li>Techniques of Analysis: Content analysis, Discourse analysis and Narratives.</li> <li>Analysis and Interpretation of data.</li> <li>Preparation of report, Dissertation and Scientific papers.</li> <li>Graphic and Diagrammatic presentation of data.</li> </ul>		III
IV	<ul style="list-style-type: none"> <li>Scope, utility and importance of statistics in Anthropology.</li> </ul>		IV

	<ul style="list-style-type: none"> <li>• Sampling: Types of Random and Nonrandom sampling</li> <li>• Measures of Central Tendency- Mean, Mode, Median &amp; dispersion.</li> <li>• Variables: Univariate, Bivariate and Multivariate analysis.</li> <li>• Scaling techniques.</li> </ul>		
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### Recommended Readings:

1. Goode & Hatt. Methods in Social Research.
2. Young, P. V. Scientific Social Surveys and Research.
3. Danda, Ajit. Research Methodology in Anthropology, Inter- India, New Delhi.
4. Gupta, S. P. Statistics Methods.
5. Elhance, D. N. Practical Problems in Statistics, KitabMahal, Allahabad.
6. Levin, J. Elementary Statistics in Social Research.
7. Sarin, S.S. and Balchandani, M.K. Fundamentals of Statistics. RatanPrakashanMandir, Agra.
8. Fernandes & Tondon, Participatory Research.
9. Fisher, Michael. Application in Computing for Social Anthropologists, London, Routledge.
10. H. Russel. Bernard, Handbook of Methods in Cultural Anthropology, Altamira Press.
11. Kaplan, Abraham. The Conduct of Enquiry: Methodology for Behavioural Sciences.
12. Kassam & Mustafa. Participatory Research.
13. Madrigal, Lorena. Statistics for Anthropology.
14. Mukherjee, Neela. Participatory Rural Appraisal and Questionnaire Survey.
15. Pelto P.S. & Pelto G.H. Anthropological Research: the structure of inquiry. London, Cambridge University Press.
16. Renfrew, C. (ed.). The Explanation of Culture Change: Models in Prehistory. Duckworth.
17. Sankalia, H.D. Stone Age Tools, Families and Techniques, Pune, Deccan College.
18. Trigger, B.G. Beyond History the Methods of Prehistory. Holt, Rinehard and Winston.
19. Young, Pauline. Scientific Social Survey and Research.

## M.A/M.Sc. (Anthropology) Semester-I

Program	Subject	Year	Semester
M.A/M.Sc.	Anthropology	1	I
Course Code	Course Title		Course Type
ANTH150	Practicals in Craniology and Craniometry		Core
Credit	Hours Per Week (L-T-P)		
	L	T	P
2	-	-	4
Maximum Marks	CIA		ESE
100	25		75

\* L- Lecture, T- Tutorial, P- Practical

### Learning Objective (LO):

The course aims to learn for deep knowledge and understanding of craniology and craniometric practical skills in describing and measuring human skulls, allowing them to contribute to research in biological anthropology and forensic science.

### Course Outcomes (CO):

CO No.	Expected Course Outcomes	CL
	At the end of the course, the students will be able to:	
1	Practical skills in conducting detailed measurements and analyses of the human skull. They will understand the importance of craniology in biological anthropology and its applications in forensic science.	Ap
2	The hands-on experience with craniometric measurements and craniographs will enhance their ability to interpret and utilize such data in anthropological research and forensic investigations.	Ap
3	This knowledge is valuable for students pursuing careers in physical or biological anthropology and forensic anthropology.	Ap
4	Various aspects related to the description and measurements of the human skull, with a focus on craniology and forensic science.	Ap

CL : Cognitive Levels (R-Remember; U-Understanding; Ap-Apply; An-Analyze; E-Evaluate; C-Create).

## CO-PO/PSO Mapping for the course:

PO CO	POs											PSO				
	1	2	3	4	5	6	7	8	9	10	11	1	2	3	4	5
CO1	3	3	3	1	-	-	3	-	-	3	3	3	3	3	3	3
CO2	3	3	3	1	-	-	3	-	-	3	3	3	3	3	3	3
CO3	3	3	3	1	-	-	3	-	-	3	3	3	3	3	3	3
CO4	3	3	3	1	-	-	3	-	-	3	3	3	3	3	3	3

"3"-Strong;"2"-Moderate;"1"-Low;"-"No Correlation

## Detailed Syllabus: ANTH150 - Practicals in Craniology and Craniometry (I)

Unit No.	Topics	No. of Lectures	CO No.
I	<ul style="list-style-type: none"> <li>Description of Human Skull and its importance in biological anthropology.</li> <li>Craniology and Forensic science.</li> </ul>		I
II	<p><b>Following Craniometric measurements are to be taken on at least 2 skulls.</b></p> <p><b>Measurements</b></p> <ul style="list-style-type: none"> <li>Maximum cranial length</li> <li>Glabella-inion length</li> <li>Nasion-inion length</li> <li>Glabella-lambda length</li> <li>Length of foramen magnum</li> <li>Maximum Cranial breadth</li> <li>Minimum frontal breadth</li> <li>Maximum frontal breadth</li> <li>Bi-auricular breadth</li> <li>Greatest occipital breadth</li> <li>Bi- mastoid breadth</li> <li>Minimum breadth of skull</li> <li>Breadth of foramen magnum</li> <li>Basionbregma height</li> <li>Auriculobregmatic height</li> <li>Calvarial height</li> <li>Occipital chord</li> <li>Outer bi-orbital breadth</li> <li>Inner bi-orbital breadth</li> <li>Bi-orbital breadth</li> <li>Bizygomatic breadth</li> <li>Bimaxillary breadth</li> <li>Morphological facial height</li> <li>Upper facial height</li> <li>Inter orbital breadth</li> <li>Orbital breadth, Orbital height</li> <li>Nasal breadth</li> </ul>	4	II

	<ul style="list-style-type: none"> <li>• Nasal height</li> <li>• Length of nasal bone</li> <li>• Maxillo-alveolar length</li> <li>• Maxillo alveolar breadth</li> <li>• Palatal length</li> <li>• Palatal breadth</li> <li>• Palatal height</li> <li>• Bi-condylar breadth</li> <li>• Bigonial breadth</li> <li>• Symphysial height</li> <li>• Height of ramus.</li> </ul>		
III	<b>Angles</b> <ul style="list-style-type: none"> <li>• Total profile angle</li> <li>• Nasal profile angle</li> <li>• Profile angle of nasal roof</li> <li>• Metopic angle</li> <li>• Inclination angle of foramen magnum</li> <li>• Calvarial base angle</li> <li>• Bregma angle of Schwalbe</li> <li>• Mandibular angle.</li> </ul> <b>Index</b> <ul style="list-style-type: none"> <li>• Cranial index</li> <li>• Facial index</li> <li>• Nasal index</li> </ul>		III
IV	<b>Measurement on Craniograph</b> (At least on 2 skulls) <ul style="list-style-type: none"> <li>• Calvarial height</li> <li>• Lambda calvarial height</li> <li>• Frontal perpendicular</li> <li>• Parietal perpendicular</li> <li>• Occipital perpendicular.</li> </ul>		IV

### Recommended Readings:

1. Singh, S.P. Kinanthropometry
2. Ashley Montagu, M.F.A. Hand Book of Anthropometry. Charles. C. Thomas. Illinois.
3. Singh, I.P. Bhasin, M.K. Anthropometry. BhartiBhawan, New Delhi.
4. Weiner, J.S. &Lourie. J.A. Human Biology: A Guide to Field Methods. I.B.P. Hand
5. Book No. 9 Blackwell Scientific Publication, Oxford.
6. Mitra, M. 1990. PrayogikManavVigyan- Bhag –2. Madhya Pradesh Hindi Granth
7. Academy (in Hindi).
8. Mitra, M. &Chaube, R. 2004. PrayogikManavVigyan (Sharirik) Bhag –2. Madhya
9. Pradesh Hindi Granth Academy (in Hindi).



## M.A/M.Sc. (Anthropology) Semester-I

Program	Subject	Year	Semester
M.A/M.Sc.	Anthropology	1	I
Course Code	Course Title		Course Type
ANTH160	Practicals in Osteology and Osteometry		Core
Credit	Hours Per Week (L-T-P)		
	L	T	P
3	-	-	6
Maximum Marks	CIA		ESE
100	25		75

\* L- Lecture, T- Tutorial, P- Practical

### Learning Objective (LO):

The importance of this course for the students is a comprehensive understanding of human skeletal bones, osteometric measurements and their applications in biological anthropology and forensic science. They should also develop practical skills for accurate measurements and ethical considerations when working with human remains.

### Course Outcomes (CO):

CO No.	Expected Course Outcomes	CL
	At the end of the course, the students will be able to:	
1	Knowledge of human skeletal bones, their measurements, and the application of osteometric analysis.	Ap
2	Students will learn about the description and osteometric measurements of various human skeletal bones, including the clavicle, scapula, humerus, radius, ulna, and femur.	Ap
3	This information is crucial in biological anthropology and forensic science for understanding human skeletal variations and contributing to the identification of individuals.	Ap
4	The hands-on experience with measurements and angles provides students with practical skills for analyzing skeletal remains in anthropological and forensic contexts.	Ap

CL : Cognitive Levels (R-Remember; U-Understanding; Ap-Apply; An-Analyze; E-Evaluate; C-Create).

## CO-PO/PSO Mapping for the course:

PO CO	POs											PSO				
	1	2	3	4	5	6	7	8	9	10	11	1	2	3	4	5
CO1	3	3	3	1	-	-	3	-	-	3	3	3	3	3	3	3
CO2	3	3	3	1	-	-	3	-	-	3	3	3	3	3	3	3
CO3	3	3	3	1	-	-	3	-	-	3	3	3	3	3	3	3
CO4	3	3	3	1	-	-	3	-	-	3	3	3	3	3	3	3

"3"-Strong; "2"-Moderate; "1"-Low; "-"No Correlation

## Detailed Syllabus: ANTH160 - Practicals in Osteology and Osteometry

Unit No.	Topics	No. of Lectures	CO No.
I	Description of Human skeletal bones and its importance in biological anthropology, Osteology and forensic science.		I
II	<p>Following <b>Osteometric</b> measurements are to be taken on bones.</p> <p><b>CLAVICLE</b> <b>Measurements</b></p> <ul style="list-style-type: none"> <li>• Maximum length</li> <li>• Vertical diameter in the middle</li> <li>• Sagittal diameter in middle</li> <li>• Girth in the middle</li> <li>• Breadths of curvature of shaft</li> </ul> <p><b>Angles</b></p> <ul style="list-style-type: none"> <li>• Inner and outer</li> </ul> <p><b>Indices</b></p> <ul style="list-style-type: none"> <li>• Caliber index</li> <li>• Cross section index</li> </ul> <p><b>SCAPULA</b> <b>Measurements</b></p> <ul style="list-style-type: none"> <li>• Anatomical breadth</li> <li>• Anatomical length</li> <li>• Length of Cranial border</li> <li>• Length of axillary border</li> <li>• Projective length of spine</li> <li>• Anatomical breadth of supra-spinous fossa</li> <li>• Anatomical breadth of infraspinous fossa</li> <li>• Length of glenoid fossa</li> <li>• Breadth of glenoid fossa</li> <li>• Projective breadth of supraspinous fossa</li> <li>• Projective breadth of infraspinous fossa</li> </ul> <p><b>Angles</b></p> <ul style="list-style-type: none"> <li>• Supraspinous angle</li> <li>• Infraspinous angle</li> <li>• Breadth-Length angle</li> <li>• Axillo-Spinal angle</li> <li>• Vertebral border angle</li> </ul>	6	II

	<p><b>Indices</b></p> <ul style="list-style-type: none"> <li>• Scapular index</li> <li>• Supra spinal index</li> <li>• Infra spinal index</li> <li>• Marginal index</li> <li>• Length breadth index of glenoid fossa</li> </ul>		
III	<p>Following <b>Osteometric</b> measurements are to be taken on bones.</p> <p><b>HUMERUS</b></p> <p><b>Measurements</b></p> <ul style="list-style-type: none"> <li>• Maximum length</li> <li>• Breadth of proximal epiphysis</li> <li>• Breadth of distal epiphysis</li> <li>• Least girth of shaft</li> <li>• Maximum transverse diameter of head</li> <li>• Maximum Vertical diameter of Head</li> <li>• Maximum Diameter in middle</li> <li>• Girth in middle of shaft</li> <li>• Minimum diameter in middle</li> </ul> <p><b>Angles</b></p> <ul style="list-style-type: none"> <li>• Torsion angle</li> <li>• Capito-diaphysial angle</li> <li>• Condylo-diaphysial angle</li> </ul> <p><b>Indices</b></p> <ul style="list-style-type: none"> <li>• Caliber index</li> <li>• Cross-section index of shaft</li> <li>• Cross-section index of head</li> </ul> <p><b>RADIUS</b></p> <p><b>Measurements</b></p> <ul style="list-style-type: none"> <li>• Maximum length</li> <li>• Physiological length</li> <li>• Least girth of shaft</li> <li>• Transverse diameter of shaft</li> <li>• Sagittal diameter of shaft</li> </ul> <p><b>Angles</b></p> <ul style="list-style-type: none"> <li>• Collo-diaphysial angle</li> <li>• Torsion angle</li> </ul> <p><b>Indices</b></p> <ul style="list-style-type: none"> <li>• Caliber index</li> <li>• Cross section index of shaft</li> <li>• Curvature index</li> </ul> <p><b>ULNA</b></p> <p><b>Measurements</b></p> <ul style="list-style-type: none"> <li>• Maximum length</li> <li>• Physiological length</li> <li>• Least girth of shaft</li> <li>• Breadth of olecranon</li> <li>• Height of olecranon</li> </ul>		III

	<b>Angles</b> <ul style="list-style-type: none"> <li>• Olecranon- coronoid angle</li> <li>• Joint axis angle</li> </ul> <b>Indices</b> <ul style="list-style-type: none"> <li>• Caliber index</li> <li>• Cross-section index of shaft</li> <li>• Curvature index</li> </ul>		
IV	Following <b>Osteometric</b> measurements are to be taken on bones.  <b>FEMUR</b> <b>Measurements</b> <ul style="list-style-type: none"> <li>• Maximum length</li> <li>• Trochanteric length</li> <li>• Sagittal diameter of middle of shaft</li> <li>• Physiological length</li> <li>• Transverse diameter of middle shaft</li> <li>• Girth of middle of shaft</li> </ul> <b>Angles</b> <ul style="list-style-type: none"> <li>• Torsion angle,</li> <li>• Collo-diaphysial angle</li> <li>• Condylodiaphysial angle</li> </ul>		IV

### Recommended Readings:

1. Singh, S.P. Kinanthropometry
2. Ashley Montagu, M.F.A. Hand Book of Anthropometry. Charles. C. Thomas. Illinois.
3. Singh, I.P. Bhasin, M.K. Anthropometry. Bharti Bhawan, New Delhi.
4. Weiner, J.S. &Lourie. J.A. Human Biology: A Guide to Field Methods. I.B.P. Hand
5. Book No. 9 Blackwell Scientific Publication, Oxford.
6. Mitra, M. 1990. Prayogik ManavVigyan- Bhag –2. Madhya Pradesh Hindi Granth
7. Academy (in Hindi).
8. Mitra, M. &Chaube, R. 2004. Prayogik ManavVigyan (Sharirik) Bhag –2. Madhya
9. Pradesh Hindi Granth Academy (in Hindi).

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## M.A/M.Sc. (Anthropology) Semester-II

Program	Subject	Year	Semester
M.A/M.Sc.	Anthropology	1	II
Course Code	Course Title		Course Type
ANTH210	Medical Anthropology		Core
Credit	Hours Per Week (L-T-P)		
	L	T	P
5	5	1	-
Maximum Marks	CIA		ESE
100	25		75

**\* L- Lecture, T- Tutorial, P- Practical**

### Learning Objective (LO):

This learning outcome aim to equip students with a comprehensive understanding of the cultural, social, and biological aspects of health and disease, preparing them for work in the field of Medical Anthropology. Understand the importance of a judicious mix of qualitative and quantitative research methods in evaluating health programs and interventions.

### Course Outcomes (CO):

CO No.	Expected Course Outcomes	CL
	At the end of the course, the students will be able to:	
1	Comprehensive understanding of the cultural dimensions of health and medicine, exploring diverse perspectives on healing, disease prevention, and varied healthcare systems across different societies. They will also learn how cultural beliefs and practices influence individual and community well-being.	U
2	Comprehensive understanding of epidemiology and its application to study the occurrence and distribution of diseases.	Ap
3	Apply and analyze the statistical tools and qualitative tools for research in health, medicine, religion, culture, public health promotion, nutrition, reproductive and child health, family welfare, health education for aging populations	Ap
4	Understand and evaluate the historical context of national health policies, the dynamics of healthcare delivery in diverse settings, the role of voluntary efforts in community health, and the application of anthropological methods in health systems research.	E

CL: Cognitive Levels (R-Remember; U-Understanding; Ap-Apply; An-Analyze; E-Evaluate; C- Create).

## CO-PO/PSO Mapping for the course:

PO CO	POs											PSO				
	1	2	3	4	5	6	7	8	9	10	11	1	2	3	4	5
CO1	3	3	3	1	3	3	3	-	3	3	3	3	3	3	3	2
CO2	3	3	3	2	2	3	3	-	3	3	3	3	3	3	3	2
CO3	3	3	3	2	3	3	3	-	3	3	3	3	3	3	3	3
CO4	3	3	3	2	3	3	3	-	3	3	3	3	3	3	3	1

"3"-Strong; "2"-Moderate; "1"-Low; "-"No Correlation

## Detailed Syllabus: ANTH210 - Medical Anthropology

Unit No.	Topics	No. of Lectures	CO No.
I	<ul style="list-style-type: none"> <li>• Meaning and scope of Medical Anthropology</li> <li>• Changing concepts of health and disease</li> <li>• Culture and lifestyle in relation to health and disease.</li> <li>• Ethno medicine.</li> <li>• Magico-Religious practices.</li> <li>• Indigenous medical systems and medical practitioner</li> <li>• Ethno-botany</li> <li>• Ethno-pharmacology.</li> <li>• Ethno-biology.</li> <li>• Ethnography of tribal medical system with special reference to tribes of central India.</li> <li>• Resurgence of traditional medical systems in the west and India.</li> </ul>	5+1	I
II	<ul style="list-style-type: none"> <li>• Epidemiology basic principles Types of Epidemiology; Epidemiology of common communicable and non-communicable diseases- 1. Malaria 2. T.B. 3. Leprosy 4. STD 5. Diabetes, 6. HIV/AIDS 7. Cancer 8. Cardiovascular diseases.</li> <li>• Mental health,</li> <li>• National disease control programmes.</li> <li>• Plural and alternative systems of medicine traditional system as part of culture and life style: 1. Ayurveda 2. Unani 3. Naturopathy 4. Tibetan 5. Chinese basic principles.</li> </ul>		II
III	<ul style="list-style-type: none"> <li>• Medical statistics measurement of morbidity and mortality rates incidence and other statistics.</li> <li>• Health promotion and health programmes.</li> <li>• Nutrition</li> <li>• RCH</li> <li>• Family welfare</li> <li>• Health education ageing (Peoples perspectives to be focused)</li> <li>• Health and environment: water pollution, air pollution, noise pollution.</li> <li>• International Health : WHO, UNICEF, USAID, Food Foundation etc.</li> </ul>		III
IV	<ul style="list-style-type: none"> <li>• National health policy: Historical Review.</li> </ul>		IV

	<ul style="list-style-type: none"> <li>• Health care delivery in India rural and urban, Response of the people.</li> <li>• Voluntary efforts in community health and development: Some case studies of community participation.</li> <li>• Anthropological approach to health systems research, use of an anthropological research method in health system research.</li> <li>• Evaluation judicious mix of qualitative and quantitative research methods.</li> </ul>		
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### Recommended Readings:

1. Medical Anthropology: Foster, George
2. Handbook of Medical Anthropology: Freeman, H.E. et al
3. Culture, Disease and Healing: Landy, D.
4. Culture, Health and Illness: Helman Cecil, Wright Bristol, 1985
5. Folk illness and Ethnomedicine: Banerjee B.G. and R. Jalota
6. Applied Anthropology in Medicine: Coudil, W.
7. Social Anthropology and Medicine: Loudon, J.B. (ASA Monograph)
8. Doctors and Society: Madan T.N.
9. Forensic Anthropology: Steward T.D.
10. Crime and Detection: Symans, J.
11. Methods in Forensic Anthropology: Nicoles
12. Forensic Science and laboratory: Turner
13. Practical Finger printing: Bridges
14. Finger, Palm and Sole Prints: Chatterjee
15. Methods in Forensic Science: Lundquist, F. and A.S. Curry
16. Modern Trends in Forensic Medicine: Ment
17. Anthropology Part-I: Jha and Baranwal
18. Harold Cummins and Charles Midlo. 1961. Finger Prints, Palms and Soles: An Intoduction to Dermatoglyphics, Dover Publications, New York.
19. Medicine, Magic and Religion, Rivers, W.H.R.
20. The Cultural Frontiers of Health, Hasan, K.
21. Traditional Medicine and Health Care Coverage (WHO), Bannermann et al.
22. Folk and Modern Medicine, Kakar, D.N.
23. Asian Medical System, Leslie, C. (Ed.).
24. People' Health in People's Hand, Anti, A.H. & Bhatia
25. Women's Autonomy, Education and Reproductive Health, Jajeebhoy, S.
26. Ministry of Health and Family Welfare, National Health Policy
27. W.H.O., World Health Reports.
28. National Institute of Health & Family Welfare, Maternal and Child Welfare
29. Health, Culture and Community, Paul, B.D.
30. Cultural Patterns and Technological Change, Mead, M.
31. Culture, Health and Disease, Read, M.
32. Dash, J., Patra, P.K. and Sathpathy, K.C. Dimensions of Healthcare practices, SSDN Publishers, New Delhi.

## M.A/M.Sc. (Anthropology) Semester-II

Program	Subject	Year	Semester
M.A/M.Sc.	Anthropology	1	II
Course Code	Course Title		Course Type
ANTH220	Fundamentals of Human Genetics		Core
Credit	Hours Per Week (L-T-P)		
	L	T	P
5	5	1	-
Maximum Marks	CIA		ESE
100	25		75

\* L- Lecture, T- Tutorial, P- Practical

### Learning Objective (LO):

The objective of this course is to equip students with a solid understanding of the history, principles, and methods of human genetics. They should be able to apply their knowledge to analyze and interpret inheritance patterns, understand the molecular basis of genetics, and appreciate the complexity of genetic variation in human populations.

### Course Outcomes (CO):

CO No.	Expected Course Outcomes	CL
	At the end of the course, the students will be able to:	
1	Understanding of the historical context, the core concepts, and the molecular mechanisms that govern genetic inheritance in humans. The knowledge acquired in these areas is foundational for further studies in genetics, genomics, and related fields.	U
2	This part of the syllabus delves deeper into the mechanisms of cell division, the practical application of Mendelian principles in human genetics, and various methods used to study heredity in human populations.	U
3	The syllabus delves into the genetics of blood groups, including the inheritance patterns of multiple alleles in different blood group systems. These topics are relevant in medical genetics, transfusion medicine, and population genetics.	Ap
4	Understanding these inheritance patterns is crucial for predicting and explaining the transmission of traits in families and populations, and it forms the basis for genetic counseling and research in human genetics.	Ap

CL : Cognitive Levels (R-Remember; U-Understanding; Ap-Apply; An-Analyze; E-Evaluate; C-Create).



## CO-PO/PSO Mapping for the course:

PO CO	POs											PSO				
	1	2	3	4	5	6	7	8	9	10	11	1	2	3	4	5
CO1	3	3	3	1	-	-	3	-	3	3	3	3	3	3	3	3
CO2	3	3	3	1	-	-	3	-	3	3	3	3	3	3	3	3
CO3	3	3	3	1	-	-	3	-	3	3	3	3	3	3	3	3
CO4	3	3	3	1	-	-	3	-	3	3	3	3	3	2	3	3

"3"-Strong; "2"-Moderate; "1"-Low; "-"No Correlation

## Detailed Syllabus: ANTH 220 - Fundamentals of Human Genetics

Unit No.	Topics	No. of Lectures	CO No.
I	<ul style="list-style-type: none"> <li>History, Definition and Scope of Human Genetics.</li> <li>Branches of Human Genetics.</li> <li>Concept of Gene.</li> <li>Elementary principles of Genetics.</li> <li>Structure and function of DNA, RNA and Proteins.</li> <li>Genetic code.</li> </ul>	5+1	I
II	<ul style="list-style-type: none"> <li>Cell Division- Mitosis and Meiosis.</li> <li>Mendelism. Application of Mendel's theory in man.</li> <li>Methods of studying human heredity: Pedigree method, Twin method, Linkage Studies.</li> </ul>		II
III	<ul style="list-style-type: none"> <li>Multiple alleles and blood groups</li> <li>Inheritance of ABO, MN and Rh blood groups.</li> <li>Compatible and Incompatible mating.</li> <li>Concept of gene frequencies.</li> </ul>		III
IV	<ul style="list-style-type: none"> <li>Autosomal Dominant and Recessive inheritance.</li> <li>Sex-linked, Sex-limited and Sex-influenced inheritance.</li> <li>Polygenic inheritance.</li> </ul>		IV

## Recommended Readings:

1. Curt Stern. 1968. Principles of Human Genetics. Eurasia Publishing House (Pvt.) Ltd., Ram Nagar, New Delhi-1 (India).
2. Winchester, A. M. 1967. Genetics, Oxford & IBH Publishing Co.
3. Bhasin, V. 1994. People, Health and Disease: The Indian Scenario, Kamla- Raj Enterprises, Delhi.
4. Bhasin, M., K., Walter, H. and Danker-Hopfe, H. 1992. The Distribution of Genetical, Morphological and behavioural
5. Traits among the Peoples of Indian Region, Kamla- Raj Enterprises, Delhi.
6. Bhamrah and Chaturvedi, A Text Book of Genetics.
7. Mange and Mange, Basic Human Genetics.
8. Rothwell, N.V., Human Genetics.
9. Harrison et al. Human Biology.
10. Ashley Montagu, Concept of Race.
11. Shukla, B.R.K. & Rastogi, S., Physical Anthropology and human Genetics.
12. Dalela and Verma, T Text Book of Genetics.
13. Bodmer & Cavalli Sforza, Genetics, Evolution and Man.

14. King and Stansfield, A Dictionary of Genetics.
15. Brudette, W.J., Methodology in Human Genetics.
16. Yunis, J.J. (Ed.), Biochemical Methods in Red Cell Genetics.
17. Harris, H., Human Biochemical Genetics.

## M.A/M.Sc. (Anthropology) Semester-II

Program	Subject	Year	Semester
M.A/M.Sc.	Anthropology	1	II
Course Code	Course Title		Course Type
ANTH230	Indian Archaeology		Core
Credit	Hours Per Week(L-T-P)		
	L	T	P
5	5	1	-
Maximum Marks	CIA		ESE
100	25		7 5

\* L- Lecture, T- Tutorial, P- Practical

### Learning Objective (LO):

The objective of this course is to cultivate a profound comprehension of understanding of the historical development, methods, and key archaeological cultures of prehistoric India. They should be equipped with the knowledge and skills to analyze archaeological data, interpret cultural developments, and contribute to the broader field of prehistoric archaeology.

### Course Outcomes (CO):

CO No.	Expected Course Outcomes	CL
	At the end of the course the students will be able to:	
1	Students gain insights into the challenges and intricacies of reconstructing past cultures based on material evidence, contributing to a broader understanding of human history.	Ap
2	Comprehensive exploration of the archaeological evidence, technological advancements, cultural developments, and artistic expressions associated with the Paleolithic cultures in India.	U
3	Understanding of how these communities adapted to environmental changes, developed new technologies, and transformed their ways of life, ultimately contributing to the emergence of settled agricultural societies during the Neolithic Revolution.	U
4	It encompasses the technological advancements, settlement patterns, religious practices, and economic activities of these ancient civilizations, contributing to a holistic comprehension of India's prehistoric and ancient past.	U

CL : Cognitive Levels (R-Remember; U-Understanding; Ap-Apply; An-Analyze; E-Evaluate; C-Create).

## CO-PO/PSO Mapping for the course:

PO CO	POs											PSO				
	1	2	3	4	5	6	7	8	9	10	11	1	2	3	4	5
CO1	3	2	3	3	3	2	3	-	2	3	3	3	3	3	3	3
CO2	3	2	3	3	3	1	3	-	2	3	3	3	3	3	3	3
CO3	3	2	3	3	2	3	3	-	1	3	3	3	3	3	3	3
CO4	3	2	3	3	2	1	3	-	1	3	3	3	3	3	3	3

"3"-Strong; "2"-Moderate; "1"-Low; "-"No Correlation

## Detailed Syllabus: ANTH230 - Indian Archaeology

Unit No.	Topics	No. of Lectures	CO No.
I	<ul style="list-style-type: none"> <li>Historical development of Prehistoric Archeology.</li> <li>Framework of Archaeological Cultures</li> <li>Terminology Issues</li> <li>Exploration and Excavation Techniques.</li> </ul>	5+1	I
II	<ul style="list-style-type: none"> <li>Lower Palaeolithic cultures of India: Distribution, Stratigraphy, Chronology, Tool Kit, Soanian&amp;Madrasian Traditions, Development &amp; Associated fossils.</li> <li>Middle Paleolithic Cultures of India: Distribution, Stratigraphy, Chronology, Tool Kit, Development &amp; Associated fossils.</li> <li>Upper Paleolithic Cultures of India: Distribution, Chronology, Assemblage, Art (Rock Art &amp; Cave Art), Development</li> </ul>		II
III	<ul style="list-style-type: none"> <li>Mesolithic Cultures of India: Discoveries, Chronology, Tool kit, Stratigraphy, Development, Lifeways, Burial Practices, Associated Flora and Fauna.</li> <li>Neolithic Cultures of India: Neolithic Revolution, Discoveries, Chronology, Assemblage, Emergence of Human settlements, Regional Variations.</li> </ul>		III
IV	<ul style="list-style-type: none"> <li>Chalcolithic Cultures of India: Distribution, Chronology, Assemblage, Traditions, Lifeways</li> <li>Indus Civilization: Discoveries, Distribution, Chronology, Town-planning, Religion, Trade, Origin &amp; Decay Theories.</li> <li>Megalithic Culture of India: Distribution, Chronology, Assemblage, Types, Living Megalithic Traditions.</li> </ul>		IV

## Recommended Readings:

1. Agrawal, D.P. The Archeology of India.
2. Allchin and Allchin, 1982. The Rise of Civilization in India and Pakistan, Select Book Service
3. Syndicate, New Delhi.
4. Bhattacharya, D.K. 1987. Pre-historic Archaeology: A comparative study of human succession.
5. Bhattacharya, D.K. 1994. Outline of Indian Prehistory.
6. Pandey, J. N. 2000. PuratatvaVimarsh (in Hindi)
7. Misra, V. N. & M. S. Mate 1995. Indian Prehistory; 1964.
8. Choubey, R. PuratatvikManavvigyan (in Hindi)
9. Sankalia, H. D. 1974. Pre and Protohistory of India and Pakistan.

10. Varma, R.K. & N. Varma, 2001. PuratatvaAnushilan
11. Wheeler, R.E.M. 1959. Early India & Pakistan.

## M.A/M.Sc. (Anthropology) Semester-II

Program	Subject	Year	Semester
M.A/M.Sc.	Anthropology	1	II
Course Code	Course Title		Course Type
ANTH240	Biostatistics and Computer Application		Core
Credit	Hours Per Week (L-T-P)		
	L	T	P
5	5	1	-
Maximum Marks	CIA		ESE
100	25		75

\* L- Lecture, T- Tutorial, P- Practical

### Learning Objective (LO):

The primary objective of this course is to empower students with the fundamental principles required to foundation in statistical methods relevant to anthropology and have practical skills in using computers and software applications for data analysis and academic research.

### Course Outcomes (CO):

CO No.	Expected Course Outcomes	CL
	At the end of the course, the students will be able to:	
1	The skills acquired in this syllabus are applicable in various fields, including research, finance, economics, and other areas where statistical analysis is crucial for decision-making and understanding patterns in data.	An
2	Students will gain essential skills in statistical analysis, hypothesis testing, and regression modeling.	An
3	This knowledge is valuable in fields such as public health, sociology, demography, and policymaking, as it provides a comprehensive understanding of the characteristics and changes within populations over time.	Ap
4	These skills include basic computer literacy, proficiency in using common software tools, internet research, and the application of data analysis and referencing software in the context of anthropological studies.	An

CL : Cognitive Levels (R-Remember; U-Understanding; Ap-Apply; An-Analyze; E-Evaluate; C-Create).

## CO-PO/PSO Mapping for the course:

PO CO	POs											PSO				
	1	2	3	4	5	6	7	8	9	10	11	1	2	3	4	5
CO1	3	3	3	3	3	3	3	-	3	3	3	3	3	3	3	3
CO2	3	3	3	3	2	3	3	-	3	3	3	3	3	3	3	3
CO3	3	3	3	3	2	3	3	-	2	3	3	3	3	3	3	3
CO4	3	3	3	3	2	3	3	-	2	3	3	3	3	3	3	3

"3"-Strong;"2"-Moderate;"1"-Low;"-"No Correlation

## Detailed Syllabus: ANTH240 - Biostatistics and Computer Application (II)

Unit No.	Topics	No. of Lectures	CO No.
I	<ul style="list-style-type: none"> <li>Measures of Dispersion: Dispersion, Range, Variance, Standard Deviation, Standard Errors, Skewness and Kurtosis.</li> <li>Correlation: Simple correlation, Grouped and ungrouped data, Karl Pearson's Coefficient of Correlation.</li> </ul>	5+1	I
II	<ul style="list-style-type: none"> <li>Parametric and non-parametric test.</li> <li>Test of Significance: Non- parametric Tests: Chi-square Test, Goodness of fit.</li> <li>Parametric Test: t-test. ANOVA.</li> <li>Regression analysis: Linear regression and logistic regression</li> <li>Bivariate and multivariate Analysis</li> </ul>		II
III	<ul style="list-style-type: none"> <li>Population Study: Vital Statistics.</li> <li>Fertility and Fertility rates.</li> <li>Mortality and Mortality rates: Infant Mortality and Infant Mortality rates &amp; Maternal Mortality.</li> <li>Factors affecting Fertility and Mortality.</li> <li>Morbidity and Morbidity rates.</li> <li>Migration and Migration rates.</li> </ul>		III
IV	<ul style="list-style-type: none"> <li>Introduction to Computer: History &amp; Types of Computers.</li> <li>Computer hardware and software.</li> <li>Operating System : Windows.</li> <li>MS Office: 1. MS-Word 2. MS-Excel 3.MS-Power Point</li> <li>Internet: Use of Internet in Anthropological Research, epgPathshala, N-List.</li> <li>Anti virus.</li> <li>Data Analysis Softwares: SPSS 16.0, MS-Excel.</li> <li>Referencing Softwares :Mandelely.</li> </ul>		IV

## Recommended Readings:

1. Gupta, S.P., Statistical Methods.
2. Sarin, S.S. and Balchandani, M.K., Fundamentals of Statistics. RatanPrakashanMandir, Agra.
3. Summar, M., Computers: Concepts and Uses.
4. Wardlaw, A.C. ,PracticalStatisticals for experimental biologists.
5. Zar, J.H., Biostatistical Analysis.
6. Elhance, D. N., Practical Problems in Statistics, KitabMahal, Allahabad.
7. Sarin, S.S. and Balchandani, M.K. ,Fundamentals of Statistics. RatanPrakashanMandir, Agra.
8. Fernandes&Tondon, Participatory Research.
9. Fisher, Michael.,Application in Computing for Social Anthropologists, London, Routledge.
10. H. Russel. Bernard, Handbook of Methods in Cultural Anthropology, Altamira Press.
11. Kaplan, Abraham, The Conduct of Enquiry: Methodology for Behavioural Sciences.
12. Madrigal, Lorena, Statistics for Anthropology.
13. Pradhan, Ashok, JanjatiyaJanankiki



## M.A/M.Sc.(Anthropology)Semester-II

Program	Subject	Year	Semester
M.A/M.Sc.	Anthropology	1	II
Course Code	Course Title		Course Type
ANTH250	Practicals in Archaeology		Core
Credit	Hours Per Week (L-T-P)		
	L	T	P
3	-	-	6
Maximum Marks	CIA		ESE
100	25		75

\* L- Lecture, T- Tutorial, P- Practical

### Learning Objective (LO):

The objective of this course is to create a deep understanding of archaeological tools, site types, and conservation practices, preparing them for further studies and careers in the field of archaeology and understand the importance of formation processes and reconstructing the environment of archaeological sites.

### Course Outcomes (CO):

CO No.	Expected Course Outcomes	CL
	At the end of the course, the students will be able to:	
1	Understanding the challenges of environmental factors, deterioration processes, and methods to mitigate these issues. By covering these topics,	Ap
2	Exploring ethical considerations related to the conservation and preservation of cultural heritage.	Ap
3	Students will acquire practical skills in the analysis and interpretation of prehistoric tools, understand different types of archaeological sites.	U
4	Gain fieldwork experience through site visits, and learn the importance of conserving and preserving antiquities for future generations.	An

CL : Cognitive Levels (R-Remember; U-Understanding; Ap-Apply; An-Analyze; E-Evaluate; C-Create)

### CO-PO/PSO Mapping for the course:

PO CO	POs											PSO				
	1	2	3	4	5	6	7	8	9	10	11	1	2	3	4	5
CO1	3	2	3	3	3	2	3	-	2	3	3	3	3	3	3	3
CO2	3	2	3	3	3	1	3	-	2	3	3	3	3	3	3	3
CO3	3	2	3	3	2	3	3	-	1	3	3	3	3	2	3	2
CO4	3	2	3	3	2	1	3	-	1	3	3	3	3	2	3	-

"3"-Strong; "2"-Moderate; "1"-Low; "-"No Correlation

## Detailed Syllabus: ANTH250 - Practicals in Archaeology (II)

Unit No.	Topics	No. of Lectures	CO No.
I	<ul style="list-style-type: none"><li>Tools: Typology, Functions &amp; Technology.</li><li>Sketching and description of representative Prehistoric tools:<ul style="list-style-type: none"><li>(a) Stone tools</li><li>(b) Bone tools</li><li>(c) Pottery</li></ul></li></ul>	6	I
II	<ul style="list-style-type: none"><li>Site Types: Kill sites, Habitation sites, Industry sites, Query sites, Burial sites.</li></ul>		II
III	<ul style="list-style-type: none"><li>Visit to Museum, Excavation Site.</li></ul>		III
IV	<ul style="list-style-type: none"><li>Conservation &amp; Preservation of Antiquities.</li></ul>		IV

### Recommended Readings:

1. Mitra, Mitashree & Ramesh Choubey. PrayogikManavvigyan (in Hindi).
2. Oakley, K.P. 1972. Man the Tool Maker.
3. Reddy, Rami. Tool techniques in Prehistory.
4. Sankalia, H. D. 1964. Stone age tools: Their techniques, names & probable functions.

## M.A/M.Sc. (Anthropology) Semester-II

Program	Subject	Year	Semester
M.A/M.Sc.	Anthropology	1	II
Course Code	Course Title		Course Type
ANTH260	Compulsory Field Work (II)		Core
Credit	Hours Per Week (L-T-P)		
	L	T	P
2	-	-	4
Maximum Marks	CIA		ESE
100	25		75

\* L- Lecture, T- Tutorial, P- Practical

### Learning Objective (LO):

The objective of this course is to develop a profound comprehension of fieldwork skills, ethical considerations, and independent research capabilities and the ability to work collaboratively with communities, analyze data, and communicate their findings through a well-structured fieldwork report

### Course Outcomes (CO):

CO No.	Expected Course Outcomes	CL
	At the end of the course, the students will be able to:	
1	The course aims to provide students with hands-on experience in conducting fieldwork, with an emphasis on practical skills such as rapport building, data collection, analysis, and report writing.	Ap
2	Students gain valuable insights into the complexities of anthropological research and develop the capacity to undertake independent research programs in the future.	Ap
3	Understanding the strengths and limitations of different data collection techniques and selecting appropriate methods based on research objectives.	Ap
4	Learn how to compile and present fieldwork findings in the form of a comprehensive report. Developing skills in data analysis, interpretation, and effective communication of research results.	Ap

CL : Cognitive Levels (R-Remember; U-Understanding; Ap-Apply; An-Analyze; E-Evaluate; C-Create).

## CO-PO/PSO Mapping for the course:

PO CO	POs											PSO				
	1	2	3	4	5	6	7	8	9	10	11	1	2	3	4	5
CO1	3	3	3	1	3	1	3	-	3	3	3	3	3	3	3	3
CO2	3	3	3	2	-	1	3	-	3	3	3	3	3	3	3	3
CO3	3	3	3	2	3	3	3	-	3	3	3	3	3	3	3	3
CO4	3	3	3	3	-	2	3	-	3	3	3	3	3	3	3	3

"3"-Strong;"2"-Moderate;"1"-Low;"-"No Correlation

## Detailed Syllabus: ANTH 260- Compulsory Field Work (II)

Unit No.	Topics	No. of Lectures	CO No.
	The course is designed to make the student carry out field work in the planning of project proposal, data collection, data analysis and report writing under the guidance of teacher assigned by the Head of the department using conventional and scientific methods at various stages of the field dissertation. The course aims at capacity building of the student in taking up independent research programmes. The students are required to work with the community for a period of 7-10 days in the village. Two typed copies of analyzed data is to be submitted in the department in the form of a Field work Report		
I	Fieldwork tradition in anthropology. Rapport building - initial contact.	4	I
II	Preparation for fieldwork tools: Review of data collection methods (as per Research method).		II
III	Fieldwork		III
IV	Data analysis and Report writing.		IV

## M.A/M.Sc. (Anthropology) Semester- III

Program	Subject	Year	Semester
M.A/M.Sc.	Anthropology	2	III
Course Code	Course Title		Course Type
ANTH310	Applied Anthropology (Group- A & B)		Core
Credit	Hours Per Week (L-T-P)		
	L	T	P
5	5	1	-
Maximum Marks	CIA		ESE
100	25		75

\* L- Lecture, T- Tutorial, P- Practical

### Learning Objective (LO):

The objective of the course is to provide students a comprehensive understanding of the applications of anthropology in sports, nutrition, defense, genetics, tribal development, industry, education, and public health. Additionally, they should be equipped to critically analyze and contribute to real-world challenges in these domains.

### Course Outcomes (CO):

CO No.	Expected Course Outcomes	CL
	At the end of the course, the students will be able to:	
1	Anthropological principles contribute to our understanding of sports, nutrition, and defense-related activities. The focus on applied aspects underscores the relevance of biological anthropology in addressing contemporary challenges and enhancing human well-being in various contexts.	Ap
2	Its applications contribute to advancements in healthcare, forensic science, and our understanding of human heredity, also addresses the ethical considerations associated with genetic interventions and the societal implications of applying genetic knowledge in various contexts.	Ap
3	Anthropological theories and methodologies can be effectively utilized to understand, engage with, and contribute to the development of tribal communities and emphasizes the active role of anthropologists in addressing real-world challenges, promoting community participation, and fostering positive social change.	U
4	Contributions of anthropologists in different sectors, emphasizing the practical applications of anthropological theories and methods to bring about positive change and enhance the well-being of individuals and communities.	An

CL: Cognitive Levels (R-Remember; U-Understanding; Ap-Apply; An-Analyze; E-Evaluate; C-Create)

CO-PO/PSO Mapping for the course:

PO CO	POs											PSO				
	1	2	3	4	5	6	7	8	9	10	11	1	2	3	4	5
CO1	3	1	3	-	2	3	3	-	1	3	3	3	3	3	3	3
CO2	3	1	3	-	3	3	3	-	3	3	3	3	3	3	3	3
CO3	3	2	3	3	2	3	3	-	2	3	3	3	3	3	3	3
CO4	3	1	3	-	2	3	3	-	2	3	3	3	3	3	3	2

"3"-Strong; "2"-Moderate; "1"-Low; "-"No Correlation

**Detailed Syllabus: ANTH310 - Applied Anthropology (Group- A & B)**

Unit No.	Topics	No. of Lectures	CO No.
I	<ul style="list-style-type: none"> <li>• Meaning and Scope of Applied Biological Anthropology.</li> <li>• Anthropology of Sports.</li> <li>• Nutritional Anthropology.</li> <li>• Designing of defense equipment's.</li> <li>• Defense Services.</li> </ul>	5+1	I
II	<ul style="list-style-type: none"> <li>• Applications of Human Genetics: Medico - Legal cases, Eugenics.</li> <li>• Genetic screening, Genetic counseling, Genetic engineering.</li> <li>• Human Genomics &amp; its applications.</li> </ul>		II
III	<ul style="list-style-type: none"> <li>• Meaning &amp; Scope of Applied Social Anthropology.</li> <li>• Applied &amp; Action anthropology.</li> <li>• Applications of Anthropological theory and methodology in the field of tribal development.</li> </ul>		III
IV	<ul style="list-style-type: none"> <li>• Applied anthropology in industry.</li> <li>• Applied anthropology in education.</li> <li>• Applied anthropology in public health</li> <li>• National health Mission.</li> </ul>		IV

**Recommended Readings:**

1. Kroeber. Anthropology Today.
2. Curt Stern. 1968. Principles of Human Genetics. Eurasia Publishing House (Pvt.) Ltd., Ram Nagar, New Delhi-1(India).
3. Steine. Biosocial Genetics.
4. Karp, E. Genetic Engineering.
5. Bodmer and Cavalli-Sforza. Genetics of Human Populations.
6. Backer, PT and Weiner (Eds), The Biology of Human Adaptability.
7. Beal, Virginia, Nutrition and the Life Span
8. Craig, Human Development
9. Eveleth, PB and Tanner, JM Worldwide Variation in Human Growth
10. Forbes, GB, Human Body Composition
11. Sodhi, HS, Sports Anthropology
12. Willigt, JV, Applied Anthropology: An Introduction
13. Stern, C., Principles of Human Genetics.
14. Shukla, B.R.K. & Rastogi, S., Physical Anthropology and Human Genetics An Introduction.

## M.A/M.Sc. (Anthropology) Semester- III

Program	Subject	Year	Semester
M.A/M.Sc.	Anthropology	2	III
Course Code	Course Title		Course Type
ANTH320	Advanced Human Biology		Core
Credit	Hours Per Week (L-T-P)		
	L	T	P
5	5	1	-
Maximum Marks	CIA		ESE
100	25		75

\* L- Lecture, T- Tutorial, P- Practical

### Learning Objective (LO):

The objective of this course is to equip students with a solid grasp of genetic principles, their applications, and the implications of genetic variations and anomalies in human populations. This course aims to help students analyze genetic patterns, counsel individuals, and contribute to discussions on genetic issues in various contexts.

### Course Outcomes (CO):

CO No.	Expected Course Outcomes	CL
	At the end of the course, the students will be able to:	
1	This knowledge is crucial for comprehending the basics of inheritance, genetic variation in human populations and includes both theoretical concepts and practical techniques used in dermatoglyphic analysis, providing a basis for applications in fields such as forensic science, anthropology, and medical genetics.	An
2	Students will acquire a comprehensive understanding of these genetic concepts and their implications in human biology.	E
3	Understanding of human genetics, from the fundamentals of chromosome biology to the practical applications of genetic counseling and prenatal diagnosis.	Ap
4	This syllabus provides a comprehensive overview of genetic processes and their implications for human populations, covering both theoretical concepts and practical applications.	E

CL : Cognitive Levels (R-Remember; U-Understanding; Ap-Apply; An-Analyze; E-Evaluate; C-Create).

## CO-PO/PSO Mapping for the course:

PO CO	POs											PSO				
	1	2	3	4	5	6	7	8	9	10	11	1	2	3	4	5
CO1	3	1	3	1	-	1	3	-	2	3	3	3	3	3	3	3
CO2	3	1	3	1	-	2	3	-	1	3	3	3	3	2	3	3
CO3	3	2	3	-	-	3	3	-	2	3	3	3	3	2	3	3
CO4	3	1	3	1	-	2	3	-	2	3	3	3	3	1	3	3

"3"-Strong; "2"-Moderate; "1"-Low; "-"No Correlation

## Detailed Syllabus: ANTHA320 - Advanced Human Biology

Unit No.	Topics	No. of Lectures	CO No.
I	<ul style="list-style-type: none"> <li>Gene expressivity: Lethal genes, Sub-lethal genes, modifying genes, Co-dominance. Suppressor genes, Selfish gene Variable Penetrance in man.</li> <li>Sex determination in man.</li> <li>Dermatoglyphics: Identification, Topography, Finger prints pattern-identification, pattern intensity, Furuata and Dankmeijer's index.</li> <li>Palmar Dermatoglyphics- Configurational areas, Main line formula and Index &amp; transversality, atd angle and flexion creases.</li> </ul>	5+1	I
II	<ul style="list-style-type: none"> <li>Probability.</li> <li>Hardy-Weinberg law, Testing Equilibrium, Applications of Hardy Weinberg Law in Human Population Genetics.</li> <li>Genetic Polymorphism: Transient and Balanced.</li> <li>Concept of Gene Pool and Gene Frequency.</li> </ul>		II
III	<ul style="list-style-type: none"> <li>Human Chromosomes, Chromosome Karyotype – Banding Techniques.</li> <li>Numerical and Structural Chromosomal abnormalities</li> <li>Inborn errors of Metabolism: G6PD Deficiency, PKU, Alkaptonuria.</li> <li>Genetic Counseling and pre-natal diagnosis.</li> </ul>		III
IV	<ul style="list-style-type: none"> <li>Occurrence of Mutation: Mutation Rate- Direct and Indirect Method.</li> <li>Selection in Human Population, Selection Relaxation, Selection Leading to Changes in Gene.</li> <li>Frequency and Selection leading to change in Genetic Equilibrium.</li> <li>Inbreeding: Definition and Concept, Inbreeding with Pedigree.</li> <li>Coefficient of Inbreeding. Genetics Consequences of inbreeding in Human Population.</li> <li>Genetic hazards of radiation.</li> </ul>		IV



## Recommended Readings:

1. Crow & Kimura. 1970. An Introduction to Population Genetics Theory, Harper & Row Publishers, New York.
2. Curt Stern. 1968. Principle of Human Genetics, Eurasia Publishing House (Pvt.) Ltd., Ram Nagar, New Delhi-1
3. (India).
4. Li, C. C. Population Genetics, Chicago University Press, Chicago.
5. Baker, P.T. & Weiner (Eds.), The Biology of Human Adaptability.
6. Beal, Virginia, Nutrition and the Life Span.
7. Beutler, E., Red Cell Metabolism: A Manual of Biochemical Methods.
8. Bouge, D., Principles of Demography.
9. Brock and Mayo, The Biochemical Genetics of Man.
10. Burdette, W.J., Methodology of Human Genetics.
11. Craig, Human Development.
12. Dixit, M., Human Nutrition Principles and Applications in India.
13. Emery A.E.H., Elements of Medical Genetics.
14. Eveleth, P.B. & Tanner, J.M., Worldwide variations in Human Growth.
15. Giblett, E.R., Genetics Markers in Human Blood.
16. Li, C.C., Human Genetics
17. Malhotra, K.C. & ISHG, Calcutta, Statistical Methods in Human Population Genetics, IBRAD, ISI
18. Wright, S., Evolution and Genetics of Population
19. Stanfield, W.D., Theory and Problems of Genetics.
20. Burdette, WJ, Methodology in Human Genetics
21. Crow, J.F. & Kimura, M., An Introduction to Population Genetic Theory
22. Rothwell, N.V., Human Genetics.
23. Mange, J.E. & Mange, A.P., Basic Human Genetics.
24. Bhamarh, H.S. & Chaturvedi, C.M., A Textbook of Genetics.

## M.A/M.Sc. (Anthropology) Semester- III

Program	Subject	Year	Semester
M.A/M.Sc.	Anthropology	2	III
Course Code	Course Title		Course Type
ANTH 330	Practicals in Applied Biological Anthropology		Core
Credit	Hours Per Week (L-T-P)		
	L	T	P
3	-	-	6
Maximum Marks	CIA		ESE
100	25		75

\* L- Lecture, T- Tutorial, P- Practical

### Learning Objective (LO):

The aim of this course is to build strong understanding of various laboratory techniques related to blood analysis, genetic testing, and forensic investigations. They should also understand the practical applications of these techniques in criminal detection, personal identification, and genetic studies.

### Course Outcomes (CO):

CO No.	Expected Course Outcomes	CL
	At the end of the course, the students will be able to:	
1	Students will acquire practical skills and theoretical knowledge in various laboratory techniques related to blood analysis, forensic investigation, genetic analysis, and personal identification.	Ap
2	Understanding the ABO blood group system, Rh blood group system, and MN blood group system. Exploring methods for personal identification through blood grouping.	Ap
3	Studying the patterns of ridges and other features in fingerprints, palm prints, sole prints, and toe prints for identification purposes.	An
4	This knowledge is particularly relevant for those pursuing careers in forensic science, genetics, clinical laboratories, and related fields.	Ap

CL: Cognitive Levels (R-Remember; U-Understanding; Ap-Apply; An-Analyze; E-Evaluate; C-Create).

## CO-PO/PSO Mapping for the course:

PO CO	POs											PSO				
	1	2	3	4	5	6	7	8	9	10	11	1	2	3	4	5
CO1	3	-	3	3	2	1	3	-	3	3	3	3	3	3	3	1
CO2	3	-	3	3	2	1	3	-	3	3	3	3	3	3	3	2
CO3	3	-	3	3	2	1	3	-	3	3	3	3	3	3	3	3
CO4	3	-	3	3	2	1	3	-	3	3	3	3	3	3	3	1

"3"-Strong;"2"-Moderate;"1"-Low;"-"No Correlation

## Detailed Syllabus: ANTHA 330 - Practicals in Applied Biological Anthropology

Unit No.	Topics	No. of Lectures	CO No.
I	<ul style="list-style-type: none"> <li>Collection of blood specimens.</li> <li>Preparation of Hemolysates and serum &amp; their storage.</li> <li>Preparation &amp; identification of Heme in Crystals.</li> <li>Laboratory examination of blood and blood stains for criminal detection: Preliminary test, confirmatory test: Tiechmann test, Takayama test.</li> <li>Techniques of blood grouping: ABO blood group system Rh, blood group system &amp; MN blood group system. Personal Identification by blood grouping.</li> </ul>	6	I
II	<ul style="list-style-type: none"> <li>Calculation of gene frequencies.</li> <li>Test of ABH saliva secretion.</li> <li>Test of Hemoglobin determination in human blood.</li> <li>Test for Sickle cell hemoglobin.</li> <li>Test for Colour blindness P.T.C. taste sensitivity.</li> <li>Examination of R.B.C. in Human Blood.</li> <li>Examination W.B.C. in Human Blood.</li> </ul>		II
III	<ul style="list-style-type: none"> <li>Dermatoglyphics: Analysis of finger, palm, sole and toe prints</li> </ul>		III
IV	<ul style="list-style-type: none"> <li>Isolation of DNA from human blood and personal identification by DNA markers.</li> </ul>		IV
	<p><b>NOTE:</b> Five specimens to be analyzed by each student in the above-mentioned traits unless stated otherwise.</p>		

## Recommended Readings:

- Race, R. R. & Sanger, R. 1968. Blood group in man. Blackwell Scientific Publications, Oxford. (612.11825, RAR).
- Kathleen E. Boormen and Barbara E. Dodd. An Introduction to Blood group Serology (612.11825, BOK).
- Bhasin, M. K. and Chahal, S. M. S. 1996 . A Laboratory Manual for Human blood Analysis, Kamla Raj Enterprises, Delhi.
- Shrivastava, B. K. 1983. A Manual of Practical Physiology, Samit Medical Publications,
- Patna. Dacie, J. V. and Lewis, S. M. 1991. Practical haematology, 5th edition, J. and A. Churchill, Livingstone.

## M.A/M.Sc. (Anthropology) Semester- III

Program	Subject	Year	Semester
M.A/M.Sc.	Anthropology	2	III
Course Code	Course Title		Course Type
ANTH 340	Practicals in Human Growth, Nutrition and Physiology		Core
Credit	Hours Per Week (L-T-P)		
	L	T	P
2	-	-	4
Maximum Marks	CIA		ESE
100	25		75

\* L- Lecture, T- Tutorial, P- Practical

### Learning Objective (LO):

The objective of this course is to create a deep understanding of the skills to assess and interpret various anthropometric measurements, nutritional status, clinical signs, and physiological parameters related to human growth and well-being. They should also be able to apply these skills in evaluating and promoting individual and community health.

### Course Outcomes (CO):

CO No.	Expected Course Outcomes	CL
	At the end of the course, the students will be able to:	
1	Students will acquire practical skills in anthropometric measurements, nutritional assessment, and physiological evaluations.	Ap
2	These assessments can be applied to understand human growth, nutritional status, and physiological well-being.	Ap
3	This knowledge is valuable for individuals pursuing careers in fields such as nutrition, sports science, healthcare, and physiology.	Ap
4	Various clinical signs can indicate nutritional deficiencies or imbalances in the body.	Ap

CL : Cognitive Levels (R-Remember; U-Understanding; Ap-Apply; An-Analyze; E-Evaluate; C-Create).

## CO-PO/PSO Mapping for the course:

PO CO	POs											PSO				
	1	2	3	4	5	6	7	8	9	10	11	1	2	3	4	5
CO1	3	-	3	3	2	1	3	-	3	3	3	3	3	3	3	1
CO2	3	-	3	3	2	1	3	-	3	3	3	3	3	3	3	2
CO3	3	-	3	3	2	1	3	-	3	3	3	3	3	3	3	-
CO4	3	-	3	3	2	1	3	-	3	3	3	3	3	3	3	-

"3"-Strong;"2"-Moderate;"1"-Low;"-"No Correlation

## Detailed Syllabus: ANTHA 340 - Practicals in Human Growth, Nutrition and Physiology

Unit No.	Topics	No. of Lectures	CO No.
I	<b>Human Growth :</b> <ul style="list-style-type: none"> <li>• Techniques of taking skinfold measurement: Biceps, Triceps, Sub-scapular, Supra-iliac.</li> <li>• Body Proportions.</li> <li>• Body Composition.</li> <li>• Somatotyping.</li> </ul>	4	I
II	<b>Nutrition:</b> <ul style="list-style-type: none"> <li>• Detection of nutritional status on the basis of body measurements</li> <li>• Nutritional Anthropometry: Age-ht, Age-wt, Ht-wt.</li> <li>• Body Mass Index (BMI)</li> <li>• Waist/Hip Ratio</li> </ul>		II
III	<b>Evaluation of Nutritional Status on the Basis of Clinical Signs :</b> <ul style="list-style-type: none"> <li>• Hair</li> <li>• Skin</li> <li>• Nail</li> <li>• Face</li> <li>• Mouth</li> <li>• Tongue</li> <li>• Eye</li> </ul>		III
IV	<b>Physiology:</b> <ul style="list-style-type: none"> <li>• Examination of Pulse Rate</li> <li>• Determination of Blood Pressure</li> <li>• Determination of Vital Capacity</li> <li>• Hand Grip</li> </ul>		IV

## Recommended Readings:

1. Jelliffe, D. B. & Jelliffe, E. F. B. Nutrition & Growth, New York, Plenum.
2. Swaminathan, M. 1985. Essentials of Food and Nutrition, The Bangalore Printing and Publishing Co. Ltd.
3. Gopalan, C., Rama Sastri, B., V. & Balasubramanian, S. C. 2002. Nutritive value of Indian foods, National Institute of Nutrition, ICMR, Hyderabad.
4. Falkner, F. & Tanner, J. M. Human Growth. Vols. I, II & III, Plenum Press, New York.
5. Jelliffe, D. B. The Assessment of the nutritional status of the community, WHO, Geneva.

## M.A/M.Sc. (Anthropology) Semester- III

Program	Subject	Year	Semester
M.A/M.Sc.	Anthropology	2	III
Course Code	Course Title		Course Type
ANTH 351	Human Growth & Nutrition		Core
Credit	Hours Per Week (L-T-P)		
	L	T	P
5	5	1	-
Maximum Marks	CIA		ESE
100	25		75

\* L- Lecture, T- Tutorial, P- Practical

### Learning Objective (LO):

The objective of the course is to provide students a comprehensive understanding of human growth and development, factors influencing growth, nutrition concepts, and the evaluation of nutritional status. They should also be familiar with various programs and initiatives addressing malnutrition and health-related issues in India.

### Course Outcomes (CO):

CO No.	Expected Course Outcomes	CL
	At the end of the course, the students will be able to:	
1	The entire life span of human growth and development, including the factors influencing growth at different stages, variations in growth patterns, and the methods employed to study these processes.	U
2	The multifaceted factors influencing human growth, the adaptive strategies of humans to different environments, and the diverse ways age can be conceptualized and measured.	U
3	About the fundamental principles of nutrition, the importance of a balanced diet, and how nutritional issues can impact individuals at different stages of life. They will also learn practical methods for evaluating nutritional status through both physical measurements and clinical observations.	Ap
4	This knowledge is relevant for individuals pursuing careers in public health, nutrition, healthcare management, and related fields.	Ap

CL: Cognitive Levels (R-Remember; U-Understanding; Ap-Apply; An-Analyze; E-Evaluate; C-Create).

## CO-PO/PSO Mapping for the course:

PO CO	POs											PSO				
	1	2	3	4	5	6	7	8	9	10	11	1	2	3	4	5
CO1	3	-	3	-	2	2	3	-	3	3	3	3	3	3	3	3
CO2	3	-	3	-	2	2	3	-	3	3	3	3	3	2	3	3
CO3	3	-	3	-	2	2	3	-	3	3	3	3	3	2	3	3
CO4	3	-	3	-	3	2	3	-	3	3	3	3	3	2	3	3

"3"-Strong; "2"-Moderate; "1"-Low; "-"No Correlation

## Detailed Syllabus: ANTH 351 - Human Growth & Nutrition

Unit No.	Topics	No. of Lectures	CO No.
I	<ul style="list-style-type: none"> <li>Human growth and Development: Pre-natal and Post-natal growth, infancy, Childhood, adolescence, adulthood, senility.</li> <li>Human growth curves Catch up and Catch down growth.</li> <li>Basic methods of growth studies - Cross-sectional, Longitudinal, Mixed Longitudinal Linked longitudinal.</li> </ul>	5+1	I
II	<ul style="list-style-type: none"> <li>Factors affecting human growth: Heredity, Environment, Hormone and Nutrition.</li> <li>Human Adaptation : Allen's and Bergmann's rule</li> <li>Concept of age: chronological, skeletal, dental, morphological.</li> </ul>		II
III	<ul style="list-style-type: none"> <li>Nutrition: Basic terms and concepts.</li> <li>Concept of Balanced Diet, Malnutrition, Under nutrition, Overnutrition, Obesity etc.</li> <li>Special problems related to growth and nutrition growth at risk; infants, pregnant and lactating mothers, old age problems, birth weight variations; abnormal growth failure.</li> <li>Evaluation of nutritional status through Anthropometric and Clinical signs of malnutrition.</li> </ul>		III
IV	<ul style="list-style-type: none"> <li>Growth Programmes: ANP, ICDS, SNP, Mid-Day meal programme; Vitamin-A prophylaxis programme, Anemia prophylaxis Programme, Goiter control programme, Nutritional deficiency diseases: Nicotinic acid deficiency, Vitamin-C, Vitamin-D deficiency.</li> <li>Problem of Malnutrition.</li> <li>Morbidity and Mortality in India.</li> <li>IMR. Role of maternal education, Immunization programme in India.</li> </ul>		IV

## Recommended Readings:

1. Tanner, J. M. 1962. Growth at Adolescence, Blackwell Scientific Publications, Oxford.
2. Lowrey, G. H. 1978. Growth & development of children, Year book Medical Publishers, Chicago – London.
3. Swaminathan, M. 1985. Essentials of Food and Nutrition, The Bangalore Printing and Publishing Co. ltd.

4. Gopalan, C., Rama Sastri, B., V. & Balasubremanian, S., C. 2002. Nutritive value of Indian foods, National Institute of Nutrition, ICMR, Hyderabad.
5. Parasmanidasgupta and Roland Hauspie, 2001. Perspectives in Human Growth, Development and Maturation, Kluwer Academic Publishers, London.
6. Marshall, W. A. 1977. Human Growth and its Disorders, Academic Press, London.
7. Harrison, G.A., Weiner, J.S., Tanner, J.M. and Barnicot, N.A. Human Biology: An Introduction to Human Evolution, Variation and Growth, Clarendon Press, Oxford.
8. Tanner, J.M., Fetus into Man.
9. Jelliff, D.B., Community Nutritional Assessment with Special Reference to Less Developed Countries.
10. Dixit. Human Nutrition: Principles and Applications in India.
11. Shanti, G. Nutrition and Child Care: A Practical Guide.
12. B. Srilaxmi, Nutrition Science.
13. Margart Schay, Nutrition.
14. Rao, V.K.R.V. Food Nutrition and Poverty.
15. Nelson, A Text Book of Pediatrics
16. Garrow, J.S. and James, W.P.T: Human Nutrition and Dietetics.
17. Swaminathan, M., Essentials of Food and Nutrition: Applied Aspect.
18. Eveleth, PB and Tanner, JM Worldwide Variation in Human Growth
19. Forbes, GB, Human Body Composition



## M.A/M.Sc. (Anthropology) Semester- III

Program	Subject	Year	Semester
M.A/M.Sc.	Anthropology	2	III
Course Code	Course Title		Course Type
ANTH 352	Anthropological Demography		Core
Credit	Hours Per Week (L-T-P)		
	L	T	P
5	5	1	-
Maximum Marks	CIA		ESE
100	25		75

\* L- Lecture, T- Tutorial, P- Practical

### Learning Objective (LO):

The course aims to equip students with a comprehensive understanding of demography and its anthropological implications, enabling them to engage with population-related issues from a nuanced perspective and the methods of collecting demographic data

### Course Outcomes (CO):

CO No.	Expected Course Outcomes	CL
	At the end of the course, the students will be able to:	
1	They will learn how demographic data can be applied to understand the structure and dynamics of human populations, contributing to broader anthropological research on societies, cultures, and human behavior.	Ap
2	It provides a foundation for understanding the challenges and strategies involved in shaping population dynamics and improving the well-being of communities within a specific socio-cultural and geographical context like India.	Ap
3	Providing a solid foundation for understanding the complexities of population growth and its societal implications.	Ap
4	Provides insights into the complexities of human mobility and its implications for societies and cultures.	Ap

CL: Cognitive Levels (R-Remember; U-Understanding; Ap-Apply; An-Analyze; E-Evaluate; C-Create).

## CO-PO/PSO Mapping for the course:

PO CO	POs											PSO				
	1	2	3	4	5	6	7	8	9	10	11	1	2	3	4	5
CO1	3	1	3	-	1	2	3	-	2	3	3	3	3	3	3	3
CO2	3	1	3	-	1	2	3	-	2	3	3	3	3	3	3	3
CO3	3	1	3	-	1	2	3	-	-	3	3	3	3	3	3	3
CO4	3	1	3	-	1	2	3	-	2	3	3	3	3	3	3	3

"3"-Strong; "2"-Moderate; "1"-Low; "-"No Correlation

## Detailed Syllabus: ANTH 352- Anthropological Demography

Unit No.	Topics	No. of Lectures	CO No.
I	<ul style="list-style-type: none"> <li>Introduction to demography and sources of demographic data, application of demographic studies in Anthropology, basic concepts and measures in demography: population studies, population composition, age and sex structure, social composition.</li> </ul>	5	I
II	<ul style="list-style-type: none"> <li>India's population policy with special reference to family welfare policies; population change: fertility, mortality and migration.</li> </ul>		II
III	<ul style="list-style-type: none"> <li>Population theories: Malthusian, Neo-Malthusian, Optimum theory, Logistic curve theory, Demographic Transition theory and Herbert's Spencer theory.</li> </ul>		III
IV	<ul style="list-style-type: none"> <li>Nature and causes of migration, anthropological significance of migration, theories and models on migration (Lee's theory, Todaro's model, LFR model).</li> </ul>		IV

## Recommended Readings:

- Bhende, A. and T. Kanitkar. 2000. *Principles of Population Studies*. New Delhi: Tata McGraw.
- Bogue, D. 1969. *Principles of Demography*. New York: John Wiley & Sons.
- Brase, C.H. and Brase, C.P. 2010. *Understandable Statistics*, 10<sup>th</sup> ed. Boston: HoughtonMifflin Co.
- Cochran, W.G. 1977. *Sampling Techniques*. New York: John Wiley & Sons.
- Dyson, T. and N. Crook. 1984. *India's Demography*. New Delhi: South Asia Publishers.
- Hans Raj 2003. *Population Studies – with special reference to India (Fundamentals of Demography)*. Delhi: Surjeet Publications,
- Kertzer I. David and Thomas E. Fricke. 1997. *Anthropological Demography*. Chicago:University of Chicago Press.
- Preston, Samuel, Patrick Heuveline, and Michel Guillot. 2000. *Demography: Measuring and Modeling Population Processes*. Blackwell Publishing.
- Singh A. 2007. *Indian Diaspora the 21<sup>st</sup> Century – Migration, Change and Adaptation*. New Delhi: Kamla Raj Enterprises.
- Sinha, V.C. and Zacharia E. 1984. *Elements of Demography*. Delhi: Allied Publishers.
- Srinivasan, K. 1998. *Basic Demographic Techniques and Applications*. New Delhi: Sage Publications.
- Thompson, W.S. and D.T. Lewis. 1980. *Population Problems*. New Delhi: Tata McGraw Hill Publishing House.
- United Nations. 2009. *International Migration Report 2006: A Global Assessment*. New York: United Nations Department of Economic and Social Affairs/Population Division.

## M.A/M.Sc. (Anthropology) Semester- III

Program	Subject	Year	Semester
M.A/M.Sc.	Anthropology	2	III
Course Code	Course Title		Course Type
ANTH 353	Anthropology of Ageing		Core
Credit	Hours Per Week (L-T-P)		
	L	T	P
5	5	1	-
Maximum Marks	CIA		ESE
100	25		75

\* L- Lecture, T- Tutorial, P- Practical

### Learning Objective (LO):

This course aims to impart students with a profound comprehension of biological aging, various dimensions of age, challenges and rewards associated with aging, societal attitudes, and the impact of aging on cognitive functions. Students should also be familiar with intergenerational relationships, community resources, and the global aspects of aging.

### Course Outcomes (CO):

CO No.	Expected Course Outcomes	CL
	At the end of the course, the students will be able to:	
1	The interdisciplinary approach combines biological and anthropological viewpoints, offering a holistic understanding of the aging process and its implications for individuals and societies.	U
2	Students will likely gain insights into the scientific, social, and ethical considerations surrounding aging, providing a holistic understanding of the challenges and opportunities associated with an aging population.	Ap
3	Students will learn about the dynamics, challenges, and rewards of relationships across different age groups, with a focus on understanding aging experiences in diverse social and cultural contexts.	Ap
4	Students will gain insights into the complexities of aging experiences and explore strategies for combating age-related stereotypes and biases. The syllabus encourages critical thinking about aging within the broader social and cultural context.	Ap

CL: Cognitive Levels (R-Remember; U-Understanding; Ap-Apply; An-Analyze; E-Evaluate; C-Create).

## CO-PO/PSO Mapping for the course:

PO CO	POs											PSO				
	1	2	3	4	5	6	7	8	9	10	11	1	2	3	4	5
CO1	3	-	1	-	-	2	3	2	2	3	3	3	3	2	3	2
CO2	3	-	1	-	-	1	3	1	2	3	3	3	3	1	1	-
CO3	3	-	3	-	1	2	3	1	2	3	3	3	3	1	1	-
CO4	3	-	3	-	1	2	3	2	2	3	3	3	3	1	1	-

"3"-Strong; "2"-Moderate; "1"-Low; "-"No Correlation

## Detailed Syllabus: ANTHA 353 - Anthropology of Ageing

Unit No.	Topics	No. of Lectures	CO No.
I	<ul style="list-style-type: none"> <li>Introduction to fundamentals of biological aging, anthropological perspectives of ageing, phenomenon of aging, chronological age, psychological age, sociological age, functional age, optimal aging, normal aging, pathological aging and successful aging.</li> </ul>	5+1	I
II	<ul style="list-style-type: none"> <li>Human longevity: exceptional longevity, sex differences in aging and longevity, hormonal influences on longevity, life expectancy / life span, longevity / postponing human aging - is it good or bad for mankind? Living longer ... living better? Demography of aging: aging facts &amp; statistics, baby boomers, growth &amp; diversity in older population.</li> </ul>		II
III	<ul style="list-style-type: none"> <li>Intergenerational relationships, grandparenthood, life-course and life-course perspective of aging and ethnicity, aging and urbanization, aging in place, aging and gender, menopause, current living generations, challenges and rewards of intergenerational relationships.</li> </ul>		III
IV	<ul style="list-style-type: none"> <li>Intergenerational programmes and community resources, societal attitudes toward old age, images of aging, combating ageism, stereotypes - is aging a sub-culture? Cognitive aging: fighting stereotypes &amp; ageism in society, globalization and aging older people in families and households, ethnicity, care-giving and Alzheimer's disease, care-giving to AIDS orphans.</li> </ul>		IV

## Recommended Readings:

1. Alam, M., Karan A. 2010. *Elderly Health in India: Dimensions, Differentials, and Over Time Changes*. New Delhi: United Nations Population Fund.
2. Buch, Elana D. 2015. Anthropology of Aging and Care. *Annual Review of Anthropology*, 44:277–93.
3. Caspari, R. and Lee, S.H. 2006. Is human longevity a consequence of cultural change or modern biology? *American Journal of Physical Anthropology*, 129: 512–517.
4. Erikson, E.H. and Erikson, J.M. 1997. *The Life Cycle Completed: Extended Version with New Chapters on the Ninth Stage of Development*. New York: Norton & Comp.

5. Finch, C.E. 2007. *The Biology of Human Longevity. Inflammation, Nutrition, and Aging in the Evolution of Life spans*. San Diego: Academic.
6. Kapoor, A.K. and Satwanti, Kapoor (eds). 2004. *India's Elderly: A Multidisciplinary Dimension*. Delhi: Mittal Publications.
7. Llyod-Sherlock, P. 2000. Old age and poverty in developing countries: New Policy Challenges. *World Development*, 28: 2157-2168.
8. Rajan, S.I., Misra, U.S., Sharma, P.S. 1999. *India's Elderly: Burden or Challenge?* New Delhi: Sage.
9. Rose, M.R. 1991. *Evolutionary Biology of Aging*. New York: Oxford University Press.
10. Rowe, J.W. and Kahn, R.L. 1997. Successful aging. *The Gerontologist*, 37: 433–440.
11. Sathyanarayana, K.M., Sanjay Kumar and James, K.S. 2012. Living Arrangements of Elderly in India: Policy and Programmatic Implications. *BKPAI Working Paper No. 7*. New Delhi: United Nations Population Fund (UNFPA).
12. World Health Organisation. 2015. *Aging and Health*. Geneva: WHO.

## M.A/M.Sc. (Anthropology) Semester- III

Program	Subject	Year	Semester
M.A/M.Sc.	Anthropology	2	III
Course Code	Course Title		Course Type
ANTHA 361	Human Molecular Genetics		Core
Credit	Hours Per Week (L-T-P)		
	L	T	P
5	5	1	-
Maximum Marks	CIA	ESE	
100	25	75	

\* L- Lecture, T- Tutorial, P- Practical

### Learning Objective (LO):

The aim of this course is to build strong understanding of molecular genetics, including nucleic acid structure, DNA organization, gene transcription, various molecular techniques, polymorphism, mutation, repair, gene mapping, genomic imprinting, protein synthesis, DNA sequencing, and the applications of genomic technology in various fields. Understanding of the Human Genome Project and the use of molecular genetics in prenatal diagnosis and genetic counselling.

### Course Outcomes (CO):

CO No.	Expected Course Outcomes	CL
	At the end of the course, the students will be able to:	
1	Detailed understanding of the molecular mechanisms involved in the storage and expression of genetic information.	Ap
2	Students will gain practical knowledge of key molecular genetics techniques, from manipulating DNA using recombinant DNA technology to analyzing gene expression and protein presence using various methods.	An
3	Depth knowledge of genetic variation, mutation, and repair, as well as the molecular processes involved in gene mapping, gene expression, and protein synthesis.	An
4	Applications of genomic technology, including its use in forensic sciences for DNA profiling. The syllabus also covers the significant undertaking of the Human Genome Project and explores the critical aspects of prenatal diagnosis and genetic counseling for molecular disorders.	An

CL : Cognitive Levels (R-Remember; U-Understanding; Ap-Apply; An-Analyze; E-Evaluate; C-Create).

## CO-PO/PSO Mapping for the course:

PO CO	POs											PSO				
	1	2	3	4	5	6	7	8	9	10	11	1	2	3	4	5
CO1	3	-	3	1	-	2	3	-	1	3	3	3	3	2	3	3
CO2	3	-	3	3	-	2	3	-	3	3	3	3	3	3	3	3
CO3	3	2	3	3	-	2	3	-	3	3	3	3	3	3	3	3
CO4	3	2	3	3	-	2	3	-	3	3	3	3	3	3	3	3

"3"-Strong; "2"-Moderate; "1"-Low; "-"No Correlation

## Detailed Syllabus: ANTHA 361 - Human Molecular Genetics

Unit No.	Topics	No. of Lectures	CO No.
I	<ul style="list-style-type: none"> <li>Definition and scope of Molecular Genetics.</li> <li>Nucleic acid: Structure, Chemical and physical properties of nucleic acids, spectroscopic and thermal properties of nucleic acids.</li> <li>DNA organization in chromosomes: DNA structure, DNA replications.</li> <li>RNA structure.</li> <li>Gene transcription in eukaryotes</li> </ul>	5+1	I
II	<ul style="list-style-type: none"> <li>Techniques in Molecular Genetics: Recombinant DNA technology, Restriction enzymes, Nucleic acid hybridization, DNA cloning, DNA sequencing, Polymerase chain reaction (PCR), Southern blot, Northern and Western blot, In situ hybridization, Labeling nucleic acid probes, Transgenic organisms.</li> </ul>		II
III	<ul style="list-style-type: none"> <li>DNA Polymorphism DNA mutation and repair, Repetitive DNA.</li> <li>Gene mapping, Physical mapping, Genomic imprinting.</li> <li>Expression of eukaryotic protein-coding genes.</li> <li>Genetic code and Protein synthesis.</li> <li>DNA Sequencing and fingerprinting</li> </ul>		III
IV	<ul style="list-style-type: none"> <li>Application of Genomic Technology: RFLP (Restriction fragment length polymorphism), VNTR (Variable number tandem repeat), Microsatellite repeat polymorphism, Application in forensic sciences.</li> <li>Human genome project.</li> <li>Prenatal diagnosis and Genetic Counseling of molecular disorders.</li> </ul>		IV

## Recommended Readings:

1. Strachan, T. and Read, A.P. 1999. Human Molecular Genetics. BIOS Scientific Publishers Ltd, Oxford. (574.8732, STT H, 84237).

2. Jackson, M., Strachan, T. and Dover, G. 1996. Human genome Evolution. BIOS Scientific Publishers Ltd., Oxford. (573.2, JAM H, 79134).
3. Levis,R.2003. Human Genetics Concepts and Application.4<sup>th</sup> ed. Dubuque, IA: McGraw-Hill.
4. Koolman, J and Roehm, K.H. 2005.Color Atlas of Biochemistry. 2<sup>nd</sup> ed. Thieme Stuttgart. New York.
5. Lewin.2003. Genes VIII. 1<sup>st</sup> ed. Prentice Hall.
6. McKusick, V.A. Human Genetics.
7. Rieger, R. et al., Glossary of Genetics – Classical and Molecular
8. Brock and Mayo, The Biochemical Genetics of Man
9. Winchester, A.M., Human Genetics.



## M.A/M.Sc. (Anthropology) Semester- III

Program	Subject	Year	Semester
M.A/M.Sc.	Anthropology	2	III
Course Code	Course Title		Course Type
ANTH 362	Human Physiological Anthropology		Core
Credit	Hours Per Week (L-T-P)		
	L	T	P
5	5	1	-
Maximum Marks	CIA		ESE
100	25		75

\* L- Lecture, T- Tutorial, P- Practical

### Learning Objective (LO):

The aim of this course is to make students proficient in understanding of physiological anthropology, including cardio-vascular and respiratory endurance, haemodynamic, physical working capacity, physical fitness methodology, and the impact of lifestyle factors on cardio-respiratory functions. Students should also be familiar with the health-related aspects of exercise, the regulation of body weight and the various factors contributing to obesity.

### Course Outcomes (CO):

CO No.	Expected Course Outcomes	CL
	At the end of the course, the students will be able to:	
1	The syllabus emphasizes the physiological aspects of human adaptation to physical stress and exercise.	Ap
2	It emphasizes the importance of understanding how the body responds to exercise stress and adapts over time, as well as the broader implications for health and fitness.	Ap
3	The syllabus emphasizes the importance of considering various external factors and individual behaviors in assessing and promoting cardiovascular and respiratory health.	Ap
4	Knowledge about the regulation of body weight, the assessment of body composition, and the complex interplay of environmental and genetic factors in the development of obesity.	Ap

CL : Cognitive Levels (R-Remember; U-Understanding; Ap-Apply; An-Analyze; E-Evaluate; C-Create).

## CO-PO/PSO Mapping for the course:

PO CO	POs											PSO				
	1	2	3	4	5	6	7	8	9	10	11	1	2	3	4	5
CO1	3	-	3	-	2	2	3	-	3	3	3	3	3	2	2	-
CO2	3	-	3	-	1	2	3	-	3	3	3	3	3	1	2	-
CO3	3	-	3	-	1	2	3	-	3	3	3	3	3	1	2	-
CO4	3	-	3	-	1	2	3	-	3	3	3	3	3	1	2	-

"3"-Strong; "2"-Moderate; "1"-Low; "-"No Correlation

## Detailed Syllabus: ANTHA 362 - Human Physiological Anthropology

Unit No.	Topics	No. of Lectures	CO No.
I	<ul style="list-style-type: none"> <li>Fundamentals of physiological anthropology: Cardio-vascular and respiratory endurance, hemodynamics and exercise (blood pressure, pulse rate, heart rate and oxygen-transporting system, blood flow, Hb, hematocrit, etc.)</li> </ul>	5+1	I
II	<ul style="list-style-type: none"> <li>Physical working capacity and physical fitness methodology: evaluation of response and adaptation of the body to stress of exercise; variations in respiratory functions with age, sex and environment; interrelationship of body measurements with respiratory functions; health and fitness.</li> </ul>		II
III	<ul style="list-style-type: none"> <li>Impact of smoking, alcohol, air pollution and occupation on cardio-respiratory functions; physical performance and environmental stress: heat stress, cold stress and high altitude, chronic diseases, malnutrition; ageing and health related aspects of exercise.</li> </ul>		III
IV	<ul style="list-style-type: none"> <li>Regulation of body weight: energy expenditure and physical activity; body composition: methods of assessment, environmental and genetic contribution to obesity, treatment and prevention and management; obesity and ethnicity; global prevalence and secular trends in obesity: regulation of body weight-energy expenditure and physical activity.</li> </ul>		IV

## Recommended Readings:

- Case, RM, Ed. 1985. Variations in Human Physiology. Manchester University Press.
- Davson, Hugh, Eggleton, M. Grace, Lea &Febiger (eds). 1968. Principles of Human Physiology.
- Hale, Tudor. 2003. Exercise Physiology. John Wiley & Sons Inc.
- Nageswari, K., Sharma, Rajeev. 2006. Practical workbook of Human Physiology. Jaypee Brothers.
- Sherwood, Lauralee. 2008. Human Physiology: From Cells to Systems. Brooks Cole.
- Vander, Arthur J., Sherman, James H., Luciano, Dorothys. 1978. Human Physiology: The Mechanisms of Body Functions. McGraw-Hill Education.

## M.A/M.Sc. (Anthropology) Semester- III

Program	Subject	Year	Semester
M.A/M.Sc.	Anthropology	2	III
Course Code	Course Title		Course Type
ANTH 363	Human Variation and Adaptations		Core
Credit	Hours Per Week (L-T-P)		
	L	T	P
5	5	1	-
Maximum Marks	CIA		ESE
100	25		75

\* L- Lecture, T- Tutorial, P- Practical

### Learning Objective (LO):

The objective of the course is to provide students a comprehensive understanding of the history, principles, and applications of human genetics, including Mendelian genetics, population genetics, genetic variation, biological basis of human variation, polymorphism, and chromosomal analysis in humans.

### Course Outcomes (CO):

CO No.	Expected Course Outcomes	CL
	At the end of the course, the students will be able to:	
1	Providing a foundation for exploring the genetic principles that underlie inheritance patterns in human populations and the broader implications of human genetics in medicine and its connections to other scientific disciplines.	U
2	Understanding of the concept of genetic variation and the factors influencing diversity within and between human populations. This knowledge is essential for comprehending the complexities of human genetics and evolution.	Ap
3	Providing a comprehensive understanding of genetic variations and their impact on human traits and characteristics.	Ap
4	Providing insights into the mapping of genetic information within the genome. This knowledge is fundamental for understanding the molecular and genetic basis of various traits and conditions in humans.	U

CL : Cognitive Levels (R-Remember; U-Understanding; Ap-Apply; An-Analyze; E-Evaluate; C-Create).

## CO-PO/PSO Mapping for the course:

PO CO	POs											PSO				
	1	2	3	4	5	6	7	8	9	10	11	1	2	3	4	5
CO1	3	1	3	-	-	2	3	-	3	3	3	3	3	3	3	3
CO2	3	1	3	-	-	2	3	-	3	3	3	3	3	2	3	3
CO3	3	1	3	2	-	2	3	-	3	3	3	3	3	2	3	3
CO4	3	1	3	1	-	2	3	-	3	3	3	3	3	2	3	3

"3"-Strong; "2"-Moderate; "1"-Low; "-"No Correlation

## Detailed Syllabus: ANTH 363- Human Variation and Adaptations

Unit No.	Topics	No. of Lectures	CO No.
I	<ul style="list-style-type: none"> <li>History and development of human genetics; concept, scope and fields of human genetics; human genetics in relation to other sciences and medicine; Mendelian genetics in man: autosomal and sex-linked inheritance, dominant and recessive inheritance, penetrance and expressivity, extra nuclear inheritance, linkage, genetic interaction; population genetics - Hardy Weinberg Law, breeding population, selection; genetic polymorphism.</li> </ul>	5+1	I
II	<ul style="list-style-type: none"> <li>Concept of genetic variation, causes of genetic variation between and within human populations with special reference to the role mutation, selection, genetic drift, isolation and gene flow; biological basis of human variation: mutation, selection, gene flow, genetic drift; morphological and genetic variation in man.</li> </ul>		II
III	<ul style="list-style-type: none"> <li>Polymorphism: Red cell antigen (ABO, Rh, MNSs) and white cell antigen (HLA) Red Cell enzyme (G6PD and Haemoglobin), Serum Protein (HP), Quantitative trait loci: Concepts, Multifactorial and Polygenic.</li> </ul>		III
IV	<ul style="list-style-type: none"> <li>Chromosomes in man: identification and techniques of studying; cell mechanics and chromosomes: chromosomal aberrations: numerical and structural; methods of genetic analysis in localisation of genes on chromosome.</li> </ul>		IV

## Recommended Readings:

- Harrison, G.A. and Howard Morphy. 1998. *Human Adaptation*. Oxford: Berg Publisher.
- Howard, Michael C. and Janet Dunaif-Hattis. 1992. *Anthropology: Understanding Human Adaptation*. New York: Harper Collins.
- Kleinman, David S. 1980. *Human adaptation & population growth*. New Jersey: Osman & Co.
- Marks, Jonathan. 1995. *Human Biodiversity: Genes, Race and History (Foundations of Human Behaviour)*. Aldine.
- Mielke, J.H., L.N. Konigsherg, J. Relethford. 2004. *Human Biological Variation*. Oxford University Press.

6. Morgen, E.F. 2000. *Human Adaptability: An Introduction to Ecological Anthropology*. Westview Press.
7. Relethford, John. 2007. *The Human Species: An Introduction to Biological Anthropology*. McGraw Hill.

## M.A/M.Sc. (Anthropology) Semester- III

Program	Subject	Year	Semester
M.A/M.Sc.	Anthropology	2	III
Course Code	Course Title		Course Type
ANTH 310	Applied Anthropology (Group- A & B)		Core
Credit	Hours Per Week (L-T-P)		
	L	T	P
5	5	1	-
Maximum Marks	CIA		ESE
100	25		75

**\* L- Lecture, T- Tutorial, P- Practical**

### Learning Objective (LO):

The course aims to equip students with the knowledge and skills required to of the practical applications of biological and social anthropology in various fields, ranging from sports and nutrition to defence, genetics, genomics, education, and public health.

### Course Outcomes (CO):

CO No.	Expected Course Outcomes	CL
	At the end of the course, the students will be able to:	
1	This interdisciplinary approach demonstrates how anthropological knowledge can be utilized to address real-world challenges and contribute to the understanding of human biology and behavior in different contexts.	Ap
2	Highlight the diverse ways in which genetic knowledge is applied in various contexts, from legal and forensic settings to healthcare and biotechnology.	Ap
3	This knowledge equips students with the tools to engage in meaningful and impactful work in various applied anthropological settings.	U
4	The inclusion of the National Health Mission specifically addresses the application of anthropology in the context of public health initiatives at the national level.	An

CL : Cognitive Levels (R-Remember;U-Understanding;Ap-Apply;An-Analyze;E-Evaluate;C-Create).

CO-PO/PSO Mapping for the course:

PO CO	POs											PSO				
	1	2	3	4	5	6	7	8	9	10	11	1	2	3	4	5
CO1	3	1	3	-	2	3	3	-	1	3	3	3	3	3	3	3
CO2	3	1	3	-	3	3	3	-	3	3	3	3	3	3	3	3
CO3	3	2	3	3	2	3	3	-	2	3	3	3	3	3	3	3
CO4	3	1	3	-	2	3	3	-	2	3	3	3	3	3	3	2

"3"-Strong; "2"-Moderate; "1"-Low; "-"No Correlation

**Detailed Syllabus: ANTH 310 - Applied Anthropology (Group- A & B)**

Unit No.	Topics	No. of Lectures	CO No.
I	<ul style="list-style-type: none"> <li>• Meaning and Scope of Applied Biological Anthropology.</li> <li>• Anthropology of Sports.</li> <li>• Nutritional Anthropology.</li> <li>• Designing of defense equipments.</li> <li>• Defense Services.</li> </ul>	5+1	I
II	<ul style="list-style-type: none"> <li>• Applications of Human Genetics: Medico - Legal cases, Eugenics.</li> <li>• Genetic screening, Genetic counseling, Genetic engineering.</li> <li>• Human Genomics &amp; its applications.</li> </ul>		II
III	<ul style="list-style-type: none"> <li>• Meaning &amp; Scope of Applied Social Anthropology.</li> <li>• Applied &amp; Action anthropology.</li> <li>• Applications of Anthropological theory and methodology in the field of tribal development.</li> </ul>		III
IV	<ul style="list-style-type: none"> <li>• Applied anthropology in industry.</li> <li>• Applied anthropology in education.</li> <li>• Applied anthropology in public health</li> <li>• National health Mission.</li> </ul>		IV

**Recommended Readings:**

1. Kroeber. Anthropology Today.
2. Curt Stern. 1968. Principles of Human Genetics. Eurasia Publishing House (Pvt.) Ltd., Ram Nagar, New Delhi-1(India).
3. Steine. Biosocial Genetics.
4. Karp, E. Genetic Engineering.
5. Bodmer and Cavalli-Sforza. Genetics of Human Populations.
6. Backer, PT and Weiner (Eds), The Biology of Human Adaptability.
7. Beal, Virginia, Nutrition and the Life Span
8. Craig, Human Development
9. Eveleth, PB and Tanner, JM Worldwide Variation in Human Growth
10. Forbes, GB, Human Body Composition
11. Sodhi, HS, Sports Anthropology
12. Willigt, JV, Applied Anthropology: An Introduction
13. Stern, C., Principles of Human Genetics.
14. Shukla, B.R.K. &Rastogi, S., Physical Anthropology and Human Genetics An Introduction.
15. McKusick, V.A., Human Genetics.

## M.A/M.Sc. (Anthropology) Semester- III

Program	Subject	Year	Semester
M.A/M.Sc.	Anthropology	2	III
Course Code	Course Title		Course Type
ANTH 370	Theory and Methods in Social –Cultural Anthropology		Core
Credit	Hours Per Week (L-T-P)		
	L	T	P
5	5	1	-
Maximum Marks	CIA		ESE
100	25		75

\* L- Lecture, T- Tutorial, P- Practical

### Learning Objective (LO):

The course aims to equip students with a deep understanding of the historical development of anthropological thought. Identify and critically analyse various theories of culture. Understand and reflect on the various roles of anthropologists as scientists, advocates and humanists.

### Course Outcomes (CO):

CO No.	Expected Course Outcomes	CL
	At the end of the course, the students will be able to:	
1	Demonstrate a deep and comprehensive knowledge and understanding of the diversity of thought within anthropology and the ongoing evolution of the field.	An
2	Understand, analyze and critically examine the major theoretical paradigms within anthropology and the key figures associated with each perspective.	An
3	Identify the intersections of knowledge between Anthropology and other social sciences in the development of thought and various theories of culture	An
4	Critically engage with concepts, paradigms, and ethical dilemmas, developing the skills necessary for conducting culturally sensitive and contextually informed research. Developing skills like reasoning, critical analytical thinking and its application in the field as well as in analysis and generate models and theories contributing to the academia and research	E

CL: Cognitive Levels (R-Remember; U-Understanding; Ap-Apply; An-Analyze; E-Evaluate; C-Create).



CO-PO/PSO Mapping for the course:

PO CO	POs											PSO				
	1	2	3	4	5	6	7	8	9	10	11	1	2	3	4	5
CO1	3	3	3	-	2	3	3	-	2	3	3	3	3	3	3	3
CO2	3	3	3	-	2	3	3	-	2	3	3	3	3	3	3	3
CO3	3	3	3	-	2	3	3	-	2	3	3	3	3	3	3	3
CO4	3	3	3	-	2	3	3	-	3	3	3	3	3	3	3	3

"3"-Strong; "2"-Moderate; "1"-Low; "-"No Correlation

**Detailed Syllabus: ANTHB 370 -Theory and Methods in Social –Cultural Anthropology**

Unit No.	Topics	No. of Lectures	CO No.
I	<ul style="list-style-type: none"> <li>History of Anthropology Thought.</li> <li>Pioneers in Anthropology.</li> <li>Evolutionism: Spencer, Morgan, Tylor, Jamer Frazer.</li> <li>Neo-evolutionism : Leslie White, Julian Steward, Sahlin</li> <li>Diffusionism: Perry, Elliot Smith, Graebner, FreidrichRatzel.</li> <li>Historicl Particularism: Boas, Wissler, Kroebar.</li> </ul>	5+1	I
II	<ul style="list-style-type: none"> <li>Functional: B. Malinowski, Merton.</li> <li>Structural-Functionalism: Radcliffe-Brown, Evans-Pritchard, Mayer Fortes, Raymond Firth, Nadel.</li> <li>Structuralism: Levi Strauss, Leach.</li> <li>Psychological Anthropology : Culture and Personality Studies : Kardiner, Linton, Ruth Benedict, Cora-du-Bois, Margaret Mead, Spiro, Mary Douglas, A. Kleinman, AFC Wallace, Stephen Taylor.</li> </ul>		II
III	<ul style="list-style-type: none"> <li>Philosophical anthropology: Concept of Value, Cultural Relativism, Value and human rights : Herskovits.</li> <li>Cognitive Anthropology.</li> <li>Historical and Dialectical Materialism: Hegel, Marx and Engels.</li> <li>Symbolic and Interpretative Anthropology: Turner, Schneider, Geertz.</li> <li>Post-Modernism: Marcus, Fischer, Jean Baudrillard, Michel Foucault, Jacques Derrida.</li> <li>Anthropology &amp; Gender: Leela Dubey, Renato Rosaldo, Marilyn Strathern, Zora Neale Hutson.</li> </ul>		III
IV	<ul style="list-style-type: none"> <li>“Primitive” as a conceptual model in Anthropological research.</li> <li>Emic-Etic paradigms.</li> <li>Synchronic- Diachronic paradigms.</li> <li>Ethnographic method for policy planning and intervention.</li> <li>Synthesizing micro and macro paradigms, Inductive and deductive approaches.</li> <li>Dilemma of “We” and “They” in research.</li> <li>Efficacy of qualitative method and its application as an</li> </ul>		IV

	<p>additive tool to quantification.</p> <ul style="list-style-type: none"> <li>• Autonomous nature of Anthropology: Integration of Scientific and humanistic approaches.</li> <li>• Anthropologist as scientist, citizen and humanist.</li> </ul>		
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### Recommended Readings:

1. Jha, M. Manavshastriya vichardhara- EkParichaya. (in Hindi).
2. Shrivastava, A.R.N. SanskritikManavvigyan – SiddhantaaurUplabdhiyan ((in Hindi).
3. Harskovitz, M.J. Sanskritikiprithabhumi (in Hindi).
4. Muthal, S. SamajikManavVigyan- SaidthantikVyavahar (in Hindi).
5. Harris, M. Rise of Anthropological Theory. Routlege and Kegan Paul, London.
6. Malinowski, B. Scientific theory of culture and other essays.
7. Evans-Pritchard. A History of Anthropological Thought.
8. Bidney, David, Theoretical Anthropology, New York, Colombia University press.
9. Erickson, Paul, Anthropological Lives: Biographies of Eminent Anthropologists, New Delhi, Reliance.
10. Sahlins& Service, Evolutions and Culture.
11. Schneider et al., Symbolic Anthropology: A Reader in the Study of Symbols and Meanings.
12. Turner, Roy, Ethnomethodology.
13. Douglas, Marry, Cultural Bias.
14. Gerttaz, Clifford, The Interpretation of Culture.
15. Ingram, John, Psychological Anthropology Reconsidered.
16. Manganaro, Marc, Modernist Anthropology: From Fieldwork to Text.
17. Nadel, S.F., The Foundations of Social Anthropology
18. Manners, R.A. & David Kaplan (Eds.), Theory in Anthropology.
19. Levis-Strauss, Structural Anthropology.
20. Malinowsky, Scientific Theory of Culture and Other Essay.
21. Redfield, R., Human Nature and the Study of Society.
22. Tyler, Stephen (Ed.), Cognitive Anthropology.
23. Redfield, Robert, Peasant Society and Culture.
24. Steward, Julian H., Contemporary Change in Traditional Society.
25. Moore, The Future of Anthropological Knowledge.
26. Hastrup, A Passage to Anthropology.
27. Schneider, Turner and Douglas. Symbolic and Interpretative Anthropology
28. Tylor, E.B. Studies in Cognitive Anthropology
29. Upadhyay and Pandey. History of Anthropological thought
30. Upadhyay and Pandey. Tribal Development in India.

## M.A/M.Sc. (Anthropology) Semester- III

Program	Subject	Year	Semester
M.A/M.Sc.	Anthropology	2	III
Course Code	Course Title		Course Type
ANTH 380	Practicals in Museology		Core
Credit	Hours Per Week (L-T-P)		
	L	T	P
2	-	-	4
Maximum Marks	CIA		ESE
100	25		75

\* L- Lecture, T- Tutorial, P- Practical

### Learning Objective (LO):

This course aims to impart students with a profound comprehension of the skills and knowledge necessary for the effective conservation and preservation of various types of museum objects, ensuring their longevity and maintaining their cultural and historical significance.

### Course Outcomes (CO):

CO No.	Expected Course Outcomes	CL
	At the end of the course, the students will be able to:	
1	Comprehensive understanding of the principles and techniques involved in the conservation and preservation of a wide range of museum objects made from different materials.	U
2	Management of the museum artifacts, storage, display and labelling etc.	Ap
3	Identify causes of decay and deterioration in museum objects. Implementing Integrated Pest Management strategies. Learning methods for treating objects affected by insect infestations.	Ap
4	Describe Strategies for preserving materials of plant origin, including wood, bamboo, bark, basketry, fibers, textiles, books, paper, and paintings on paper and cloth.	Ap

CL: Cognitive Levels (R-Remember; U-Understanding; Ap-Apply; An-Analyze;E-Evaluate;C-Create).

## CO-PO/PSO Mapping for the course:

PO CO	POs											PSO				
	1	2	3	4	5	6	7	8	9	10	11	1	2	3	4	5
CO1	3	-	3	-	-	2	3	-	1	3	3	3	3	2	3	-
CO2	3	-	3	-	-	2	3	-	1	3	3	3	3	2	3	-
CO3	3	-	3	3	-	2	3	-	1	3	3	3	3	2	3	-
CO4	3	-	3	3	-	2	3	-	1	3	3	3	3	2	3	-

"3"-Strong; "2"-Moderate; "1"-Low; "-"No Correlation

## Detailed Syllabus: ANTH 380 -Practical's in Museology

Unit No.	Topics	No. of Lectures	CO No.
I	<p><b>Conservation</b></p> <ul style="list-style-type: none"> <li>Conservation in Museums: Causes of Decay and deterioration of Museum Objects. Integrated Pest Managements. Treatment of Inset Infected objects.</li> <li>Care and Handling of Museums objects: General Rules for care of Museum objects. Care and handling of some important museum objects: Sculptures, Metal objects, Jewellery, Ceramics and Glass, Oil Paintings, Paper Paintings, Ivory objects.</li> </ul>	4	I
II	<p><b>Conservation</b></p> <ul style="list-style-type: none"> <li>Packing of Museum objects: General principles of packing, packing material.</li> <li>Packing methods of some museum objects: Stone Sculpture, Terracottas and Pottery Pieces, Bronze Statues, Miniature Paintings.</li> <li>Cleaning and Repairing : Cleaning, Repairing, Strengthening, Renewing</li> </ul>		II
III	<p><b>Preservation</b></p> <ul style="list-style-type: none"> <li>Preservation of Organic Objects - Preservation of materials of plant origin : Wood and Bamboo, Preparation of Creosote Solution, Preparation of Shellac Solution. Preservation of Bark origin objects. Preservation of Basketry objects. Preservation of Fibres origin objects. Preservation of Textiles objects. Preservation of Books and Paper Materials Preservation of Painting on Paper and cloth</li> <li>Preservation of Materials of Animal Origin - Preservation of Bone objects. Preservation of Leather objects.</li> </ul>		III

	Preservation of Feather objects. Preservation of Hair origin objects Preservation of Fur origin objects. Preservation of Horn origin objects Preservation of Sheel origin objects.		
IV	<b>Preservation</b> Preservation of Inorganic object–  Preservation of Stone objects Preservation of Bead objects Preservation of Glass objects Preservation of Pottery and clay objects Preservation of Copper and Bronze objects Preservation of Iron objects Preservation of Coins		IV

### Recommended Readings:

1. Basu, T. M. Indian Museum Movement, A. K. Banerjee 89, Mahatma Gandhi Road, Calcutta7
2. Zeheer M. Museum Management, Ram Advani Book.
3. Aiyppan, A. & Satyamurthy, S. T. Handbook of Museum Technique, Govt. of Madras Publication, Gupta Brothers Vishakhapatnam.
4. Markham, S. F. & Hargreaves, H. The Museum of India.
5. Ghosh, D. P. Problems & Trends in Museology
6. Choudhary, J. The Ethnographical collection & their display.
7. Blanderleith, N. J. The Conservation & Antiquities of works and Art.
8. UNESCO (Pub.) A Quaterly Review, Ministry of Education & Social welfare Museum.
9. Bijay K. Behera and Subodha K. Mohanty: Museology and Museum Management in India. MayurPublication:Bhubneshwar.
10. Agnihotri, V. 2003. ManavauruskiBhotikSanskriti (in Hindi), K.K. Publications, Allahabad.

## M.A/M.Sc. (Anthropology) Semester- III

Program	Subject	Year	Semester
M.A/M.Sc.	Anthropology	2	III
Course Code	Course Title		Course Type
ANTH 390	Fieldwork based report and seminar on Ethno-museology and Visual anthropology		Core
Credit	Hours Per Week (L-T-P)		
	L	T	P
3	-	-	6
Maximum Marks	CIA		ESE
100	25		75

\* L- Lecture, T- Tutorial, P- Practical

### Learning Objective (LO):

The aim of this course is to empower students with a profound understanding of museum studies, visual anthropology, and anthropological film production, enabling them to apply their knowledge and skills in practical settings such as museum curation, fieldwork documentation, and film production within an anthropological context.

### Course Outcomes (CO):

CO No.	Expected Course Outcomes	CL
	At the end of the course, the students will be able to:	
1	Training in preservation of endangered specimen and cultural heritage through audio-visual and documentation.	Ap
2	Preserve endangered specimen and cultural heritage through audio-visual and documentation.	Ap
3	Critically analyse and evaluate Films and write reviews	An
4	Anthropological filmmaking through a combination of theoretical knowledge and practical applications such as fieldwork, measurements, and film production.	C

CL: Cognitive Levels (R-Remember; U- Understanding; Ap- Apply; An- Analyze; E-Evaluate; C- Create).

## CO-PO/PSO Mapping for the course:

PO CO	POs											PSO				
	1	2	3	4	5	6	7	8	9	10	11	1	2	3	4	5
CO1	3	-	3	-	1	3	3	-	3	3	3	3	3	2	3	-
CO2	3	-	3	-	1	3	3	-	3	3	3	3	3	2	3	-
CO3	3	-	3	-	-	3	3	-	3	3	3	3	3	2	3	-
CO4	3	-	3	-	-	3	3	-	3	3	3	3	3	2	3	-

"3"-Strong;"2"-Moderate;"1"-Low;"-"No Correlation

## Detailed Syllabus: ANTH 390 -Fieldwork based report and seminar on Ethno- museology and Visual anthropology

Unit No.	Topics	No. of Lectures	CO No.
I	<ul style="list-style-type: none"> <li>Draw and describe the measurement of any two specimen from each category of Ethno-Museological Specimen in the Museum of SoS. in Anthropology.</li> </ul>	6	I
II	<ul style="list-style-type: none"> <li>A student has to present seminar along with submission of brief report containing characteristic features of material objects collected by him / her during field-work in one of the tribal groups of the Chhattisgarh on any one of the following categories.                             <ol style="list-style-type: none"> <li>Housing patterns</li> <li>Agricultural implements</li> <li>Fishing, Hunting, Fire Appliances.</li> <li>Costumes and dress</li> <li>Ornaments</li> <li>Musical instruments</li> <li>Masks</li> <li>Folk Tales &amp; Folk Lore</li> <li>Folk Songs</li> <li>Folk Dance</li> <li>Tribal Paintings</li> <li>Any other</li> </ol> </li> </ul>		II
III	<ul style="list-style-type: none"> <li>Film review, Appreciation and Criticism.</li> <li>Note: Students will be chosen either topic 1-2 or topic 3-4 from this syllabus with consultation of concern teacher.</li> </ul>		IV
IV	Production of anthropological films, Script writing, Shooting, Editing, Sound mixing, Commentary.		IV

## Recommended Readings:

1. Choudhary, J. The Ethnographical collection & their display.
2. Agnihotri, V. 2003. ManavaurskiBhotikSanskriti (in Hindi), K.K. Publications, Allahabad.
3. Asch, T. 1971 Ethnographic Film Production, Film Comment 7(1):40-53
4. Asch, T. 1972 Making Ethnographic film for Teaching and Research, PIEF Newsleter, 3(2):6-10
5. Asch, T. et al. 1973 Ethnographic film: Structure and function, Ann. Reviews of Anthropology, 2:179-187
6. Breen, R. (Ed) 1977 Ethnographic Film, Cambridge University Press
7. Thorn, R. 1987 Visual anthropology as Teaching Method, CVA Newsletter, Jan 29-32
8. Collier, J. Visual Anthropology: Photography as a Research Method, Collier, M. 1986 University of New Mexico Press
9. Basu, T. M. Indian Museum Movement, A. K. Banerjee 89, Mahatma Gandhi Road, Calcutta7
10. Zeheer M. Museum Management, Ram Advani Book.
11. Aiyppan, A. & Satyamurthy, S. T. Handbook of Museum Technique, Govt. of Madras Publication, Gupta Brothers Vishakhapatnam.
12. Markham, S. F. & Hargreaves, H. The Museum of India.
13. Ghosh, D. P. Problems & Trends in Museology
14. Choudhary, J. The Ethnographical collection & their display.
15. Blanderleith, N. J. The Conservation & Antiquities of works and Art.
16. UNESCO (Pub.) A Quaterly Review, Ministry of Education & Social welfare Museum.
17. Bijay K. Behera and Subodha K. Mohanty: Museology and Museum Management in India. MayurPublication:Bhubneshwar.
18. Agnihotri, V. 2003. ManavaurskiBhotikSanskriti (in Hindi), K.K. Publications, Allahabad.



## M.A/M.Sc. (Anthropology) Semester- III

Program	Subject	Year	Semester
M.A/M.Sc.	Anthropology	2	III
Course Code	Course Title		Course Type
ANTH 401	Museological Anthropology and Visual Anthropology		Core
Credit	Hours Per Week (L-T-P)		
	L	T	P
5	5	1	-
Maximum Marks	CIA		ESE
100	25		75

\* L- Lecture, T- Tutorial, P- Practical

### Learning Objective (LO):

The course aims to equip students with a deep understanding of museum studies, visual anthropology, and anthropological film production, enabling them to contribute effectively to these fields. Understand the different approaches to anthropological films, including commercial, realistic, new wave, and documentary films.

### Course Outcomes (CO):

CO No.	Expected Course Outcomes	CL
	At the end of the course, the students will be able to:	
1	Comprehensive knowledge about the history of the museum movement, the classification of museums in India, and the practical aspects of museum administration, including planning, display, lighting, and specimen acquisition and arrangement.	Ap
2	Comprehensive knowledge about the history of the museum movement, the classification of museums in India, and the practical aspects of museum administration, including planning, display, lighting, and specimen acquisition and arrangement.	Ap
3	Applications of visual anthropology, with a focus on its role in preserving culture, fostering cultural enrichment, and aiding visual literacy.	Ap
4	Students will also gain hands-on experience in scriptwriting, shooting, editing, sound mixing, and commentary for anthropological films.	C

CL: Cognitive Levels (R-Remember; U-Understanding; Ap-Apply; An-Analyze; E-Evaluate; C-Create).

## CO-PO/PSO Mapping for the course:

PO CO	POs											PSO				
	1	2	3	4	5	6	7	8	9	10	11	1	2	3	4	5
CO1	3	-	3	-	1	3	3	-	1	3	3	3	3	2	3	3
CO2	3	-	3	-	1	3	3	-	1	3	3	3	3	2	3	3
CO3	3	-	3	-	1	3	3	-	2	3	3	3	3	2	1	3
CO4	3	-	3	-	1	3	3	-	2	3	3	3	3	2	1	3

"3"-Strong; "2"-Moderate; "1"-Low; "-"No Correlation

## Detailed Syllabus: ANTH 401 - Museological Anthropology and Visual Anthropology

Unit No.	Topics	No. of Lectures	CO No.
I	<ul style="list-style-type: none"> <li>History and Development of Museum Movement: Meaning and definition of museum, A short history of museum movement in India.</li> <li>Classification of Museum in India: National Museum, State Museum, University Museum, Specialized Museum in India.</li> <li>Museum Administration, Acquisition and Arrangement of specimens; Museum Administration,</li> <li>Planning of Museum Building, Planning of Museum Gallery, Principles of Display, Lighting of Museum Galleries, Mode and ways of Acquisition of museum specimens, Arrangement of Museum.</li> </ul>	5+1	I
II	<ul style="list-style-type: none"> <li>Documentation and labels in Museum : Need for Documentation, Methods of Documentation, Safeguards of Records, Development of Computer based Documentations, Documentations of Ethnographic specimens, Museum Labels, Dioramas, Models and Charts, Museum Photography.</li> <li>Conservation of Museum: Causes of decay and determination of Museum objects, Care and handling of Museum objects, Packing of Museum objects, cleaning and repairing, Preservation of organic objects, Preservation of Inorganic objects.</li> </ul>		II
III	<ul style="list-style-type: none"> <li>Visual anthropology: Meaning, definition. concepts, scope, uses and problems. Visual communication through folk arts and modern mass media. Visual anthropology as a discipline for study and as a mode of recording and documenting human societies and their cultures. History and development of visual anthropology.</li> <li>Approaches to anthropological films. Visual anthropology and analysis of cultural style. Development of visual anthropology and ethnographic films in India . Scope of visual anthropology in India. Its uses, urgent problems and</li> </ul>		III

	<p>future possibilities.</p> <ul style="list-style-type: none"> <li>• Visual Anthropology as a mode to preserve culture and as an input to cultural enrichment. Visual anthropology as an aid to visual literacy and cultural development.</li> </ul>		
IV	<ul style="list-style-type: none"> <li>• Visual anthropology and films: commercial, realistic, new wave and documentary films. Television and visual anthropology. Video-tape: New techniques of observation and analysis in anthropology.</li> <li>• Film review, appreciation and criticism. Film as an art. The film language. Necessary conditions for film making. Screening of visual anthropological films and their critical review.</li> <li>• Production of anthropological films, script writing, shooting, editing, sound mixing, commentary.</li> <li>• Advancement of film technologies to make video films with ease.</li> </ul>		IV

### Recommended Readings:

1. Markham, S. F. & Hargreaves, H. The Museum of India.
2. Ghosh, D. P. Problems & Trends in Museology
3. Choudhary, J. The Ethnographical collection & their display.
4. Blanderleith, N. J. The Conservation & Antiquities of works and Art.
5. UNESCO (Pub.) A Quaterly Review, Ministry of Education & Social welfare Museum.
6. Bijay K. Behera and Subodha K. Mohanty: Museology and Museum Management in India. MayurPublication:Bhubneshwar
7. Agnihotri, V. 2003. Manavaurski. BhotikSanskriti (in Hindi), K.K. Publications, Allahabad.
8. Arnheim, R. 1969 Visual Thinking, University of California Press.
9. Asch, T. 1971 Ethnographic Film Production, Film Comment 7(1):40-53.
10. Asch, T. 1972 Making Ethnographic film for Teaching and Research, PIEF Newsleter, 3(2):6-10
11. 4Asch, T. et al. 1973 Ethnographic film: Structure and function, Ann. Reviews of Anthropology, 2:179-187
12. Barndt, D. 1974 Toward a Visual study of Society, Michigan State University, College of Social Sciences
13. Barnouw, E. 1974 Documentary: A History of Non-fiction film, Oxford University Press, New York Anthropology 192
14. Becker, 1981 Exploring society photographically, University of Chicago Press
15. Bogaart, N.C.R. and Methodology in Anthropological film making, Herodot, Gottingen H.W.E.R. Ketelaar (Ed) 1983
16. Breen, R. (Ed) 1977 Ethnographic Film, Cambridge University Press
17. Hockings, P. (Ed) 1975 Principles of Visual Anthropology, Mouton, The Hague
18. Collier, J. Visual Anthropology: Photography as a Research Method, Collier, M. 1986 University of New Mexico Press
19. Taureg, M. Visual Explorations of the World, Herodot, Aachen Ruby, J. 1987
20. Thorn, R. 1987 Visual anthropology as Teaching Method, CVA Newsletter, Jan 29-32
21. Mead, M. 1982 The study of culture at a distance, Chicago University Press Metraux, R. (Eds)
22. Jeffrey, I. A concise History, Oxford University Press, New York 1981 Photography:

## M.A/M.Sc. (Anthropology) Semester- III

Program	Subject	Year	Semester
M.A/M.Sc.	Anthropology	2	III
Course Code	Course Title		Course Type
ANTH 402	Linguistic Anthropology		Elective
Credit	Hours Per Week (L-T-P)		
	L	T	P
5	5	1	-
Maximum Marks	CIA		ESE
100	25		75

\* L- Lecture, T- Tutorial, P- Practical

### Learning Objective (LO):

The students will learn about language and its place in anthropology understanding relationship with other branches of anthropology. Learning the socio-cultural context of language and linguistics and acquiring the skill to conduct a language survey and prepare a report on the same.

### Course Outcomes (CO):

CO No.	Expected Course Outcomes At the end of the course, the students will be able to:	CL
1	Explain and discuss the complex and multifaceted aspects of human language, which is essential for anthropological research and analysis. Understanding its relationship with other branches of anthropology.	U
2	Explore the intricate ways in which language influences and reflects human societies and behaviors within the anthropological framework.	An
3	Analyse the dynamic interplay between language and society, offering a framework for analyzing the social dimensions of linguistic behavior and its impact on various aspects of human interaction.	An
4	Examine and critically analyse the current state and future prospects of Linguistic Anthropology in the dynamic landscape of linguistic diversity and cultural change.	E

CL: Cognitive Levels (R-Remember; U-Understanding; Ap-Apply; An-Analyze; E-Evaluate; C-Create).

## CO-PO/PSO Mapping for the course:

PO CO	POs											PSO				
	1	2	3	4	5	6	7	8	9	10	11	1	2	3	4	5
CO1	3	1	3	-	2	3	3	-	2	3	3	3	3	2	3	-
CO2	3	-	3	-	2	3	3	-	2	3	3	3	3	2	3	-
CO3	3	1	3	-	2	3	3	-	2	3	3	3	3	2	3	-
CO4	3	-	3	-	2	3	3	-	2	3	3	3	3	2	3	-

"3"-Strong; "2"-Moderate; "1"-Low; "-"No Correlation

## Detailed Syllabus: ANTH 402 - Linguistic Anthropology

Unit No.	Topics	No. of Lectures	CO No.
I	<ul style="list-style-type: none"> <li>Nature, origin and characteristics of language; language and dialect, verbal and nonverbal communication, place of language in anthropology.</li> </ul>	5+1	I
II	<ul style="list-style-type: none"> <li>Origin, scope and development of Linguistic Anthropology; its relationship with other branches of Anthropology; Linguistic Anthropology and Linguistics; language and culture.</li> </ul>		II
III	<ul style="list-style-type: none"> <li>Social context of language use: sociolinguistics, linguistic and social inequalities, linguistic prejudices and stereotypes, power and solidarity relations in language, language and social stratification, language and ethnicity.</li> </ul>		III
IV	<ul style="list-style-type: none"> <li>Linguistic Anthropology and language surveys; Linguistic Anthropology and Language Development; Crisis of Linguistic Anthropology in India and the world.</li> </ul>		IV

## Recommended Readings:

- Aheam, Laura M. 2012. *Living Language*. Malden: Wiley-Blackwell.
- Duranti, A. 1997. *Linguistic Anthropology*. Cambridge: University Press.
- Duranti, A. 2004. *A Companion to Linguistic Anthropology*. Malden: Blackwell.
- Goodenough, W.H. 1971. *Culture, Language and Society*. Mass: Addison Wesley.
- Hickerson, N.P. 1980. *Linguistic Anthropology*. New York: Holt, Rinehart and Winston.
- Hymes, D.H. 1964. *Language in Culture and Society*. New York: Harper & Row.
- Kottack, Conrad P. et al. eds, 1997. *The Teaching of Anthropology*, London: Mayfield Pub.
- Co.
- Kramarae, Cheris et al (eds), 1984. *Language and Power*. Beverly Hills: Sage.
- Lyons, J. 1982. *Language & Linguistics: An Introduction*. Cambridge: University Press.
- Misra, K.K. 2000. *Textbook of Anthropological Linguistics*. New Delhi: Concept.
- Ottenheimer, H. 2006. *Anthropology of Language*. Belmont: Thomson, Wadsworth.
- Nuyts, Jan and Eric Pederson. 2000. *Language and Conceptualization*. Cambridge: University Press.
- Pride, J.B. 1970. *The Social Meaning of Language*. London: OUP.
- Thomas, Linda et al. 1999. *Language, Society and Power: An Introduction*. London: Routledge.

## M.A/M.Sc. (Anthropology) Semester- III

Program	Subject	Year	Semester
M.A/M.Sc.	Anthropology	2	III
Course Code	Course Title		Course Type
ANTH 403	Anthropology of Food		Elective
Credit	Hours Per Week (L-T-P)		
	L	T	P
5	5	1	-
Maximum Marks	CIA		ESE
100	25		75

\* L- Lecture, T- Tutorial, P- Practical

### Learning Objective (LO):

This course will explore connections among food, culture, and society, in our globalizing world. Study and explore the varied concepts of food as nutrition, medicine, and rituals. Explore and examine the concept of food cross-culturally and reduce ethnocentrism by critically looking at food and culture- own and other's.

### Course Outcomes (CO):

CO No.	Expected Course Outcomes	CL
	At the end of the course, the students will be able to:	
1	Understand the complexities involved in ensuring access to sufficient, nutritious food for diverse populations and the crucial concept of food security.	An
2	Explore the dietary changes, hunting and gathering practices, the advent of tools and fire, and the development of food production systems and their crucial role in human evolution and the rise of ancient civilizations.	An
3	Examine and analyse the relationship between food, culture, hierarchy, religion, nutrition, and medicine.	An
4	Analyse and evaluate the social and cultural dimensions of food, highlighting its significance in shaping individual and collective identities and behaviors.	E

CL: Cognitive Levels (R-Remember; U-Understanding; Ap-Apply; An-Analyze; E-Evaluate; C-Create).

## CO-PO/PSO Mapping for the course:

PO CO	POs											PSO				
	1	2	3	4	5	6	7	8	9	10	11	1	2	3	4	5
CO1	3	3	3	-	1	3	3	-	3	3	3	3	3	2	2	2
CO2	3	3	3	-	1	3	3	-	3	3	3	3	3	2	2	2
CO3	3	3	3	-	1	3	3	-	3	3	3	3	3	2	2	-
CO4	3	3	3	-	1	3	3	-	3	3	3	3	3	2	2	-

"3"-Strong;"2"-Moderate;"1"-Low;"-"No Correlation

### Detailed Syllabus: ANTH 403 - Anthropology of Food

Unit No.	Topics	No. of Lectures	CO No.
I	<ul style="list-style-type: none"> <li>Introduction: Meaning of food, cuisine, and foodways; Approaches of studying food: structuralism, functionalism, symbolic-social analyses, making of gender, taste and status; Bio-cultural perspectives on nutrition; Concept of food security.</li> </ul>	5+1	I
II	<ul style="list-style-type: none"> <li>Evolution: meat consumption and brain development, teeth: evolution and function, scavenging v/s hunting, and role of fire and tools; Archaeology of food ways: hunter gatherers and foragers, food production and domestication, and food to feed ancient civilizations.</li> </ul>		II
III	<ul style="list-style-type: none"> <li>Functions: Social functions of food, food and identity, food and gender, food and social class and caste, food and health, dietary taboos (sacred cows, prohibited pigs, Jewish dietary laws, cannibalism), and religious food (feasting, fasting).</li> </ul>		III
IV	<ul style="list-style-type: none"> <li>Food as heritage: ethnic food, food and memory, making of national cuisines; Globalization and modernization of food: European colonization (chocolate, potatoes, sugar), restaurant culture, slow food movement, localization and fast foods.</li> </ul>		IV

### Recommended Readings:

1. Appadurai, A. 1981. Gastro-politics in Hindu South Asia. *American Ethnologist*, 8(3): 494-511.
2. Appadurai, A. 1988. How to make a national cuisine: Cookbooks in contemporary India.
3. *Comparative Studies in Society and History*, 30(1): 3-24.
4. Blumenshine, R.J. 1986. Carcass consumption sequences and the archaeological distinction of scavenging and hunting. *Journal of Human Evolution*, 15(8):639-59.
5. Bourdieu, P. 1984. *Distinction: A social critique of the judgement of taste*. Cambridge, MA: Harvard University Press.
6. Brillat-Savarin, J. A. 1994. *The physiology of taste*. London: Penguin.
7. Caplan, P. 1994. *Feasts, Fasts and Famine: Food for Thought*. Oxford: Berg.
8. Counihan, C. and P. van Esterik. 1997. *Food and Culture: A Reader*. New York: Routledge.
9. Crowther, G. 2013. *Eating Culture: An Anthropological Guide to Food*. Toronto: University of Toronto Press.
10. Douglas, M. 1966. *Purity and danger: An analysis of concepts of pollution and taboo*. London: Routledge&Kegan Paul.

11. Harris, M. 1985. *The sacred cow and the abominable pig: Riddles of food and culture*. New York: Simon & Schuster.
12. J. Goody. 1998. *Food and Love: A cultural history of East and West*. London: Verso, 161-71.
13. Lawrence, D. 1988. Menstrual politics: Women and pigs in rural Portugal. In T. Buckley & A. Gottlieb (eds.), *Blood magic: The anthropology of menstruation*. Berkeley: Univ. Calif. Press, 117-36.
14. Levi-Strauss, C. 1966. The Culinary Triangle. *Partisan Review*, 33: 587-95.
15. Mintz, S. 1985. *Sweetness and Power: The place of sugar in modern history*. New York: Penguin.
16. Mintz, S. W and C.M. Du Bois. 2002. The anthropology of food and eating. *Annual Review of Anthropology*, 31:99-119.
17. O'Connell, J. F., K. Hawkes and N. G. Blurton Jones. 1999. Grandmothering and the evolution of *Homo erectus*. *Journal of Human Evolution*, 36: 461-485.
18. Pelto, G. P, A. H. Goodman and D. L. Dufour. 2000. The Biocultural Perspective in Nutritional Anthropology. In A. H. Goodman, D. L. Dufour & G. H. Pelto (eds), *Nutritional Anthropology: Biocultural Perspectives on Food and Nutrition*. Oxford: OUP, 1-10.
20. Taylor Sen, C. 2016. *Feast and Fasts: A History of Food in India*. London: Reaktion.
21. Watson, J. L. and M. L. Caldwell. 2004. *The Cultural Politics of Food and Eating: A Reader*. New Jersey: Wiley-Blackwell.



## M.A/M.Sc. (Anthropology) Semester- III

Program	Subject	Year	Semester
M.A/M.Sc.	Anthropology	2	III
Course Code	Course Title		Course Type
ANTH 411	Tribal Development		Core
Credit	Hours Per Week (L-T-P)		
	L	T	P
5	5	1	-
Maximum Marks	CIA		ESE
100	25		75

\* L- Lecture, T- Tutorial, P- Practical

### Learning Objective (LO):

To understand and explore the debates regarding tribes, development, and the relationship between culture and development. Study and critically analyse the theories of development. Discuss the various tribal development plans and projects implemented in India. Critically evaluate and review development projects and prepare reports on the same.

### Course Outcomes (CO):

CO No.	Expected Course Outcomes	CL
	At the end of the course, the students will be able to:	
1	Define and discuss the concept of tribe, development. explore the intricate relationship between tribes and governance, exploring both historical and contemporary aspects of tribal life in India.	An
2	Explore the various facets of tribal economies, covering economic practices, policies, societal interactions, and external influences on tribal communities.	An
3	Evaluate the various strategies, policies, and programs implemented to address their educational, housing, health, and socio-economic needs.	E
4	Study, explain and analyse tribal movements, enriching the understanding of the broader context of tribal history and development in India, especially with reference to Chhattisgarh.	E

CL: Cognitive Levels (R-Remember; U-Understanding; Ap-Apply; An-Analyze; E-Evaluate; C-Create).

## CO-PO/PSO Mapping for the course:

PO CO	POs											PSO				
	1	2	3	4	5	6	7	8	9	10	11	1	2	3	4	5
CO1	3	3	3	-	2	3	3	-	3	3	3	3	3	3	3	3
CO2	3	3	3	-	2	3	3	-	3	3	3	3	3	3	3	3
CO3	3	3	3	-	2	3	3	-	3	3	3	3	3	3	3	3
CO4	3	3	3	-	2	3	3	-	3	3	3	3	3	3	3	3

"3"-Strong;"2"-Moderate;"1"-Low;"-"No Correlation

### Detailed Syllabus: ANTH 411 - Tribal Development

Unit No.	Topics	No. of Lectures	CO No.
I	<ul style="list-style-type: none"> <li>Definition of tribe and scheduled Tribe. Distribution of scheduled Tribes. Demographic trends. Classification and characteristics of tribal regions. Racial and linguistic classification of Scheduled Tribes. Social structure. Tribal Economy (Stages of economy). Tribal religions.</li> <li>Tribal Policy: Tribal Policy, PanchsheelNeeti of Tribal Policy Regulatory and development measures during British India. Indian Constitutions –safeguards and provisions for Scheduled Tribes: socio-cultural, economic, education, political services, etc. History of regulatory and developmental measures in pre-Independence period. Administration of Scheduled Areas (Fifth Schedule to the Constitution), Tribal Areas (Sixth Scheduled to the Constitution) and tribal majority States. Important Regulations promulgated by Governors in Scheduled Areas.</li> <li>PESA: 73<sup>rd</sup> Amendment.</li> </ul>	5+1	I
II	<ul style="list-style-type: none"> <li>Tribal Economy: Forests – shifting cultivation- Forest department-its policy, Acts and regulations, Joint Forest Management: tribal agriculture – land holding – land rights-land tenures and land reforms – adoption of modern agricultural technology: allied economics- fishing and hunting; pastoralism; village and cottage industries; distributions: consumption, saving and investments; tribal markets.</li> <li>International and National funding for tribal schemes.</li> <li>Land alienation: Impact of Acts and Regulations against land alienation and debt redemption measures. Indebtedness, Bonded labour and forms of tribal exploitation: Role of cooperation, cooperatives and other financial institutions; Tribal and non-tribal interaction patterns.</li> </ul>		II
III	<ul style="list-style-type: none"> <li>History of tribal development in India. Tribal Development in Five Year Plans.</li> </ul>		III

	<ul style="list-style-type: none"> <li>• Tribal Education: Literacy and educational levels; educational programmes: formal, non-formal and vocational; problems in the promotion of tribal education and female education.</li> <li>• House and Health: housing condition and housing programmes; health, sickness and disease – drinking water, ethno-medicine and modern medical systems; roads and communications –status and issues.</li> <li>• Impact of industrializations and urbanization. Displacement of tribals as a result of land acquisition for projects and their rehabilitation. Contributions of Anthropology in Tribal Development.</li> <li>• Anthropological Approaches of Tribal Development.</li> </ul>		
IV	<ul style="list-style-type: none"> <li>• Tribal's Contributions on Freedom Movement; Religious movement; Political movements.</li> <li>• History of tribal movement in India with special reference to Chhattisgarh.</li> <li>• Basic issues in transition: Loss of languages and traditions, identity and problems of integration</li> <li>• Planning and Development: Scheduled Tribes in Five Year Plans; Tribal development through SMPT Blocks, TD Blocks and Tribals Sub-plans; Voluntary efforts and role of tribal leadership. Resources-rich regions and resources-depleted regions. Poverty alleviation programmes. Dispersed tribals. Primitive groups. Oceanic communities.</li> </ul>		IV

### Recommended Readings:

1. Chaudhary, Bhudadeb (Ed.). Tribal Development in India.
2. Elwin, V.A. Philosophy for NEFA.
3. Haimendorf. The Tribes of India: Struggle for survival.
4. Shara B.D. Basic Issues in tribal Development.

## M.A/M.Sc. (Anthropology) Semester- III

Program	Subject	Year	Semester
M.A/M.Sc.	Anthropology	2	III
Course Code	Course Title		Course Type
ANTH 412	Symbolic Anthropology		Elective
Credit	Hours Per Week (L-T-P)		
	L	T	P
5	5	1	-
Maximum Marks	CIA		ESE
100	25		75

\* L- Lecture, T- Tutorial, P- Practical

### Learning Objective (LO):

To learn about the basic ideas in Anthropological Symbolism and the leading symbolic anthropologists. Critically examine and evaluate the theory especially in the context of religion, rituals, kinship and polity etc. And to identify, classify, interpret the symbols and write a report on the basis of a fieldwork lasting for a week.

### Course Outcomes (CO):

CO No.	Expected Course Outcomes	CL
	At the end of the course, the students will be able to:	
1	Understand the theory of symbolic anthropology, setting the stage for further exploration and research in the field.	U
2	Critically analyze how symbols operate in diverse cultural contexts, recognizing the dynamic nature of symbolism and its role in shaping human behavior, communication, and societal structures.	An
3	A comprehensive overview of the diverse ways in which scholars have contributed to the understanding of symbols, rituals, and cultural meaning within the field of anthropology.	U
4	Analyse and evaluate how symbolism permeates daily life, influencing perceptions, communication, and cultural expression.	An

CL: Cognitive Levels (R-Remember; U-Understanding; Ap-Apply; An-Analyze; E-Evaluate; C-Create).

## CO-PO/PSO Mapping for the course:

PO CO	POs											PSO				
	1	2	3	4	5	6	7	8	9	10	11	1	2	3	4	5
CO1	3	-	1	-	2	2	3	-	-	3	3	3	2	2	3	3
CO2	3	-	3	1	2	1	3	-	-	3	3	3	2	2	3	3
CO3	3	-	1	1	2	3	3	-	-	3	3	3	2	2	3	3
CO4	3	3	3	3	2	2	3	-	-	3	3	3	2	2	3	3

"3"-Strong; "2"-Moderate; "1"-Low; "-"No Correlation

### Detailed Syllabus: ANTH 412- Symbolic Anthropology

Unit No.	Topics	No. of Lectures	CO No.
I	<ul style="list-style-type: none"> <li>Basic concepts in Symbolism and Anthropology, problems of definition, religion and Symbolic Anthropology, Symbolism and kinship, symbolic capital.</li> </ul>	5+1	I
II	<ul style="list-style-type: none"> <li>Classification, symbols and taboo, symbols in ritual, symbolism and neurosciences in Anthropology, symbols and environment, political symbolism.</li> </ul>		II
III	<ul style="list-style-type: none"> <li>Major symbolic anthropologists: Victor Turner, Mary Douglas, Clifford Geertz, Rodney Needham, Raymond Firth, Levi-Strauss, Abner Cohen, Peter Bourdieu, and TalalAsad.</li> </ul>		III
IV	<ul style="list-style-type: none"> <li>Symbolism and the idea of everyday life, comparing symbolic analysis, symbols in visual analysis, critiques of symbolism.</li> </ul>		IV

### Recommended Readings:

- Asad, Talal. 1993. *Genealogies of Religion: Discipline and Reasons of Power in Christianity and Islam*. Baltimore: Johns Hopkins University Press.
- Dolgin, J.L., Schneider, David M. (Eds.). 1977. *Symbolic Anthropology: A Reader in the Study of Symbols and Meanings*. New York: Columbia University Press.
- Douglas, Mary. 1970. *Natural Symbols*. London: Cresset.
- Douglas, Mary. 2000. *Deep Thoughts on the Forbidden: A Review of Valerio Valeri's Forest of Taboos*. *Science*, 289, p. 2288.
- Geertz, Clifford. 1973. *The Interpretation of Cultures*. New York: Basic Books.
- Geertz, Clifford. 2000. *Available Light: Anthropological Reflection on Philosophical Topics*. Princeton: Princeton University Press.
- Kroeber, Albert L., and Kluckhohn, Clyde. 1952. *Culture: A Critical Review of Concepts and Definitions*. Cambridge: The Peabody Museum.
- Ortner, Sherry. (Ed.). 1984. *Theory in Anthropology since the Sixties*. *Comparative Studies in Society and History*, 26(1): 126–166.
- Schneider, David M. 1969. *Kinship, Nationality and Religion in American Culture*. In Spencer, R.F. (Ed.) *Forms of Symbolic Action*. Seattle: University of Washington Press, 116–125.
- Turner, Victor. 1967. *The Forest of Symbols*. Ithaca: Cornell University Press.
- Turner, Victor. 1974. *Dramas, Fields and Metaphors*. Ithaca: Cornell University Press.
- Turner, Victor. 1975. *Symbolic Studies*. *Annual Review of Anthropology*, 4: 145–161.
- Turner, Victor. 1986. *Dewey, Dilthey and Drama: An essay in the anthropology of experience*. In Victor Turner and Edward M. Bruner (Eds.) *The Anthropology of Experience*. Urbana: University of Illinois.
- Turner, Victor. 1987. *The Anthropology of Performance*. New York: PAJ Publications.

## M.A/M.Sc. (Anthropology) Semester- III

Program	Subject	Year	Semester
M.A/M.Sc.	Anthropology	2	III
Course Code	Course Title		Course Type
ANTH 413	Indian Diaspora		Elective
Credit	Hours Per Week (L-T-P)		
	L	T	P
5	5	1	-
Maximum Marks	CIA		ESE
100	25		75

\* L- Lecture, T- Tutorial, P- Practical

### Learning Objective (LO):

Identify and discuss the concept of diaspora, migration and settlements and culture. Explore and examine the history and ethnicity of Indian diaspora across the world. An insight into the perception of how India as a nation looks at its diaspora and how the diaspora communities look at India. Acquire the skill to research and analyze in depth about one of the Indian diaspora communities.

### Course Out comes (CO):

CO No.	Expected Course Outcomes	CL
	At the end of the course, the students will be able to:	
1	Identify and discuss the interdisciplinary nature of Diaspora studies, drawing on sociology, anthropology, history, and cultural studies.	U
2	Comprehensive understanding of the theoretical concepts related to diaspora, including home, migration, and diasporic imaginations	An
3	Understand and analyze the challenges and opportunities faced by the Indian diaspora in the Gulf region and the Western world including issues related to cultural integration and identity.	An
4	Discuss and critically evaluate the policies, experiences, and contributions of the Indian diaspora, highlighting its role in shaping India's cultural, economic, and political landscape.	E

CL: Cognitive Levels (R-Remember; U-Understanding; Ap-Apply; An-Analyze; E-Evaluate; C-Create).

## CO-PO/PSO Mapping for the course:

PO CO	POs											PSO				
	1	2	3	4	5	6	7	8	9	10	11	1	2	3	4	5
CO1	3	-	3	-	1	3	3	3	3	3	3	3	3	3	-	-
CO2	3	-	3	-	1	3	3	3	3	3	3	3	3	3	-	-
CO3	3	2	3	-	1	3	3	3	3	3	3	3	3	-	-	-
CO4	3	2	3	-	1	3	3	3	3	3	3	3	3	-	-	-

"3"-Strong; "2"-Moderate; "1"-Low; "-"-No Correlation

### Detailed Syllabus: ANTH 413 - Indian Diaspora

Unit No.	Topics	No. of Lectures	CO No.
I	<ul style="list-style-type: none"> <li>Concepts of diaspora: home, migration and diasporic imaginations; history and significance of diasporic studies in India.</li> </ul>	5+1	I
II	<ul style="list-style-type: none"> <li>Concepts of diaspora: home, migration and diasporic imaginations; history and significance of diasporic studies in India.</li> </ul>		II
III	<ul style="list-style-type: none"> <li>Southeast Asia and Indian diaspora, The Carribean Islands and Indian diaspora, Indian diaspora in Europe, America and the Gulf countries.</li> </ul>		III
IV	<ul style="list-style-type: none"> <li>India and her diasporic peoples: India's policy towards her diaspora, diasporic experiences about India, diaspora and its role in India's trade and politics.</li> </ul>		IV

### Recommended Readings:

- Cohen, Robin. 2008. *Global Diasporas: An Introduction*. New York: Routledge.
- Gopinath, Gayatri. 2005. *Impossible Desires: Queer Diasporas and South Asian Public Cultures*. Durham; Duke University Press.
- Jain, Ravindra K. 1970. *Indians in Malaya: Immigration and Settlement 1786-1957*. Cambridge: Cambridge University Press.
- Mishra, Vijay. 2007. *The Literature of the Indian Diaspora: Theorizing the Diasporic Imaginary*. New York: Routledge.
- Misra, P.K. 1995. Cultural Design in Identity Formation in Trinidad. *The Eastern Anthropologist*, 48(3): 201-26.
- Safran, William. 1991. Diaspora in Modern Societies: Myths of Homeland and Return. *Diaspora*, 1(1): 83-89.
- Sheffer, G. 2003. *Diaspora Politics: At Home Abroad*. Cambridge: Cambridge University Press.
- Shuval, Judith. 2000. Diaspora Migration: Definitional Ambiguities and Theoretical Paradigm. *International Migration*, 38(5): 41-55.
- Tololyan, K. 2007. The Contemporary Discourse of Diaspora Studies. *Comparative Studies of South Asia, Africa and the Middle East*, 27(3); 647-55.
- Van Hear, Nicholas. 1998. *New Diasporas: The Mass Exodus, Dispersal and Regrouping of Migrant Communities*. London: University of California Press.
- Vertovec, S. 1992. *Hindu Trinidad: Religion, Ethnicity and Socio-economic Change*. London: Macmillan.

## M.A/M.Sc.(Anthropology)Semester-IV

Program	Subject	Year	Semester
M.A/M.Sc.	Anthropology	2	IV
Course Code	Course Title		Course Type
ANTH 420	Ecological Anthropology (Group- A & B)		Core
Credit	Hours Per Week (L-T-P)		
	L	T	P
5	5	1	-
Maximum Marks	CIA		ESE
100	25		75

**\* L- Lecture, T- Tutorial, P- Practical**

### Learning Objective (LO):

The course aims to equip students with the knowledge and skills required to ecological anthropology, its historical development, key concepts, and its relevance to contemporary environmental issues. Students should gain a critical perspective on the relationship between human societies and their environments, as well as the role of anthropologists in addressing environmental challenges.

### Course Outcomes (CO):

CO No.	Expected Course Outcomes At the end of the course, the students will be able to:	CL
1	Comprehensive understanding of ecological anthropology, covering its foundational concepts, interdisciplinary nature, historical development, and major branches. The syllabus emphasizes the evolution of ecological anthropology beyond cultural ecology into diverse branches that explore the intricate relationships between humans and their environments.	U
2	The syllabus highlights the evolution of anthropological thought towards more dynamic and context-specific understandings of the relationships between humans and their environments.	Ap
3	The course emphasizes the interconnectedness of human culture and the natural environment, providing a holistic perspective on the relationships between humans and their ecosystems.	Ap
4	Students will gain knowledge about the complex interplay between human activities and the environment, including the various environmental problems and issues at local and global scales. The course also addresses the relationship between development and environmental challenges, introducing the concept of sustainable development..	Ap

CL: Cognitive Levels (R-Remember; U-Understanding; Ap-Apply; An-Analyze; E-Evaluate; C-Create).



**CO-PO/PSO Mapping for the course:**

PO CO	POs											PSO				
	1	2	3	4	5	6	7	8	9	10	11	1	2	3	4	5
CO1	3	2	3	-	2	3	3	-	3	3	3	3	3	3	3	3
CO2	3	2	3	-	2	3	3	-	3	3	3	3	3	3	3	3
CO3	3	2	3	-	2	3	3	-	3	3	3	3	3	-	1	1
CO4	3	2	3	-	2	3	3	-	3	3	3	3	3	-	1	1

"3"-Strong; "2"-Moderate; "1"-Low; "-"-No Correlation

**Detailed Syllabus: ANTH 420 - Ecological Anthropology (Group- A & B)**

Unit No.	Topics	No. of Lectures	CO No.
I	<ul style="list-style-type: none"> <li>Ecological Anthropology: definition and approach. Aims and objectives; key terms and concepts used (only a brief mention). Relation with, or position among, other disciplines within and outside anthropology.</li> <li>The distinctive interdisciplinary nature of ecological anthropology. Historical background and development of ecological anthropology.</li> <li>Major branches of ecological anthropology. Growth of ecological anthropology beyond cultural ecology. Other branches: population ecology, systems ecology, ethno-ecology, socio-biology, archaeological ecology, human energetics.</li> </ul>	5+1	I
II	<ul style="list-style-type: none"> <li>Ecological approach as a reaction to the Deterministic explanations. A critique of Cultural Determinism and Environmental Determinism.</li> <li>A gradual shift from Determinism to Possibilism; Possibilistic versions of Boas, Kroeber and Steward.</li> <li>Ecological approach as a reaction to the theory of unilinear evolution, and as a proponent of the school of multilinear evolution.</li> <li>Ecological approach as a reaction to the concept of culture as an abstract 'Superorganic' level. Revival of cultural materialism and emergence of 'Systems' approach.</li> </ul>		II
III	<ul style="list-style-type: none"> <li>Ecology and ecosystem: ecology as a natural science. Definition of ecology; concepts of ecosystem, eco-niche, ecological community, energy pyramid, ecological hierarchy, competition for resources, territorialism, adaptation and adaptive specialization, feedback and Carrying capacity.</li> <li>Cultural ecology: inadequacy of original definitions of ecology and ecosystem when applied to human society and culture.</li> <li>Anthropological reinterpretation of ecology, ecosystem and other related concepts; man-nature and culture-nature relationship reviewed from the viewpoint of cultural ecology; ecological transition.</li> <li>Concept of culture-core and its relation with environment as well as 'other' aspects of culture. Ecological ethnography:</li> </ul>		III

	study of huntergatherers, nomads and pastorals, island communities, etc.		
IV	<ul style="list-style-type: none"> <li>• Human ecology and environmental problems: human activities and their impact on ecosystems, ecological balance and environmental quality.</li> <li>• Environmental problems and issues: degradation of land, water, air, forests and biodiversity resources. Global warming, disturbances in ozone layer and other global environmental issues.</li> <li>• Relation between development and environmental problems. Concept of ecologically/environmentally sustainable development. Ecological considerations in development planning.</li> <li>• Ecological anthropology and environmentalism: environmental protests, movements and activism. International environmental conventions. Anthropological issues involved in environmentalism. Role of ecological anthropologists in the debate of environmentalism.</li> </ul>		IV

### Recommended Readings:

1. A. Roberto Frisancho: Human Adaptation
2. Barth, F. 1956 'Ecological Relations of Ethnic Groups in Swat, Pakistan', American Anthropologist.
3. Bennet, John 1979 'The Ecological Transition : Cultural Anthropology and Human Adaption', Pergamon Press Inc., Great Britan.
4. Chapple, Elliot 1980 'Biological Foundations of Individuality and Culture', Robert E. Krieger Publication, New York.
5. Changnon& Irons 'Evolutionary Biology and Human SoCIAL Behavior'
6. Cohen, M., Nathan 'The Food Crisis in Pre-history : Over Population and the Origins of Agriculture'
7. Eidt, R.C. 'Man, Culture and Settlement'
8. Gadgil&Guha 1997 This Fissured Land : An Ecological History of India. OUP
9. Hardesty. Donald 1997 'Ecological Anthropology', John Wiley and Sons. India Oxford University Press, New Delhi.
10. Moran, E.F. Human Adaptability: An Introduction to Ecological Anthropology
11. Netting, R.M. The Ecological Approach in Cultural Study
12. Odum, H.T. Environment, Power and Society
13. Odum, Eugene Fundamentals of Ecology
14. Reddy, G.P. Scarcity and Survival
15. Steward, Julian. Theory of Culture Change
16. Tax, S. & Freeman, L. Horizons of Anthropology
17. Tiwari& Sharma. Tribal Eco-system and Malnutrition in India
18. Ucke&Dimpleby. The Domestication and Exploitation of Plants and Animals

## M.A/M.Sc. (Anthropology) Semester-IV

Program	Subject	Year	Semester
M.A/M.Sc.	Anthropology	2	IV
Course Code	Course Title		Course Type
ANTH 430	Medical Genetics		Core
Credit	Hours Per Week(L-T-P)		
	L	T	P
5	5	1	-
Maximum Marks	CIA		ESE
100	25		75

**\* L- Lecture, T- Tutorial, P- Practical**

### Learning Objective (LO):

The primary objective of this course is to empower students with the fundamental principles required to work with the genetic basis of various medical conditions, syndromes, and disorders. They should be able to apply genetic principles to identify and analyze the causes of these conditions and understand their implications for diagnosis and treatment in a medical context.

### Course Outcomes (CO):

CO No.	Expected Course Outcomes At the end of the course, the students will be able to:	CL
1	Foundation for understanding how genetics plays a crucial role in human health and disease, with practical applications in the medical field. Students will gain knowledge about the fundamentals of Medical Genetics, including its meaning and scope, the application of genetic principles in medicine, and the causation of genetic diseases, defects, and disorders.	U
2	The course will cover the genetic basis of each disorder, including their clinical manifestations, inheritance patterns, and the underlying molecular mechanisms. This knowledge is crucial for healthcare professionals involved in the diagnosis, treatment, and genetic counseling of individuals with these conditions.	Ap
3	The genetic basis of each disorder, including their clinical features, inheritance patterns, and the underlying molecular mechanisms. This knowledge is essential for healthcare professionals involved in the diagnosis, management, and genetic counseling of individuals with these genetic conditions.	Ap
4	Knowledge about various disorders affecting the respiratory, cardiovascular, kidney and urino-genital, and endocrine systems. This understanding is essential for healthcare professionals involved in the diagnosis, management, and genetic counseling of individuals with these genetic conditions.	Ap

CL: Cognitive Levels (R-Remember; U-Understanding; Ap-Apply; An-Analyze; E-Evaluate; C-Create).

## CO-PO/PSO Mapping for the course:

PO CO	POs											PSO				
	1	2	3	4	5	6	7	8	9	10	11	1	2	3	4	5
CO1	3	1	3	-	2	3	3	-	3	3	3	3	3	2	2	2
CO2	3	-	3	-	2	3	3	-	3	3	3	3	3	1	2	1
CO3	3	-	3	-	2	3	3	-	3	3	3	3	3	1	2	1
CO4	3	-	3	-	2	3	3	-	3	3	3	3	3	1	2	1

"3"-Strong; "2"-Moderate; "1"-Low; "-"-No Correlation

### Detailed Syllabus: ANTH 430 - Medical Genetics

Unit No.	Topics	No. of Lectures	CO No.
I	<ul style="list-style-type: none"> <li>Medical Genetics: Meaning and scope; Application of Genetics in medicine. Causation of Genetic diseases/Syndrome defects/disorders. Methods in identification of Genetic Diseases: Pedigree method, Twin Method.</li> </ul>	5+1	I
II	<ul style="list-style-type: none"> <li>Skin- Ichthyosis, Baldness, Epiloia, the Porphyrias,</li> <li>The skeletal system – Marfan`s Syndrome, Nail Patella Syndrome, Brachydactyly, Syndactyly, Polydactyly, Ankylosing Spondylitis, Rheumatoid arthritis.</li> </ul>		II
III	<ul style="list-style-type: none"> <li>Spinabifida and anencephaly.</li> <li>Osteogenesisim perfecta. Muscle – Muscular dystrophies.</li> <li>Eye – Glaucoma, cataract, retinoblastoma. Jaws – Hare lip and palate.</li> <li>Ears - Deafness. Alimentary system : Gastric and Duodenal Ulcers, Peptic Ulcers, Cirrhosis of liver</li> </ul>		III
IV	<ul style="list-style-type: none"> <li>Respiratory system – Cystic fibrosis.</li> <li>Cardio Vascular System – Congenital Heart Disease, Coronary Heart Diseases and Hypertension Kidney and Urino-Genital Tract – Polycystic Kidney Disease. Endocrine system – Cretinism, Goiter, Diabetes.</li> </ul>		IV

### Recommended Readings:

1. Strachan, T. and Read, A.P. 1999. Human Molecular Genetics. BIOS Scientific Publishers Ltd.Oxford. (574.8732, STT H, 84237).s
2. Human Genetics by A.G. Motulsky and F. Vogel
3. Medical Genetics by Lynn B. Jorde et al
4. Genetic counseling by Fuhrman and F. Vogel
5. Text book of Human Genetics by Fraser and Mayo
6. Molecular structure of Human Chromosome by J J Y
7. Emery, AEH, Elements of Medical Genetics

## M.A/M.Sc. (Anthropology) Semester-IV

Program	Subject	Year	Semester
M.A/M.Sc.	Anthropology	2	IV
Course Code	Course Title		Course Type
ANTH 440	Dissertation (Fieldwork/Laboratory Based) (II)		Core
Credit	Hours Per Week(L-T-P)		
	L	T	P
3			6
Maximum Marks	CIA		ESE
100	25		75

\* L- Lecture, T- Tutorial, P- Practical

### Learning Objective (LO):

The course aims to equip students with a deep understanding and acquired advanced research and communication skills, as well as the ability to independently plan, execute, and present a substantial research project in their chosen field of study.

### Course Outcomes (CO):

CO No.	Expected Course Outcomes At the end of the course, the students will be able to:	CL
1	Their theoretical knowledge, conduct original research, and demonstrate their ability to communicate findings effectively.	Ap
2	Describing the research methods, techniques, and approaches used in the field investigation or lab work.	Ap
3	Apply theoretical knowledge, conduct original research, and effectively communicate their findings..	U
4	Summarizing the main conclusions drawn from the research and offering practical recommendations for future studies.	An

CL: Cognitive Levels (R-Remember; U-Understanding; Ap-Apply; An-Analyze; E-Evaluate; C-Create).

### CO-PO/PSO Mapping for the course:

PO CO	POs											PSO				
	1	2	3	4	5	6	7	8	9	10	11	1	2	3	4	5
CO1	3	3	3	2	1	3	3	-	3	3	3	3	3	3	3	3
CO2	3	3	3	2	1	3	3	-	3	3	3	3	3	3	3	3
CO3	3	3	3	2	3	3	3	-	3	3	3	3	3	3	3	3
CO4	3	3	3	3	1	3	3	-	3	3	3	3	3	3	3	3

"3"-Strong;"2"-Moderate;"1"-Low;"-"No Correlation

**Detailed Syllabus: ANTH 440 - Dissertation (Fieldwork/Laboratory Based)**

Unit No.	Topics	No. of Lectures	CO No.
	In Semester IV (Group-A and Group-B) students are required to undertake a Dissertation/Project work consisting of approximately one-month preparatory work, approximately One Month weeks of field investigation/approximately One Month for Lab work and / or data analysis and completion of the Dissertation/Project work. The Dissertation will be selected in consultation with the faculty members decided by Staff Council according to their specialization.		
I	<ul style="list-style-type: none"> <li>• Introduction</li> <li>• Review of Literature</li> </ul>	6	I
II	<ul style="list-style-type: none"> <li>• Preparation of fieldwork tools</li> </ul>		II
III	<ul style="list-style-type: none"> <li>• Fieldwork</li> </ul>		III
IV	<ul style="list-style-type: none"> <li>• Data analysis and Report writing.</li> </ul> <p>Dissertations/Project work will typically be a document of about 100-150 pages with sections in the following sequence:-</p> <ol style="list-style-type: none"> <li>i. Introduction</li> <li>ii. Review of Literature</li> <li>iii. Methodology</li> <li>iv. Result &amp; Discussion</li> <li>v. Conclusions &amp; Recommendations</li> <li>vi. References</li> </ol>		IV

## M.A/M.Sc. (Anthropology) Semester-IV

Program	Subject	Year	Semester
M.A/M.Sc.	Anthropology	2	IV
Course Code	Course Title		Course Type
ANTH 450	Dissertation (Fieldwork/Laboratory Based) (II)		Core
Credit	Hours Per Week(L-T-P)		
	L	T	P
2			4
Maximum Marks	CIA		ESE
100	25		75

\* L- Lecture, T- Tutorial, P- Practical

### Learning Objective (LO):

The course aims to equip students with a deep understanding and acquired advanced research and communication skills, as well as the ability to independently plan, execute, and present a substantial research project in their chosen field of study.

### Course Outcomes (CO):

CO No.	Expected Course Outcomes At the end of the course, the students will be able to:	CL
1	Their theoretical knowledge, conduct original research, and demonstrate their ability to communicate findings effectively.	Ap
2	Describing the research methods, techniques, and approaches used in the field investigation or lab work.	Ap
3	Apply theoretical knowledge, conduct original research, and effectively communicate their findings..	U
4	Summarizing the main conclusions drawn from the research and offering practical recommendations for future studies.	An

CL: Cognitive Levels (R-Remember; U-Understanding; Ap-Apply; An-Analyze; E-Evaluate; C-Create).

### CO-PO/PSO Mapping for the course:

PO CO	POs											PSO				
	1	2	3	4	5	6	7	8	9	10	11	1	2	3	4	5
CO1	3	3	3	2	1	3	3	-	3	3	3	3	3	3	3	3
CO2	3	3	3	2	1	3	3	-	3	3	3	3	3	3	3	3
CO3	3	3	3	2	3	3	3	-	3	3	3	3	3	3	3	3
CO4	3	3	3	3	1	3	3	-	3	3	3	3	3	3	3	3

"3"-Strong;"2"-Moderate;"1"-Low;"-"No Correlation

**Detailed Syllabus: ANTH 450 - Dissertation (Fieldwork/Laboratory Based)**

Unit No.	Topics	No. of Lectures	CO No.
	In Semester IV (Group-A and Group-B) students are required to undertake a Dissertation/Project work consisting of approximately one-month preparatory work, approximately One Month weeks of field investigation/approximately One Month for Lab work and / or data analysis and completion of the Dissertation/Project work. The Dissertation will be selected in consultation with the faculty members decided by Staff Council according to their specialization.		
I	<ul style="list-style-type: none"> <li>• Introduction</li> <li>• Review of Literature</li> </ul>	4	I
II	<ul style="list-style-type: none"> <li>• Preparation of fieldwork tools</li> </ul>		II
III	<ul style="list-style-type: none"> <li>• Fieldwork</li> </ul>		III
IV	Presentation and Viva-Voce of the Dissertation/Project work will be in the presence of External examiner and faculty of the department.		IV



## M.A/M.Sc. (Anthropology) Semester-IV

Program	Subject	Year	Semester
M.A/M.Sc.	Anthropology	2	IV
Course Code	Course Title		Course Type
ANTH 451	Forensic Anthropology		Core
Credit	Hours Per Week(L-T-P)		
	L	T	P
5	5	1	-
Maximum Marks	CIA		ESE
100	25		75

**\* L- Lecture, T- Tutorial, P- Practical**

### Learning Objective (LO):

The primary objective of this course is to empower students with the fundamental principles required to work with the forensic science field, particularly in the areas of identification and analysis of human remains. Understand the ethical and legal responsibilities associated with providing forensic anthropological expertise in court proceedings. Evaluate the age, sex, and ethnic attributes of individuals based on skeletal features.

### Course Outcomes (CO):

CO No.	Expected Course Outcomes	CL
	At the end of the course, the students will be able to:	
1	Collection and preservation of skeletal remains, as well as the techniques used to assess the time and cause of death. Additionally, students will be prepared for the role of a forensic anthropologist as an expert witness in legal proceedings, requiring effective communication and presentation of forensic findings in a courtroom setting.	Ap
2	Comprehensive understanding of forensic anthropology and osteology, focusing on the establishment of identity through the analysis of skeletal remains. This includes detailed knowledge of human bone anatomy, techniques for determining age, sex, and ethnic attribution, as well as the use of human dentition for forensic analysis..	Ap
3	Determination and identification of individuals in forensic anthropology, with a specific focus on fingerprint and sole print analysis. The course will cover the detailed characteristics of ridge and crease patterns, introduce dermatoglyphic indices, and highlight the forensic significance of dermatoglyphics.	An
4	Knowledge about various forensic methods for personal identification, encompassing somatometric and somatoscopic observations, hair analysis, bloodstain pattern analysis, and the use of bodily fluids for forensic serology. The course will cover both macroscopic and microscopic features, as well as DNA analysis techniques for accurate and reliable identification in forensic investigations.	An

CL: Cognitive Levels (R-Remember; U-Understanding; Ap-Apply; An-Analyze; E-Evaluate; C-Create).

## CO-PO/PSO Mapping for the course:

PO CO	POs											PSO				
	1	2	3	4	5	6	7	8	9	10	11	1	2	3	4	5
CO1	3	1	3	2	-	3	3	-	3	3	3	3	3	3	3	2
CO2	3	3	3	2	-	3	3	-	3	3	3	3	3	3	3	1
CO3	3	3	3	2	-	3	3	-	3	3	3	3	3	3	3	2
CO4	3	3	3	2	-	3	3	-	3	3	3	3	3	3	3	2

"3"-Strong; "2"-Moderate; "1"-Low; "-"No Correlation

### Detailed Syllabus: ANTH 451- Forensic Anthropology

Unit No.	Topics	No. of Lectures	CO No.
I	<ul style="list-style-type: none"> <li>Definition, Aims and scope of Forensic Anthropology, Collection and preservation of skeletal remains from crime scene, Assessment of time and cause of Death. Role of Forensic Anthropologist as Expert witness in court.</li> </ul>	5+1	I
II	<ul style="list-style-type: none"> <li>Establishment of Identity through skeletal remains, Anatomy of Human bones, Determination of Age, sex and ethnic. Attribution of sex and reconstruction of stature from skeletal remains, human dentition for determination of sex, age and ethnic group.</li> </ul>	5+1	II
III	<ul style="list-style-type: none"> <li>Determination in Forensic Anthropology, Identification of finger and sole prints, details of ridge and crease character, analysis of Dermatoglyphic indices, Dermatoglyphic significance in Forensic Science.</li> </ul>	5+1	III
IV	<ul style="list-style-type: none"> <li>Personal Identification through somatometric and somatoscopic observation. Identification through hair, blood stains, Identification through blood, semen, urine and saliva in disputed paternity cases.</li> </ul>	5+1	IV

### Recommended Readings:

1. Introduction to Forensic Anthropology-SuriderNath
2. Action area in Anthropology-A.K.Kalla
3. Bass, W. M. Human Osteology: A Laboratory and Field Manual of the Human Skeleton. 4 the Human Skeleton.Missouri Archaeological Society, 1995.
4. Blau, Soren, and Douglas Ubelaker. Handbook of Forensic Archaeology and Anthropology. Left Coast Press, 2009.
4. Boddington, A., Garland, A. N., and Janaway, R. Death, Decay, and Reconstruction: Approaches to Archaeology and Forensic Science. Manchester University Press, c.1987.
5. Byers, Steven N. Introduction to Forensic Anthropology. 4th ed. Prentice Hall, 2010.
6. Haglund, William D., Marcella H. Sorg, and Diane L. France. Human Remains: Recognition, Documentation, Recovery, and Preservation. CRC Press, c. 2002.
7. Haglund, William D., and Marcella H. Sorg. Advances in Forensic Taphonomy: Method, Theory, and Archaeological Perspectives. CRC Press, c. 2002.
8. Iscan, Mehmet Yasar, and Kennedy, K. A. R. Reconstruction of Life from the Skeleton. Alan Liss, 1989.
9. Komar, Debra, and Jane Buikstra. Forensic Anthropology: Contemporary Theory and Practice. Oxford University Press, 2007.

10. Krogman, Wilton Marion, and Iscan, Mehmet Yasar. *The Human Skeleton in Forensic Medicine*. Charles C. Thomas, 1986.
11. Steele, D. Gentry, and Bramblett, Claude A. *The Anatomy and Biology of the Human Skeleton*. 1st ed. Texas A&M University Press, c.1988.
12. Stewart, Thomas Dale. *Essentials of Forensic Anthropology*. Forward by Ellis R. Kerley. Charles C. Thomas, c1979.
13. Taylor, Karen. *Forensic Art and Illustration*. CRC Press, 2001.
14. Ubelaker, Douglas H. *Human Skeletal Remains: Excavation, Analysis, and Interpretation*. 2nd ed. Taraxacum, 1989.
15. White, Tom D., and Pieter A. Folkens. *The Human Bone Manual*. Academic Press, 2005.

## M.A/M.Sc. (Anthropology) Semester-IV

Program	Subject	Year	Semester
M.A/M.Sc.	Anthropology	2	IV
Course Code	Course Title		Course Type
ANTH 452	Ethnomedicine (Group A & B)		Core
Credit	Hours Per Week (L-T-P)		
	L	T	P
5	5	1	-
Maximum Marks	CIA		ESE
100	25		75

**\* L- Lecture, T- Tutorial, P- Practical**

### Learning Objective (LO):

The objective of the course is to provide students a comprehensive understanding of ethnomedicine, including its cultural, spiritual, and ritualistic aspects. They should be able to analyze and interpret various ethnomedical practices, considering the diverse perspectives on health and healing within different cultural contexts.

### Course Outcomes (CO):

CO No.	Expected Course Outcomes	CL
	At the end of the course, the students will be able to:	
1	Students will gain a nuanced understanding of ethnomedicine, disease, illness, health, and sickness. The course explores how these concepts are shaped by cultural, social, and historical factors, emphasizing the importance of cultural perspectives in understanding health and healing practices within diverse communities.	U
2	Explore the cultural perceptions of body image and the multifaceted symbolism associated with the human body in natural, social, cosmological, political, and spiritual contexts. This knowledge is crucial for understanding health and healing practices within diverse cultural frameworks.	Ap
3	Identify and explain of traditional health care practices, including beliefs and practices related to mother and child health. They will explore the roles of traditional medical practitioners, different types of ethnomedical specialists, apprenticeship patterns.	Ap
4	Providing an understanding of the stages patients go through in seeking traditional healing and includes rituals related to inviting healing forces, therapeutic actions, prevention, and expressions of gratitude. Additionally.	Ap

CL: Cognitive Levels (R-Remember; U-Understanding; Ap-Apply; An-Analyze; E-Evaluate; C-Create).

## CO-PO/PSO Mapping for the course:

PO CO	POs											PSO				
	1	2	3	4	5	6	7	8	9	10	11	1	2	3	4	5
CO1	3	-	3	-	-	3	3	-	3	3	3	3	3	3	2	2
CO2	3	-	3	-	-	3	3	-	3	3	3	3	3	1	2	-
CO3	3	-	3	-	-	3	3	-	3	3	3	3	3	1	2	-
CO4	3	-	3	-	-	3	3	-	3	3	3	3	3	1	2	1

"3"-Strong;"2"-Moderate;"1"-Low;"-"No Correlation

### Detailed Syllabus: ANTH 452- Ethnomedicine (Group A & B)

Unit No.	Topics	No. of Lectures	CO No.
I	<ul style="list-style-type: none"> <li>Definition and concept of ethnomedicine: Definitions of disease, illness, health and sickness.</li> <li>Disease classification concepts.</li> <li>Natural and supernatural pathogenic agents. Illness or etiological ideology.</li> </ul>	5+1	I
II	<ul style="list-style-type: none"> <li>People's perception of ethnophysiology and ethnoanatomy</li> <li>Ethno-nutritional concepts in relation to preventive, promotive and curative health and morbidity</li> <li>Perception of body image, including body constitution, composition, elements that contribute to the survival of body and soul. Human body as a natural, social, cosmological, political and spiritual symbol in the context of ritual healing.</li> </ul>		II
III	<ul style="list-style-type: none"> <li>Mother and child health care beliefs and practices.</li> <li>Nature and role of traditional medical practitioners</li> <li>Different types of ethnomedical specialists, their stats and medical functions Apprenticeship pattern</li> <li>Medical knowledge of practitioners</li> <li>Medicinal plants administered for various diseases Animal derivatives administered for various diseases Medicines extracted from minerals</li> <li>Other therapies employed</li> </ul>		III
IV	<ul style="list-style-type: none"> <li>Healing rituals: rituals of inviting healing forces for diagnosis and treatment, collecting, preparing and administrating medicines.</li> <li>Therapeutic rituals:</li> <li>Rituals of appeasing spirits, Rituals of compromise,</li> <li>Rituals of warding off pathogenic agents/evil effect, Rituals of killing pathogenic agents,</li> <li>Rituals of purification, Rituals of prevention, Thanks giving rituals</li> <li>Ethnomedical pathway- the processes or stages through which a patient passes to get himself cured.</li> <li>Cultural factors that influence decision to choose and change a therapy</li> </ul>		IV

## Recommended Readings:

1. Caulie William(1955), Applied Anthropology in Medicine, edited by Kroeber A.R., Anthropology Today
2. Foster George(1983), An Introduction to Ethnomedicine edited by Bannerman and others, Traditional Medicine and Health Coverage, WHO, Geneva
3. Hughes Charles(1968), Ethnomedicine, Encyclopedia of Social Sciences, VolX, USA
4. Kurian J.C. and Bhanu B.V.(1980), Ethnomedicine : A Study of Nomadic Vaidus of Maharashtra, Eastern Anthropologist, Vol 33, No.1, pp 71-78,Lucknow
5. Kurian.C. and Robin(1990), TraditionalMedicalPractitionersoftheSahyadri,EasternTribhuwanR Anthropologist, Vol 43 No. 3,pp 251-258, Lucknow
6. Turner Victor(1967), The Forest of Symbols, Cornell University Press, USA
7. Tribhuwan Robin(1998), Medical World of Tribals (An Exploration in Illness Ideology, Body Symbolism and Ritual Healing), Discovery Publishers, New Delhi
8. Tribhuwan Robin and Gambhir R.D.(1995), Ethnomedical Pathway : A Conceptual Model, edited by Jain N.S. and Tribhuwan Robin, An Overview of Tribal Research Studies, TR&TI, Pune
9. Jose Baban K (1998), Tribal Ethnomedicine (Continuity and Change), A.P.H., Publishing Corporation, New Delhi
10. Lieban Richard(1973), Medical Anthropology, Handbook of Social and Cultural Anthropology,editedbyJohnHonigman,RandMcNallyCollegePublis hingCo,Chicago
11. Hasan K.A.(1967), The Cultural Frontiers of Health in Village India, Manaktalaand Sons, Bombay
12. Kakar D.N. (1977), Folk and Modern Medicine, New Asian Publishers, NewDelhi
13. Young Allan(1982), The Anthropology of Illness and Sickness, Annual Review of Anthropology,No.11,pp.257-285

## M.A/M.Sc. (Anthropology) Semester-IV

Program	Subject	Year	Semester
M.A/M.Sc.	Anthropology	2	IV
Course Code	Course Title		Course Type
ANTH 453	Human Growth and Development		Core
Credit	Hours Per Week(L-T-P)		
	L	T	P
5	5	1	-
Maximum Marks	CIA		ESE
100	25		75

**\* L- Lecture, T- Tutorial, P- Practical**

### Learning Objective (LO):

The aim of this course is to make students proficient in understanding of the concepts of growth, differentiation, maturation, and development, including genetic, environmental, and nutritional aspects. Evaluate the impact of growth programs and nutritional deficiencies on public health.

### Course Outcomes (CO):

CO No.	Expected Course Outcomes	CL
	At the end of the course, the students will be able to:	
1	Explore foundational concepts of growth, differentiation, maturation, and development. They will explore the evolutionary context of human growth, grasp the lifespan perspective of development, and delve into the characteristics of major stages in the human life cycle, including prenatal and postnatal growth.	U
2	Comprehensive understanding of the multifaceted factors influencing human growth, the methodologies used to study growth, and the assessment of growth patterns. This knowledge is essential for individuals studying human biology, anthropology, and related fields, as it provides insights into the complex interplay between genetics, environment, and various influences on human development.	An
3	Students will explore segmental growth, techniques for analyzing human physique and body composition, the significance of age in growth studies, and various methods for assessing age, including dental age, skeletal age, and morphological age.	An
4	Explore the challenges associated with malnutrition, morbidity, mortality, infant mortality, and the role of maternal education and immunization programs in public health initiatives. This knowledge is valuable for those pursuing studies in public health, nutrition, and related fields.	Ap

CL: Cognitive Levels (R-Remember; U-Understanding; Ap-Apply; An-Analyze; E-Evaluate; C-Create).

## CO-PO/PSO Mapping for the course:

PO CO	POs											PSO				
	1	2	3	4	5	6	7	8	9	10	11	1	2	3	4	5
CO1	3	3	3	-	1	3	3	-	3	3	3	3	3	2	2	1
CO2	3	3	3	-	1	3	3	-	3	3	3	3	3	2	2	1
CO3	3	3	3	-	1	3	3	-	3	3	3	3	3	2	2	2
CO4	3	3	3	-	1	3	3	-	3	3	3	3	3	2	2	2

"3"-Strong; "2"-Moderate; "1"-Low; "-"-No Correlation

### Detailed Syllabus: ANTH 453- Human Growth and Development

Unit No.	Topics	No. of Lectures	CO No.
I	<ul style="list-style-type: none"> <li>Definition and concepts of growth, differentiation, maturation and development; evolution of human growth: human lifespan development process, human life cycle; major stages of human growth and development: prenatal growth, postnatal growth and their characteristics.</li> </ul>	5+1	I
II	<ul style="list-style-type: none"> <li>Factors affecting growth: genetic and environmental factors: secular trends, adaptation of growth rates to environmental stresses; methods of studying human growth; measurement and assessment of human growth: changing human growth patterns, human growth curves of different body parts and tissues, catch-up growth, maturation, growth references and standards; abnormal growth.</li> </ul>		II
III	<ul style="list-style-type: none"> <li>Segmental growth and development; analysis of human physique and body composition: Sheldon, Parnell, Heath-Carter methods of somatotyping; significance of age in growth studies; methods of assessing age-chronological age, dental age, skeletal age, secondary sex character age, morphological age, age-grouping; decimal age calendar.</li> </ul>		III
IV	<ul style="list-style-type: none"> <li>Growth Programmes: ANP, ICDS, SNP, Mid-Day meal programme; Vitamin-A prophylaxis programme, Anemiaprophylaxis Programme, Goiter control programme, Nutritional deficiency diseases: Nicotinic acid deficiency, Vitamin-C, Vitamin-D deficiency.</li> <li>Problem of Malnutrition.</li> <li>Morbidity and Mortality in India.</li> <li>IMR. Role of maternal education, Immunization programme in India.</li> </ul>		IV

### Recommended Readings:

1. Bogin, Barry. 1999. *Patterns of human growth*. Cambridge University Press.
2. Harrison, G.A., Tanner, J.M., Pilbeam, D.R., Baker, P.T. 1988. *Human biology: An introduction to human evolution, variation, growth & adaptability*. Oxford: Oxford University Press.
3. Heyward, V.H., Wagner, D.R. 2009. *Applied body Composition Assessment*. Human Kinetics.



4. Johnson, F.E., Roche, A.F., Susanne, C. 1980. *Proceeding on Human Physical Growth and Maturation*. Plenum Publishing Corporation.
5. Malina, Robert M; Bouchard, Claude, Bar-Or, Oded. 2004. *Growth, maturation & physical activity*. Human Kinetics.
6. Noel, Cameron. 2002. *Human Growth and Development*. St. Louis: Academic Press.

## M.A/M.Sc. (Anthropology) Semester-IV

Program	Subject	Year	Semester
M.A/M.Sc.	Anthropology	2	IV
Course Code	Course Title		Course Type
ANTH 461	Sports Anthropology		Core
Credit	Hours Per Week (L-T-P)		
	L	T	P
5	5	1	-
Maximum Marks	CIA		ESE
100	25		75

\* L- Lecture, T- Tutorial, P- Practical

### Learning Objective (LO):

The course aims to equip students with a deep understanding of the anthropological aspects of sports, including cultural influences, physiological considerations, and the impact of factors like ethnicity, race, and gender on sports participation and performance. They should also be aware of the ethical considerations related to sports, such as drug use and the inclusion of individuals with disabilities.

### Course Outcomes (CO):

CO No.	Expected Course Outcomes	CL
	At the end of the course, the students will be able to:	
1	Holistic understanding of sports anthropology, encompassing its historical development, relevance in the Indian context, traditional sports in India, and the physiological aspects of energy and nutrition in sports. This knowledge is valuable for individuals interested in the intersection of anthropology, culture, and physical activity, and those pursuing studies in sports science and related fields.	U
2	Role of kin-anthropometry in understanding body size, shape, and composition. They will also explore the relevance of body proportionality, human physique, and different assessment methods in the context of sports participation and excellence.	Ap
3	Comprehensive understanding of the complex relationships between biological maturity, racial variations in physical structure, sports performance, talent selection, and the broader impact of ethnicity and race on sports and political policies. This knowledge is valuable for individuals studying sports science, anthropology, sociology, and related fields.	Ap
4	Explore ethical considerations surrounding drug use in sports, the relationship between physical activity and tribal subsistence, inclusive sports opportunities for handicapped individuals, and the dynamics of gender-specific sports and games.	Ap

CL: Cognitive Levels (R-Remember; U-Understanding; Ap-Apply; An-Analyze; E-Evaluate; C-Create).

**CO-PO/PSO Mapping for the course:**

PO CO	POs											PSO				
	1	2	3	4	5	6	7	8	9	10	11	1	2	3	4	5
CO1	3	1	3	-	3	3	3	-	3	3	3	3	3	2	3	-
CO2	3	1	3	2	3	3	3	-	3	3	3	3	3	2	3	-
CO3	3	1	3	-	3	3	3	-	3	3	3	3	3	2	3	-
CO4	3	1	3	2	3	3	3	-	3	3	3	3	3	2	3	-

"3"-Strong; "2"-Moderate; "1"-Low; "-"-No Correlation

**Detailed Syllabus: ANTH 461- Sports Anthropology**

Unit No.	Topics	No. of Lectures	CO No.
I	<ul style="list-style-type: none"> <li>• Sports: Its relation to anthropology.</li> <li>• History and development of sports anthropology. Its relevance to Indian context.</li> <li>• Traditional sports and games in India.</li> <li>• Energy and sports activity: introduction, concept, interaction of energy systems.</li> <li>• Fuel for sports: introduction, different food stuffs and their involvement during exercise</li> <li>• Effect of intensity and duration of exercise on fuel consumption.</li> </ul>	5+1	I
II	<ul style="list-style-type: none"> <li>• Cardio-vascular fitness.</li> <li>• Physical work capacity and sports performance.</li> <li>• Introduction to Kin-anthropometry, body proportionality and the age changes.</li> <li>• Body proportionality in relation to sports.</li> <li>• Human physique and body composition and its role in sports participation and excellence.</li> <li>• Different methods for studying human physique and assessment of body composition for both sexes.</li> </ul>		II
III	<ul style="list-style-type: none"> <li>• Biological measures of maturity (skeletal, dental and sexual) and its role in sports performance.</li> <li>• Racial variations in physical structure and participation in sports.</li> <li>• Race and sports performance.</li> <li>• Sports talent selection in young children on the basis of structural, functional and endurance characteristics.</li> <li>• . Ethnicity, race, sports and political policies interference</li> </ul>		III
IV	<ul style="list-style-type: none"> <li>• Genetic constitution, physical fitness and sports performance.</li> <li>• Drug uses in sports.</li> <li>• Habitual physical activity, tribal subsistence activities related to game.</li> <li>• Sports and games for handicapped children and adults.</li> <li>• Gender specific sports and games</li> </ul>		IV

## Recommended Readings:

1. Boyd W.C., 1950 Genetics and the Races of Man. Little Brown, Boston
2. Das B.M., 1980 Outlines of Physical Anthropology. KitabMahal, Allahabad
3. Garn S.M., 1971 Human Races. Thomas, Springfield, Illionis
4. Hooton E.A., 1965 Up From the Ape. MotilalBanarasidas, Delhi
5. Eveleth P.B. and Worldwide Variations in Human Growth. Cambridge University Tanner J.M., 1990 Press, Cambridge
6. Forbes G.B., 1987, Human Body Composition, Springer-Verlag, New York Anthropology 171
7. Sheldon W.H., Stevens S.S., Varieties of Human Physique. Harper Grow, New York Tucker, W.B. 1940
8. Lohman T.G., 1992 Advances in Body Composition Assessment, Human Kinetics, Champaign
9. Montagu A., 1960. An Introduction to Physical Anthropology.
10. Singh I.P. and Anthropometry, Kamal-Raj Publishers, Delhi M.K. Bhasin, 1968,
11. Singh S.P., Sidhu L.S. Skeletal Maturity, HBPS, Patiala and J. Singh, 1992 12. Sodhi H.S., 1991 Sports Anthropometry, Anova Publishers, Mohali
13. Tanner J.M., et al., 1983 Assessment of Skeletal Maturity and Prediction of Adult Height (TW2 method)
14. Weiner J.S. and Human Biology - A guide to Field Methods Laurie J.A., 1969

## M.A/M.Sc. (Anthropology) Semester-IV

Program	Subject	Year	Semester
M.A/M.Sc.	Anthropology	2	IV
Course Code	Course Title		Course Type
ANTH 462	Human Reproduction and Reproductive Health (Group A & B)		Core
Credit	Hours Per Week (L-T-P)		
	L	T	P
5	5	1	-
Maximum Marks	CIA		ESE
100	25		75

\* L- Lecture, T- Tutorial, P- Practical

### Learning Objective (LO):

This course aims to cultivate a profound comprehension of the evolution and embryological development, analyze the structural organization and function of Wolffian and Mullerian ducts, reproductive ecology and energetics, including variations in fertility, menstrual characteristics, and menopause. Analyze the roles of physiological, behavioural, and environmental factors in regulating reproductive output.

### Course Outcomes (CO):

CO No.	Expected Course Out comes	CL
	At the end of the course, the students will be able to:	
1	Explain the evolutionary processes and embryological development of the reproductive systems, including the male and female gonads, gonadal ducts, external genitalia, Wolffian ducts, and Mullerian ducts.	Ap
2	Describe evolutionary processes and embryological development of the reproductive systems, including the male and female gonads, gonadal ducts, external genitalia, Wolffian ducts, and Mullerian ducts.	Ap
3	Exploring variations in fertility, menstrual characteristics, the phenomenon of menopause, and the intricate roles of physiological, behavioral, and environmental factors in shaping reproductive patterns in human populations.	U
4	Understanding of the male reproductive system, its interactions with the environment, and the potential factors that can lead to homeostatic imbalance. This knowledge is crucial for individuals interested in reproductive biology, environmental health, and public health.	An

CL: Cognitive Levels (R-Remember; U-Understanding; Ap-Apply; An-Analyze; E-Evaluate; C-Create).

## CO-PO/PSO Mapping for the course:

PO CO	POs											PSO				
	1	2	3	4	5	6	7	8	9	10	11	1	2	3	4	5
CO1	3	2	3	-	3	3	3	-	3	3	3	3	3	2	1	-
CO2	3	2	3	-	3	3	3	-	3	3	3	3	3	2	1	-
CO3	3	2	3	-	3	3	3	-	3	3	3	3	3	2	2	-
CO4	3	2	3	-	3	3	3	-	3	3	3	3	3	2	2	-

"3"-Strong; "2"-Moderate; "1"-Low; "-"-No Correlation

### Detailed Syllabus: ANTH 462- Human Reproduction and Reproductive Health(Group A & B)

Unit No.	Topics	No. of Lectures	CO No.
I	<ul style="list-style-type: none"> <li>Reproductive Systems: Evolution of male and female gonads, embryological development of gonads, gonadal ducts and external genitalia</li> </ul>	5+1	I
II	<ul style="list-style-type: none"> <li>Wolffian duct structural organization and function; Mullerian duct structural organization and function; evolution of Mullerian duct and adaptations for pregnancy.</li> </ul>		II
III	<ul style="list-style-type: none"> <li>Human reproductive ecology and energetics: definition, concept, variation in fertility, menstrual characteristics, menopause in the human species, and the roles of physiological, behavioral, and environmental factors in regulating reproductive output.</li> </ul>		III
IV	<ul style="list-style-type: none"> <li>Male reproductive health and reproductive ecology, homeostatic imbalance.</li> </ul>		IV

### Recommended Readings:

1. Tsui, Amy O., Judith N. Wasserheit, and John G. Haaga (eds.) (1997). *Reproductive Health in Developing Countries*. Washington, D.C.: National Academy Press.
2. Joseph Truglio, Rita S. Lee, Barbara E. Warren, Rainier Patrick Soriano (2022). *Sexual and Reproductive Health; Practical Guide for Primary Care*. Springer Cham.
3. Shira M. Goldenberg, Ruth Morgan Thomas, Anna Forbes, Stefan Baral (2021). *Sex Work, Health, and Human Rights. Global Inequities, Challenges and Opportunities for Action*. Advances in Prevention Sciences.
4. Chris Bobel, Inga T. Winkler, Breanne Fahs, Katie Ann Hasson, Elizabeth Arveda Kissling, Tomi-Ann Roberts (2020). *The Palgrave Handbook of Critical Menstruation Studies*. Advances in Prevention Sciences.
5. Kaoshal, S. (2011) *Indian Women Health , Education and Poverty*, Arvind Prakashan, Udaipur (Rajasthan)

6. Sinha Archana (2009) Reproductive Rights and Women Empowerment, Education and Poverty, Arvind Prakashan, Udaipur (Rajasthan)
7. Desai Ranjana (2009) Health, Family Planning and Social Welfare, Education and Poverty, Arvind Prakashan, Udaipur (Rajasthan)
8. Mishra (2011) Women Health and Social Issues, Education and Poverty, Arvind Prakashan, Udaipur (Rajasthan)
9. Singh (2012) Women, Femininity and Health, Education and Poverty, Arvind Prakashan, Udaipur (Rajasthan)
10. Koenig M (ed) (2008) Reproductive Health in India: New Evidence. Rawat Publication, New Delhi.
11. Verma A (2018) Womens Health and Nutrition. Rawat Publication, New Delhi.
12. Kabra SG (2013) Abortion in India : Myth and Reality. Rawat Publication, New Delhi.
13. Jouanjean B. (2011) Health, Culture and Society Rawat Publication, New Delhi.

## M.A/M.Sc. (Anthropology) Semester-IV

Program	Subject	Year	Semester
M.A/M.Sc.	Anthropology	2	IV
Course Code	Course Title		Course Type
ANTHA 463	Human Population Genetics		Core
Credit	Hours Per Week (L-T-P)		
	L	T	P
5	5	1	-
Maximum Marks	CIA		ESE
100	25		75

**\* L- Lecture, T- Tutorial, P- Practical**

### Learning Objective (LO):

The aim of this course is to make students proficient in understanding of the genetic structure of human populations using different approaches and biological consequences of mating systems and their impact on genetic diversity. Apply population genetics principles to study populations in various social, cultural, and demographic contexts. Evaluate the role of populations in human genetics, considering natural and social factors influencing genetic variation.

### Course Outcomes (CO):

CO No.	Expected Course Outcomes	CL
	At the end of the course, the students will be able to:	
1	Develop a solid foundation in population genetics, allowing them to analyze genetic variation, understand mating patterns, and apply these concepts to the study of human populations in an anthropological context.	U
2	Comprehensive understanding of the factors influencing gene flow, genetic isolation, and the genetic structure of human populations. This knowledge is crucial for individuals interested in anthropology, genetics, and population studies.	An
3	Explain the biological implications of different mating systems, the genetic consequences of inbreeding and outbreeding, and the relationships between population structure and genetic structure.	Ap
4	Describe the genetic aspects of populations, including demographic characteristics, marriage patterns, kinship systems, and the role of populations in shaping human genetics.	An

CL: Cognitive Levels (R-Remember; U-Understanding; Ap-Apply; An-Analyze; E-Evaluate; C-Create).



**CO-PO/PSO Mapping for the course:**

PO CO	POs											PSO				
	1	2	3	4	5	6	7	8	9	10	11	1	2	3	4	5
CO1	3	2	3	2	-	1	3	-	-	3	3	3	3	2	2	2
CO2	3	2	3	2	-	2	3	-	-	3	3	3	3	2	2	2
CO3	3	2	3	2	-	2	3	-	-	3	3	3	3	2	2	2
CO4	3	2	3	2	-	2	3	-	-	3	3	3	3	2	2	2

"3"-Strong; "2"-Moderate; "1"-Low; "-"No Correlation

**Detailed Syllabus: ANTH 463- Human Population Genetics**

Unit No.	Topics	No. of Lectures	CO No.
I	<ul style="list-style-type: none"> <li>Definition and scope of population genetics, its relevance in anthropology; its relationship and differences with other branches of human genetics, viz., for malgenetics, developmental genetics, cytogenetics and molecular genetics.</li> <li>Matingsystem: Randommating/panmixis; selectivemating/preferentialmating; matechoice/sexselection; assortativemating. Mendelian population with reference to animals and Man; other concepts and definitions statistical, geographical, demographic, ecological.</li> </ul>	5+1	I
II	<ul style="list-style-type: none"> <li>Reproductive isolates and the concept of gene pool: genetic isolates; geographic isolates ; models to study gene flow - 'island' model, 'diffusion' model; 'isolation by distance model', role of social divisions and hierarchy in genetic isolation.</li> <li>Genetic structure of human populations : approaches to study-social geographic, demographic and genetic. Principles of genetic equilibrium; Hardy-Weinberg law, causes for changes in gene frequencies: mutation, hybridisation, genetic drift and selection. Genetic polymorphisms-balanced, transient and neutral.</li> </ul>		II
III	<ul style="list-style-type: none"> <li>Biological consequences of mating systems: consanguinity; inbreeding and outbreeding. Inbreeding coefficient (F ratios) inbreeding depression: heterozygosis; homozygosis; genetic load. 10</li> <li>Population structure and genetic structure relationship: Population structure in India: religious groups; caste groups; other isolates. Origin of caste - theories: fission (Ghurye) lack of fusion (I. Karve). Endogamous group as the ultimate unit of study in population genetics. Genetic distance: concepts and approaches to study.</li> </ul>		III
IV	<ul style="list-style-type: none"> <li>Genetic study of populations: Natural and social boundaries; mobility; growth, age, sex composition; fertility, mortality and morbidity. Marriage and Kinship; a great marriage; type of marriage: consanguineous, no consanguineous-comparison : ethnic, ecological, genealogical, generational ,social, epidemiological.</li> <li>Role of population in human genetics: Natural history and racial history; variation; inheritance: direct - family and pedigree correlation; recessive ratios; indirect: population frequencies; inbreeding, genetic traits. Association: environment: mutation expression, evolution.</li> <li>Population distance measures</li> </ul>		IV

## Recommended Readings:

1. Cavalli-Sforza, L. Land  
Bodmer, W.F. The genetics of human populations
2. Crow, J.F. and  
Kimura, M. An introduction to population genetic theory
3. Stern, C. Principles of Human Genetics
4. Winchester, A.M. Human Genetics
5. Giblett, E.R. Genetic Markers in Human Blood
6. Bhende and Kanitkar Principles of Population Studies
7. Cox, Peter. Demography
8. Houser and Duncan. The study of population
9. Shryock and Shryock. Methods and Materials of Demography
10. Shukla, B.R.K. and  
Introduction Rastogi, S. Physical Anthropology and Human Genetics - An
11. McKusick, V.A. Human Genetics
12. Li, C.C. Human Genetics
13. Malhotra, K.C. Statistical Methods in Human Population Genetics, IBRAD, ISI&ISHG,  
Calcutta
14. Wright, S. Evolution and Genetics of Population
15. Harrison, G.A. and  
A.J. Boyce. Structure of Human Population
16. Stanfield, W.D. Theory and Problems of Genetics
17. Bhamrah, H.S. and  
Chaturvedi, C.M. A Textbook of Genetics
18. Rieger, R. et al. Glossary of Genetics- Classical and Molecular
19. Mange, J.E. and Mange, A.P. Basic Human Genetics
20. Rothwell, N.V. Human Genetics

## M.A/M.Sc. (Anthropology) Semester-IV

Program	Subject	Year	Semester
M.A/M.Sc.	Anthropology	2	IV
Course Code	Course Title		Course Type
ANTH 420	Ecological Anthropology (Group A & B)		Core
Credit	Hours Per Week (L-T-P)		
	L	T	P
5	5	1	-
Maximum Marks	CIA		ESE
100	25		75

**\* L- Lecture, T- Tutorial, P- Practical**

### Learning Objective (LO):

The objective of this course is to develop a profound comprehension of the ecological perspectives to address environmental issues and contribute to sustainable development and understand the complex relationships between human societies, cultures, and the environment. Analyze the historical development and major branches of ecological anthropology.

### Course Outcomes (CO):

CO No.	Expected Course Outcomes	CL
	At the end of the course, the students will be able to:	
1	Explain comprehensive understanding of ecological anthropology, its historical context, major branches, and its dynamic relationship with other disciplines. This knowledge is valuable for individuals interested in studying the complex interactions between human societies and their environments.	U
2	Describe the intellectual history of ecological anthropology, understanding how it emerged as a reaction to deterministic explanations, unilineal evolution, and abstract conceptualizations of culture.	Ap
3	Students will gain a comprehensive understanding of ecological principles, cultural ecology, and the ways in which human societies interact with and adapt to their environments.	Ap
4	Explore the role of ecological anthropology in addressing environmental problems, contributing to the broader field of environmental studies and activism. This knowledge is valuable for individuals interested in the interdisciplinary aspects of anthropology, environmental science, and sustainable development.	Ap

CL: Cognitive Levels (R-Remember; U-Understanding; Ap-Apply; An-Analyze; E-Evaluate; C-Create).

**CO-PO/PSO Mapping for the course:**

PO CO	POs											PSO				
	1	2	3	4	5	6	7	8	9	10	11	1	2	3	4	5
CO1	3	2	3	-	2	3	3	-	3	3	3	3	3	3	3	3
CO2	3	2	3	-	2	3	3	-	3	3	3	3	3	3	3	3
CO3	3	2	3	-	2	3	3	-	3	3	3	3	3	-	1	1
CO4	3	2	3	-	2	3	3	-	3	3	3	3	3	-	1	1

"3"-Strong; "2"-Moderate; "1"-Low; "-"-No Correlation

**Detailed Syllabus: ANTH 420 - Ecological Anthropology (Group- A & B)**

Unit No.	Topics	No. of Lectures	CO No.
I	<ul style="list-style-type: none"> <li>Ecological Anthropology: definition and approach. Aims and objectives; key terms and concepts used (only a brief mention). Relation with, or position among, other disciplines within and outside anthropology.</li> <li>The distinctive interdisciplinary nature of ecological anthropology. Historical background and development of ecological anthropology.</li> <li>Major branches of ecological anthropology. Growth of ecological anthropology beyond cultural ecology. Other branches: population ecology, systems ecology, ethnoecology, socio-biology, archaeological ecology, human energetics.</li> </ul>	5+1	I
II	<ul style="list-style-type: none"> <li>Ecological approach as a reaction to the Deterministic explanations. A critique of Cultural Determinism and Environmental Determinism.</li> <li>A gradual shift from Determinism to Possibilism; Possibilistic versions of Boas, Kroeber and Steward.</li> <li>Ecological approach as a reaction to the theory of unilinear evolution, and as a proponent of the school of multilinear evolution.</li> <li>Ecological approach as a reaction to the concept of culture as an abstract 'Superorganic' level. Revival of cultural materialism and emergence of 'Systems' approach.</li> </ul>		II
III	<ul style="list-style-type: none"> <li>Ecology and ecosystem: ecology as a natural science. Definition of ecology; concepts of ecosystem, eco-niche, ecological community, energy pyramid, ecological hierarchy, competition for resources, territorialism, adaptation and adaptive specialization, feedback and Carrying capacity.</li> <li>Cultural ecology: inadequacy of original definitions of ecology and ecosystem when applied to human society and culture.</li> <li>Anthropological reinterpretation of ecology, ecosystem and other related concepts; man-nature and culture-nature relationship reviewed from the viewpoint of cultural ecology; ecological transition.</li> <li>Concept of culture-core and its relation with environment as</li> </ul>		III

	well as 'other' aspects of culture. Ecological ethnography: study of hunter gatherers, nomads and pastorals, island communities, etc.		
IV	<ul style="list-style-type: none"> <li>• Human ecology and environmental problems: human activities and their impact on ecosystems, ecological balance and environmental quality.</li> <li>• Environmental problems and issues : degradation of land, water, air, forests and biodiversity resources. Global warming, disturbances in ozone layer and other global environmental issues.</li> <li>• Relation between development and environmental problems. Concept of ecologically/environmentally sustainable development. Ecological considerations in development planning.</li> <li>• Ecological anthropology and environmentalism: environmental protests, movements and activism. International environmental conventions. Anthropological issues involved in environmentalism. Role of ecological anthropologists in the debate of environmentalism.</li> </ul>		IV

### Recommended Readings:

1. A. Roberto Frisancho: Human Adaptation
2. Barth, F. 1956 'Ecological Relations of Ethnic Groups in Swat, Pakistan', American Anthropologist.
3. Bennet, John 1979 'The Ecological Transition : Cultural Anthropology and Human Adaption', Pergamon Press Inc., Great Britan.
4. Chapple, Elliot 1980 'Biological Foundations of Individuality and Culture', Robert E. Krieger Publication, New York.
5. Changnon& Irons 'Evolutionary Biology and Human Social Behavior'
6. Cohen, M., Nathan 'The Food Crisis in Pre-history : Over Population and the Origins of Agriculture'
7. Eidt, R.C. 'Man, Culture and Settlement'
8. Gadgil&Guha 1997 This Fissured Land : An Ecological History of India. OUP
9. Hardesty. Donald 1997 'Ecological Anthropology', John Wiley and Sons. India Oxford University Press, New Delhi.
10. Moran, E.F. Human Adaptability: An Introduction to Ecological Anthropology
11. Netting, R.M. The Ecological Approach in Cultural Study
12. Odum, H.T. Environment, Power and Society
13. Odum, Eugene Fundamentals of Ecology
14. Reddy, G.P. Scarcity and Survival
15. Steward, Julian. Theory of Culture Change
16. Tax, S. & Freeman, L. Horizons of Anthropology
17. Tiwari& Sharma. Tribal Eco-system and Malnutrition in India
18. Ucke&Dimpleby. The Domestication and Exploitation of Plants and Animals

## M.A/M.Sc. (Anthropology) Semester-IV

Program	Subject	Year	Semester
M.A/M.Sc.	Anthropology	2	IV
Course Code	Course Title		Course Type
ANTH 470	Indian Anthropology		Core
Credit	Hours Per Week (L-T-P)		
	L	T	P
5	5	1	-
Maximum Marks	CIA		ESE
100	25		75

**\* L- Lecture, T- Tutorial, P- Practical**

### Learning Objective (LO):

A deep and comprehensive understanding of the Indian Society in its historical and socio-cultural context. Gain an insight into the social structure of the Indian society and study it with reference to the Varna, Caste system, tribal communities. Trace, examine and analyse the changes occurring in the society along with the contemporary changes. Discuss the contributions of various scholars in the study of the Indian society.

### Course Outcomes (CO):

CO No.	Expected Course Outcomes	CL
	At the end of the course, the students will be able to:	
1	Explore the diverse historical, social, and cultural elements that have shaped the Indian subcontinent, providing a foundation for understanding the complexities and nuances of Indian civilization.	U
2	Describe intricate social fabric of India, including its caste dynamics, rural-urban interplay, and the role of reform movements and leaders in shaping societal structures. This knowledge is valuable for individuals interested in sociology, anthropology, and Indian studies.	An
3	Analyse the various processes and theories that contribute to socio-cultural change, both within indigenous societies and in response to external influences.	An
4	Discuss and critically evaluate the contributions of anthropologists in the field of anthropology in India.	E

CL: Cognitive Levels (R-Remember; U-Understanding; Ap-Apply; An-Analyze; E-Evaluate; C-Create).

**CO-PO/PSO Mapping for the course:**

PO CO	POs											PSO				
	1	2	3	4	5	6	7	8	9	10	11	1	2	3	4	5
CO1	3	2	1	-	-	3	3	-	3	3	3	3	3	3	3	3
CO2	3	2	3	-	-	3	3	-	3	3	3	3	3	3	3	3
CO3	3	2	3	-	-	3	3	-	3	3	3	3	3	3	3	3
CO4	3	2	3	-	2	3	3	-	3	3	3	3	3	3	3	3

"3"-Strong; "2"-Moderate; "1"-Low; "-"-No Correlation

**Detailed Syllabus: ANTH 470- Indian Anthropology**

Unit No.	Topics	No. of Lectures	CO No.
I	<ul style="list-style-type: none"> <li>Approaches to the study of Indian society, culture and civilization: Indological, Anthropological, historical, etc. Ancient Culture:</li> <li>Vedic and later vedic age.</li> <li>Indian people: racial, ethnic, linguistic and religious elements (composition) and distribution of people. Autochthons, peopling of India: migration, Hypergamy, Hypogamy, DNA explanations.</li> <li>Unity and diversity in Indian society and culture: linguistic, political, ethnic, communal and religious tensions and conflicts; national integration.</li> <li>Basis of traditional Indian social structure and life cycle: Varnashram dharma, Purushartha, impact of Buddhism, Jainism, Islam and Christianity.</li> </ul>	5+1	I
II	<ul style="list-style-type: none"> <li>Social Structure: caste system -definition and criteria of Caste system, Varna and Caste, Caste among non-Hindus, caste outside India; dominant caste, caste-mobility-fusion, lack of fusion and fission. Backward castes and scheduled castes: statutory provisions, caste and tribe, caste in democracy.</li> <li>Indian village: a myth or reality; village: a part society: Jajmani system: impact of new technology and urbanisation — changing agrarian social structure; peasant movements, Panchayati Raj. Importance of village studies.</li> <li>Voluntary initiatives/development and welfare movements in 19th and 20th century: anticaste, antiuntouchability, women's emancipation, education and health.</li> <li>Role of social reform leaders in caste system: Mahatma Gandhi's and Ambedkar's constructive approaches.</li> <li>Contributions of religious and spiritual leaders/reformers in caste system.</li> </ul>		II
III	<ul style="list-style-type: none"> <li>Socio-cultural change: Change Agents, Theories of culture: Acculturation, Enculturation, Culturation, Adoption, Diffusion, Assimilation, Modernisation, Post-modernisation, Materialistic perspectives, Idealistic perspectives.</li> <li>Indigenous processes - Sanskritisation, Parochialisation - Universalisation, Great-little traditions, Sacred complex:</li> </ul>		III

	<p>Nature-man-spirit complex.</p> <ul style="list-style-type: none"> <li>• Exogenous processes: Westernization, Industrialization, urbanization and globalization. Globalization and its impact on Indian society and culture. Urbanization and its impact on Indian society and culture.</li> </ul>		
IV	<ul style="list-style-type: none"> <li>• Growth of anthropology in India: contributions of the following anthropologists, scholar administrators in 19th and 20th century in the understanding of tribal, caste and village communities and Indian social structure and civilization. List is illustrative: <ul style="list-style-type: none"> <li>• J.H. Hutton</li> <li>• Mortimer Wheeler</li> <li>• Jhon Grierson</li> <li>• A.L. Basham</li> <li>• Haimendorf</li> <li>• V.Elwin</li> <li>• Milton Singer</li> <li>• S.C.Roy</li> <li>• G.S.Ghurye</li> <li>• L.A.K.Aiyer</li> <li>• N.K. Bose</li> <li>• D.N. Majumdar</li> <li>• I.Karve</li> <li>• M.N. Srinivas</li> <li>• S.C. Dube</li> <li>• L.P. Vidyarathi</li> <li>• Mckim Marriott</li> <li>• Robert Redfield</li> <li>• B.R. Ambedkar</li> </ul> </li> </ul>		IV

### Recommended Readings:

1. Agrawal, D.P. The Archaeology of India. Curzon Press, London
2. Allchin, B & Allchin, R. The Rise of Civilization in India and Pakistan. Cambridge University Press
3. Sankalia, H.D. Pre and Proto History of India and Pakistan. Deccan College, Pune
4. Karve, Irawati. Kinship Organisation in India
5. Karve, Irawati. Hindu Society - an interpretation
6. Mandelbaum, D. Society in India Anthropology 82
7. Marriot, M. Village India: Studies in the Little Community.
8. Singh, K. People of India: An Introduction. Anthropological survey of India, Calcutta
9. Vidyarthi, L.P. Sacred complex of Kashi. A microcosm of Indian Civilization, Concept Publication, New Delhi
10. Leach, E.R. Aspects of Caste in South India, Ceylon and North-West Pakistan
11. Singer, M. When a Great Tradition Modernizes
12. Srinivas, M.N. SoCIAL Change in Modern India
13. Haimendorf, C. Tribes of India, the struggle for survival.



14. Singh, K.S. Tribal Society in India
15. Dube S.C. India's Changing Villages
16. B.R. Ambedkar (1916). "Castes in India: Their Mechanism, Genesis and Development". Paper presented at an Anthropology seminar organized by Dr A.A. Golden Wiser in Columbia University on 9 May 1916. Text first printed in Indian Antiquary Vol XLI (May 1917) .
17. Dr BabasahebAmbedkar: Writings and Speeches (1979), Vol I, edited by Vasant Moon, Education Department, Government of Maharashtra, Mumbai

## M.A/M.Sc. (Anthropology)Semester-IV

Program	Subject	Year	Semester
M.A/M.Sc.	Anthropology	2	IV
Course Code	Course Title		Course Type
ANTH 440	Dissertation (Fieldwork/Laboratory Based) (II)		Core
Credit	Hours Per Week(L-T-P)		
	L	T	P
6			10
Maximum Marks	CIA		ESE
100	25		75

\* L- Lecture, T- Tutorial, P- Practical

### Learning Objective (LO):

The course aims to equip students with a deep understanding and acquired advanced research and communication skills, as well as the ability to independently plan, execute, and present a substantial research project in their chosen field of study.

### Course Outcomes (CO):

CO No.	Expected Course Outcomes	CL
	At the end of the course, the students will be able to:	
1	Their theoretical knowledge, conduct original research, and demonstrate their ability to communicate findings effectively.	Ap
2	Describing the research methods, techniques, and approaches used in the field investigation or lab work.	Ap
3	Apply theoretical knowledge, conduct original research, and effectively communicate their findings..	U
4	Summarizing the main conclusions drawn from the research and offering practical recommendations for future studies.	An

CL: Cognitive Levels (R-Remember; U-Understanding; Ap-Apply; An-Analyze; E-Evaluate; C-Create).

### CO-PO/PSO Mapping for the course:

PO CO	POs											PSO				
	1	2	3	4	5	6	7	8	9	10	11	1	2	3	4	5
CO1	3	3	3	2	1	3	3	-	3	3	3	3	3	3	3	3
CO2	3	3	3	2	1	3	3	-	3	3	3	3	3	3	3	3
CO3	3	3	3	2	3	3	3	-	3	3	3	3	3	3	3	3
CO4	3	3	3	3	1	3	3	-	3	3	3	3	3	3	3	3

"3"-Strong;"2"-Moderate;"1"-Low;"-"No Correlation

**Detailed Syllabus: ANTH 440 - Dissertation (Fieldwork/Laboratory Based)**

Unit No.	Topics	No. of Lectures	CO No.
	In Semester IV (Group-A and Group-B) students are required to undertake a Dissertation/Project work consisting of approximately one-month preparatory work, approximately One Month weeks of field investigation/approximately One Month for Lab work and / or data analysis and completion of the Dissertation/Project work. The Dissertation will be selected in consultation with the faculty members decided by Staff Council according to their specialization.		
I	<ul style="list-style-type: none"> <li>• Introduction</li> <li>• Review of Literature</li> </ul>	6	I
II	<ul style="list-style-type: none"> <li>• Preparation of fieldwork tools</li> </ul>		II
III	<ul style="list-style-type: none"> <li>• Fieldwork</li> </ul>		III
IV	<ul style="list-style-type: none"> <li>• Data analysis and Report writing.</li> </ul> <p>Dissertations/Project work will typically be a document of about 100-150 pages with sections in the following sequence:-</p> <ul style="list-style-type: none"> <li>vii. Introduction</li> <li>viii. Review of Literature</li> <li>ix. Methodology</li> <li>x. Result &amp; Discussion</li> <li>xi. Conclusions &amp; Recommendations</li> <li>xii. References</li> </ul>		IV

## M.A/M.Sc. (Anthropology) Semester-IV

Program	Subject	Year	Semester
M.A/M.Sc.	Anthropology	2	IV
Course Code	Course Title		Course Type
ANTH 450	Dissertation (Fieldwork/Laboratory Based) (II)		Core
Credit	Hours Per Week(L-T-P)		
	L	T	P
4			10
Maximum Marks	CIA		ESE
100	25		75

\* L- Lecture, T- Tutorial, P- Practical

### Learning Objective (LO):

The course aims to equip students with a deep understanding and acquired advanced research and communication skills, as well as the ability to independently plan, execute, and present a substantial research project in their chosen field of study.

### Course Outcomes (CO):

CO No.	Expected Course Outcomes	CL
	At the end of the course, the students will be able to:	
1	Their theoretical knowledge, conduct original research, and demonstrate their ability to communicate findings effectively.	Ap
2	Describing the research methods, techniques, and approaches used in the field investigation or lab work.	Ap
3	Apply theoretical knowledge, conduct original research, and effectively communicate their findings..	U
4	Summarizing the main conclusions drawn from the research and offering practical recommendations for future studies.	An

CL: Cognitive Levels (R-Remember; U-Understanding; Ap-Apply; An-Analyze; E-Evaluate; C-Create).

### CO-PO/PSO Mapping for the course:

PO CO	POs											PSO				
	1	2	3	4	5	6	7	8	9	10	11	1	2	3	4	5
CO1	3	3	3	2	1	3	3	-	3	3	3	3	3	3	3	3
CO2	3	3	3	2	1	3	3	-	3	3	3	3	3	3	3	3
CO3	3	3	3	2	3	3	3	-	3	3	3	3	3	3	3	3
CO4	3	3	3	3	1	3	3	-	3	3	3	3	3	3	3	3

"3"-Strong;"2"-Moderate;"1"-Low;"-"No Correlation

**Detailed Syllabus: ANTH 450 - Dissertation (Fieldwork/Laboratory Based)**

Unit No.	Topics	No. of Lectures	CO No.
	In Semester IV (Group-A and Group-B) students are required to undertake a Dissertation/Project work consisting of approximately one-month preparatory work, approximately One Month weeks of field investigation/approximately One Month for Lab work and / or data analysis and completion of the Dissertation/Project work. The Dissertation will be selected in consultation with the faculty members decided by Staff Council according to their specialization.		
I	<ul style="list-style-type: none"> <li>• Introduction</li> <li>• Review of Literature</li> </ul>	4	I
II	<ul style="list-style-type: none"> <li>• Preparation of fieldwork tools</li> </ul>		II
III	<ul style="list-style-type: none"> <li>• Fieldwork</li> </ul>		III
IV	Presentation and Viva-Voce of the Dissertation/Project work will be in the presence of External examiner and faculty of the department.		IV

## M.A/M.Sc.(Anthropology)Semester-IV

Program	Subject	Year	Semester
M.A/M.Sc.	Anthropology	2	IV
Course Code	Course Title		Course Type
ANTH 481	Development Anthropology		Core
Credit	Hours Per Week (L-T-P)		
	L	T	P
5	5	1	-
Maximum Marks	CIA		ESE
100	25		75

\* L- Lecture, T- Tutorial, P- Practical

### Learning Objective (LO):

Understand and examine concept of development and related debates. Identify the different approaches to development and the role of anthropology in planning and execution of development programs. Evaluate the varied measurement and indices of development, assessing different approaches. Critically evaluate development programs in India with especial reference to the marginalized communities.

### Course Outcomes (CO):

CO No.	Expected Course Outcomes	CL
	At the end of the course, the students will be able to:	
1	Discuss and debate concepts like development, planning, the role of anthropology in contributing to development studies, and the reciprocal influence of development studies on anthropological thought and methodology. Explore the moral and ethical considerations and limitations on the practice of Development Anthropology.	U
2	Understand and analyse the intricacies involved in the planning and execution of development initiatives. Explore and examine the participatory approaches, anthropological perspectives, and the roles of different agencies equipped to critically assess and contribute to the field of development.	An
3	Evaluate the impact of development programs, indices and measurements of development and the socio-cultural factors influencing development initiatives.	E
4	Discuss and evaluate the principles of sustainable development and applying the knowledge and analytical skills necessary to engage with and contribute to development efforts targeting marginalized communities.	Ap

CL: Cognitive Levels (R-Remember; U-Understanding; Ap-Apply; An-Analyze; E-Evaluate; C-Create).

## CO-PO/PSO Mapping for the course:

PO CO	POs											PSO				
	1	2	3	4	5	6	7	8	9	10	11	1	2	3	4	5
CO1	3	3	3	-	-	3	3	-	3	3	3	3	3	3	2	3
CO2	3	3	3	-	2	3	3	-	3	3	3	3	3	3	2	3
CO3	3	3	3	-	2	3	3	-	3	3	3	3	3	3	2	3
CO4	3	3	3	-	2	3	3	-	3	3	3	3	3	3	2	3

"3"-Strong; "2"-Moderate; "1"-Low; "-"-No Correlation

### Detailed Syllabus: ANTH481 - Development Anthropology

Unit No.	Topics	No. of Lectures	CO No.
I	<ul style="list-style-type: none"> <li>Development: Meaning and evolution of the concept.</li> <li>Indices and measurements of development.</li> <li>Development theories and Models.</li> <li>Contributions of Anthropology to development studies.</li> <li>Development studies contributions to anthropological thought and method.</li> <li>Moral/Ethical issues and limitations of Development Anthropology.</li> </ul>	5+1	I
II	<ul style="list-style-type: none"> <li>Policy and Planning : Concept of planning, formulation of policy and plan strategy-phases, targets, regions, resources and people; Participatory Approaches in Development, Anthropological perspectives and data in development planning. Conflict in people centered and programme centred paradigms.</li> <li>Agencies for development: Governmental and non-government, approaches, models, administration, training man power, peoples participation.</li> </ul>		II
III	<ul style="list-style-type: none"> <li>Evaluation and Impact:Indices and measures; anthropological approaches- assessment of social impact, evaluation of development programmes. Gender issues in development.</li> <li>Role of values and institutions in development: Caste, religion and culture: Weber, Bailey, Epstein, Milton Singer and Madan.</li> <li>Rural Development in India: Historical Background; Special programmes and poverty alleviation programmes. Land reforms; Panchayati Raj; Community based organizations.</li> </ul>		III
IV	<ul style="list-style-type: none"> <li>Development of Scheduled Castes: Special component plans. Development of Scheduled caste; Constitutionals provisions and safeguards, protective legislation, structure of tribal development.</li> <li>Sustainable development: Environment, natural resources, people concern and needs.</li> <li>Case Studies in Development, NGO case studies in different regions, Success stories in cooperative management.</li> </ul>		IV

## Recommended Readings:

1. Zamora, D. Mario. Perspective on cultural change and Development.
2. Vorhies et al. The Politics of Hunger
3. Rogers Everll, Communication and Development: Critical Perspectives
4. Chambers Robert. Rural Development.
5. Kapoor& Singh. Rural Development Through NGOs
6. Cochrane. Development Anthropology
7. Dalton,George (Ed), Economic Development and Social change
8. Foster,G.M. Traditional Cultures and Impact of Technological change
9. Chansarkar, B.A. Models for Planning in India
10. Krishnamachari, V.T. Community Development in India
11. Tax Sol Anthropology
12. Vidyarthi L.P. (Ed). Applied Anthropology in India
13. Upadhyay, V.S. & Pandey Gaya. VikasatmakManavvigyan (in Hindi), Madhya Pradesh Hindi Granth Academy, Bhopal
14. Schumachr, E. F. Small is Beautiful



## M.A/M.Sc. (Anthropology) Semester-IV

Program	Subject	Year	Semester
M.A/M.Sc.	Anthropology	2	IV
Course Code	Course Title		Course Type
ANTH 482	Ethnomedicine (Group A & B)		Core
Credit	Hours Per Week (L-T-P)		
	L	T	P
5	5	1	-
Maximum Marks	CIA		ESE
100	25		75

**\* L- Lecture, T- Tutorial, P- Practical**

### Learning Objective (LO):

The objective of the course is to provide students a comprehensive understanding of ethnomedicine, including its cultural, spiritual, and ritualistic aspects. They should be able to analyze and interpret various ethnomedical practices, considering the diverse perspectives on health and healing within different cultural contexts.

### Course Outcomes (CO):

CO No.	Expected Course Outcomes	CL
	At the end of the course, the students will be able to:	
1	Students will gain a nuanced understanding of ethnomedicine, disease, illness, health, and sickness. The course explores how these concepts are shaped by cultural, social, and historical factors, emphasizing the importance of cultural perspectives in understanding health and healing practices within diverse communities.	U
2	Explore the cultural perceptions of body image and the multifaceted symbolism associated with the human body in natural, social, cosmological, political, and spiritual contexts. This knowledge is crucial for understanding health and healing practices within diverse cultural frameworks.	Ap
3	Identify and explain of traditional health care practices, including beliefs and practices related to mother and child health. They will explore the roles of traditional medical practitioners, different types of ethnomedical specialists, apprenticeship patterns, and the use of medicinal plants, animal derivatives, minerals, and other therapeutic approaches in diverse cultural contexts.	Ap
4	Describe the cultural dimensions of healing and therapy through the study of rituals. This includes rituals related to inviting healing forces, therapeutic actions, prevention, and expressions of gratitude. Additionally, the course covers the ethnomedical pathway, providing an understanding of the stage's patients go through in seeking traditional healing.	Ap

CL: Cognitive Levels (R-Remember; U-Understanding; Ap-Apply; An-Analyze; E-Evaluate; C-Create).

**CO-PO/PSO Mapping for the course:**

PO CO	POs											PSO				
	1	2	3	4	5	6	7	8	9	10	11	1	2	3	4	5
CO1	3	-	3	-	-	3	3	-	3	3	3	3	3	3	2	2
CO2	3	-	3	-	-	3	3	-	3	3	3	3	3	1	2	-
CO3	3	-	3	-	-	3	3	-	3	3	3	3	3	1	2	-
CO4	3	-	3	-	-	3	3	-	3	3	3	3	3	1	2	1

"3"-Strong; "2"-Moderate; "1"-Low; "-"-No Correlation

**Detailed Syllabus: ANTH 482- Ethnomedicine (Group A & B)**

Unit No.	Topics	No. of Lectures	CO No.
I	<ul style="list-style-type: none"> <li>• Definition and concept of ethnomedicine: Definitions of disease, illness, health and sickness.</li> <li>• Disease classification concepts.</li> <li>• Natural and supernatural pathogenic agents. Illness or etiological ideology.</li> </ul>	5+1	I
II	<ul style="list-style-type: none"> <li>• People’s perception of ethnophysiology and ethnoanatomy</li> <li>• Ethno-nutritional concepts in relation to preventive, promotive and curative health and morbidity</li> <li>• Perception of body image, including body constitution, composition, elements that contribute to the survival of body and soul. Human body as a natural, social, cosmological, political and spiritual symbol in the context of ritual healing.</li> </ul>		II
III	<ul style="list-style-type: none"> <li>• Mother and child health care beliefs and practices.</li> <li>• Nature and role of traditional medical practitioners</li> <li>• Different types of ethnomedical specialists, their stats and medical functions Apprenticeship pattern</li> <li>• Medical knowledge of practitioners</li> <li>• Medicinal plants administered for various diseases Animal derivatives administered for various diseases Medicines extracted from minerals</li> <li>• Other therapies employed</li> </ul>		III
IV	<ul style="list-style-type: none"> <li>• Healing rituals: rituals of inviting healing forces for diagnosis and treatment, collecting, preparing and administrating medicines.</li> <li>• Therapeutic rituals:</li> <li>• Rituals of appeasing spirits, Rituals of compromise,</li> <li>• Rituals of warding off pathogenic agents/evil effect, Rituals of killing pathogenic agents,</li> <li>• Rituals of purification, Rituals of prevention, Thanks giving rituals</li> <li>• Ethnomedical pathway- the processes or stages through which a patient passes to get himself cured.</li> <li>• Cultural factors that influence decision to choose and change a therapy</li> </ul>		IV

## Recommend Reading:

1. Caulie William(1955), Applied Anthropology in Medicine, edited by Kroeber A.R., Anthropology Today
2. Foster George(1983), An Introduction to Ethnomedicine edited by Bannerman and others, Traditional Medicine and Health Coverage, WHO, Geneva
3. Hughes Charles(1968), Ethnomedicine, Encyclopedia of Social Sciences, VolX, USA
4. Kurian J.C. and Bhanu B.V.(1980), Ethnomedicine : A Study of Nomadic Vaidus of Maharashtra, Eastern Anthropologist, Vol 33, No.1, pp 71-78,Lucknow
5. Kurian.C. and Robin(1990), TraditionalMedicalPractitionersoftheSahyadri,EasternTribhuwanR Anthropologist, Vol 43 No. 3,pp 251-258, Lucknow
6. Turner Victor(1967), The Forest of Symbols, Cornell University Press, USA
7. Tribhuwan Robin(1998), Medical World of Tribals (An Exploration in Illness Ideology, Body Symbolism and Ritual Healing), Discovery Publishers, New Delhi
8. Tribhuwan Robin and Gambhir R.D.(1995), Ethnomedical Pathway : A Conceptual Model, edited by Jain N.S. and Tribhuwan Robin, An Overview of Tribal Research Studies, TR&TI, Pune
9. Jose Baban K (1998), Tribal Ethnomedicine (Continuity and Change), A.P.H., Publishing Corporation, New Delhi
10. Lieban Richard(1973), Medical Anthropology, Handbook of Social and Cultural Anthropology,editedbyJohnHonigman,RandMcNallyCollegePublis hingCo,Chicago
11. Hasan K.A.(1967), The Cultural Frontiers of Health in Village India, Manaktalaand Sons, Bombay
12. Kakar D.N. (1977), Folk and Modern Medicine, New Asian Publishers, NewDelhi
13. Young Allan(1982), The Anthropology of Illness and Sickness, Annual Review of Anthropology,No.11,pp.257-285

## M.A/M.Sc. (Anthropology) Semester-IV

Program	Subject	Year	Semester
M.A/M.Sc.	Anthropology	2	IV
Course Code	Course Title		Course Type
ANTH 483	Human Reproduction and Reproductive Health (Group A & B)		Core
Credit	Hours Per Week(L-T-P)		
	L	T	P
5	5	1	-
Maximum Marks	CIA		ESE
100	25		75

\* L- Lecture, T- Tutorial, P- Practical

### Learning Objective (LO):

This course aims to cultivate a profound comprehension of the evolution and embryological development, analyze the structural organization and function of Wolffian and Mullerian ducts, reproductive ecology and energetics, including variations in fertility, menstrual characteristics, and menopause. Analyze the roles of physiological, behavioral, and environmental factors in regulating reproductive output.

### Course Outcomes (CO):

CO No.	Expected Course Out comes	CL
	At the end of the course, the students will be able to:	
1	Explain the evolutionary processes and embryological development of the reproductive systems, including the male and female gonads, gonadal ducts, external genitalia, Wolffian ducts, and Mullerian ducts.	Ap
2	Describe evolutionary processes and embryological development of the reproductive systems, including the male and female gonads, gonadal ducts, external genitalia, Wolffian ducts, and Mullerian ducts.	Ap
3	Exploring variations in fertility, menstrual characteristics, the phenomenon of menopause, and the intricate roles of physiological, behavioral, and environmental factors in shaping reproductive patterns in human populations.	U
4	Understanding of the male reproductive system, its interactions with the environment, and the potential factors that can lead to homeostatic imbalance. This knowledge is crucial for individuals interested in reproductive biology, environmental health, and public health.	An

CL: Cognitive Levels (R-Remember; U-Understanding; Ap-Apply; An-Analyze; E-Evaluate; C-Create).

## CO-PO/PSO Mapping for the course:

PO CO	POs											PSO				
	1	2	3	4	5	6	7	8	9	10	11	1	2	3	4	5
CO1	3	2	3	-	3	3	3	-	3	3	3	3	3	2	1	-
CO2	3	2	3	-	3	3	3	-	3	3	3	3	3	2	1	-
CO3	3	2	3	-	3	3	3	-	3	3	3	3	3	2	2	-
CO4	3	2	3	-	3	3	3	-	3	3	3	3	3	2	2	-

"3"–Strong; "2"–Moderate; "1"-Low; "-"-No Correlation

### Detailed Syllabus: ANTH 483- Human Reproduction and Reproductive Health

Unit No.	Topics	No. of Lectures	CO No.
I	<ul style="list-style-type: none"> <li>Reproductive Systems: Evolution of male and female gonads, embryological development of gonads, gonadal ducts and external genitalia</li> </ul>	5+1	I
II	<ul style="list-style-type: none"> <li>Wolffian duct structural organisation and function; Mullerian duct structural organisation and function; evolution of Mullerian duct and adaptations for pregnancy.</li> </ul>		II
III	<ul style="list-style-type: none"> <li>Human reproductive ecology and energetics: definition, concept, variation in fertility, menstrual characteristics, menopause in the human species, and the roles of physiological, behavioural, and environmental factors in regulating reproductive output.</li> </ul>		III
IV	<ul style="list-style-type: none"> <li>Male reproductive health and reproductive ecology, homeostatic imbalance.</li> </ul>		IV

### Recommended Readings:

1. Tsui, Amy O., Judith N. Wasserheit, and John G. Haaga (eds.) (1997). *Reproductive Health in Developing Countries*. Washington, D.C.: National Academy Press.
2. Joseph Truglio, Rita S. Lee, Barbara E. Warren, Rainier Patrick Soriano (2022). *Sexual and Reproductive Health; Practical Guide for Primary Care*. Springer Cham.
3. Shira M. Goldenberg, Ruth Morgan Thomas, Anna Forbes, Stefan Baral (2021). *Sex Work, Health, and Human Rights. Global Inequities, Challenges and Opportunities for Action*. Advances in Prevention Sciences.
4. Chris Bobel, Inga T. Winkler, Breanne Fahs, Katie Ann Hasson, Elizabeth Arveda Kissling, Tomi-Ann Roberts (2020). *The Palgrave Handbook of Critical Menstruation Studies*. Advances in Prevention Sciences.
5. Kaoshal, S. (2011) *Indian Women Health , Education and Poverty*, Arvind Prakashan, Udaipur (Rajasthan)
6. Sinha Archana (2009) *Reproductive Rights and Women Empowerment, Education and Poverty*, Arvind Prakashan, Udaipur (Rajasthan)
7. Desai Ranjana (2009) *Health, Family Planning and Social Welfare, Education and Poverty*, Arvind Prakashan, Udaipur (Rajasthan)

8. Mishra (2011) Women Health and Social Issues, Education and Poverty, Arvind Prakashan, Udaipur (Rajasthan)
9. Singh (2012) Women, Femininity and Health, Education and Poverty, Arvind Prakashan, Udaipur (Rajasthan)
10. Koenig M (ed) (2008) Reproductive Health in India: New Evidence. Rawat Publication, New Delhi.
11. Verma A (2018) Womens Health and Nutrition. Rawat Publication, New Delhi.
12. Kabra SG (2013) Abortion in India : Myth and Reality. Rawat Publication, New Delhi.
13. Jouanjean B. (2011) Health, Culture and Society Rawat Publication, New Delhi.

## M.A/M.Sc. (Anthropology) Semester-IV

Program	Subject	Year	Semester
M.A/M.Sc.	Anthropology	2	IV
Course Code	Course Title		Course Type
ANTH 491	Anthropology of Disaster, Displacement & Rehabilitation		Core
Credit	Hours Per Week(L-T-P)		
	L	T	P
5	5	1	-
Maximum Marks	CIA		ESE
100	25		75

\* L- Lecture, T- Tutorial, P- Practical

### Learning Objective (LO):

Distinguish the displacements due to disasters and development and their impact on communities. Study the traditional and indigenous methods of disaster management, migration patterns as well as resettlements. Examine and evaluate the social cost of displacement and rehabilitation. Appraise the various socio-cultural, economic and ecological aspects of displacement and rehabilitation.

### Course Outcomes (CO):

CO No.	Expected Course Outcomes	CL
	At the end of the course, the students will be able to:	
1	Explore the cultural, social and psychological dimensions of disasters, gaining insights into how different communities perceive and respond to these events. Examine the insights provided in folklores and explore the cultural narratives and beliefs that shape people's experiences with disasters.	An
2	Understanding humanitarian response and the social impacts of various catastrophic events.	Ap
3	Examine, analyze and evaluate the socio-cultural, economic, and environmental dimensions of displacement caused by dams, transportation projects, urban development, industrialization, conservation initiatives, and defense projects.	E
4	Explore the anthropological dimensions of human experiences, cultural influences, and community dynamics in the rehabilitation process. Observe, correlate and analyze the importance of religious and familial considerations in relocation efforts, highlighting the need for culturally sensitive and community-driven rehabilitation strategies.	An

CL: Cognitive Levels (R-Remember; U-Understanding; Ap-Apply; An-Analyze;E-Evaluate;C-Create).

## CO-PO/PSO Mapping for the course:

PO CO	POs											PSO				
	1	2	3	4	5	6	7	8	9	10	11	1	2	3	4	5
CO1	3	3	3	-	-	3	3	-	3	3	3	3	3	1	3	-
CO2	3	3	3	-	-	3	3	-	3	3	3	3	3	1	3	-
CO3	3	3	3	-	2	3	3	-	3	3	3	3	3	3	1	-
CO4	3	3	3	-	2	3	3	-	3	3	3	3	3	3	3	-

"3"-Strong; "2"-Moderate; "1"-Low; "-"No Correlation

### Detailed Syllabus: ANTH 491- Anthropology of Disaster, Displacement & Rehabilitation

Unit No.	Topics	No. of Lectures	CO No.
I	<ul style="list-style-type: none"> <li>• Definition of disaster.</li> <li>• Nature of disaster.</li> <li>• Anthropological prospective on disaster: Natural and manmade disaster.</li> <li>• Natural disaster: Causes and classification.</li> <li>• People's perception of disaster. Folklore of disaster.</li> </ul>	5+1	I
II	<ul style="list-style-type: none"> <li>• Natural situation of disaster: 1. Floods 2. Epidemics 3. Famines 4. Earthquakes 5. Fire 6. Cyclones.</li> <li>• Manmade situation of disaster: 1. Chemical and nuclear leaks 2. Wars 3. Terrorism in India 4. Ethnic conflicts: Naxalism/Maoism</li> </ul>		II
III	<ul style="list-style-type: none"> <li>• Development and Displacement: 1. Dams 2. Roads and Railways 3. Development of cities 4. Establishment of industries 5. National Parks and Sanctuaries 6. Defence projects.</li> </ul>		III
IV	<ul style="list-style-type: none"> <li>• Rehabilitation policies of disaster management,</li> <li>• Human factor and rehabilitation: Anthropological prospective.</li> <li>• Group coordination for relocating/ reorganization of religious places.</li> <li>• Restoration of families and organizing help for shelter, food and medical treatment</li> </ul>		IV

### Recommended Readings:

1. Bose, B.P.C. Disaster Policies and Administration: A Study of Three Andhra Disasters
2. Cohen, Stephen P. and C.V. Raghavulu: The Andhra Cyclone of 1977. Individual and Institutional Responses to Mass Death
3. Fernandes, Walter and Enakshi Ganduli: Development, Displacement and Rehabilitation.



## M.A/M.Sc.(Anthropology)Semester-IV

Program	Subject	Year	Semester
M.A/M.Sc.	Anthropology	2	IV
Course Code	Course Title		Course Type
ANTH 492	Anthropology of Communication (II)		Elective
Credit	Hours Per Week (L-T-P)		
	L	T	P
5	4	1	-
Maximum Marks	CIA		ESE
100	25		75

**\* L- Lecture, T- Tutorial, P- Practical**

### Learning Objective(LO):

Understand and discuss communication- interpersonal as well as mass communication-historically and contemporary with especial focus on folk communication. Explore and examine the role of communication in socialization, development, religion, medicine etc and the traditional and modern technology of mass communication.

### Course Outcomes(CO):

CO No.	Expected Course Outcomes	CL
	At the end of the course, the students will be able to:	
1	Holistic understanding of communication, including its theoretical foundations, diverse perspectives, and practical applications across different channels and contexts.	U
2	Explore the theoretical foundations of mass communication, the transformative effects of new communication technologies, and the influential role of television in shaping cultural narratives.	An
3	A nuanced understanding of how culture and communication are intertwined. Explore the role of socialization in transmitting cultural knowledge, the dynamics of language as a cultural tool, and the various forms of expression, including non-verbal communication and visual arts.	An
4	Explore how communication influences urbanization, modernization, and societal change, as well as its impact on different demographic groups. Additionally, the syllabus addresses the specific role of educational media institutions in disseminating knowledge through television and other platforms.	E

CL : Cognitive Levels (R-Remember; U-Understanding; Ap-Apply; An-Analyze; E-Evaluate; C-Create).

**CO-PO/PSO Mapping for the course :**

PO CO	POs											PSO				
	1	2	3	4	5	6	7	8	9	10	11	1	2	3	4	5
CO1	3	1	2	-	3	3	3	-	3	3	3	3	3	2	1	-
CO2	3	3	2	-	3	3	3	-	3	3	3	3	3	-	1	-
CO3	3	1	2	-	3	3	3	-	3	3	3	3	3	-	1	-
CO4	3	3	2	-	3	3	3	-	3	3	3	3	3	-	1	-

"3"-Strong; "2"-Moderate; "1"-Low; "-"No Correlation

**Detailed Syllabus: ANTH492- Anthropology of Communication (II)**

Unit No.	Topics	No. of Lectures	CO No.
I	<ul style="list-style-type: none"> <li>• Meaning and definition of communication. The nature, role and functions of communication; human communication, approaches to study of communication - Anthropological, Sociological and Psychological perspectives of communication. Theories and models of communication.</li> <li>• Channels of communication: Inter personal and oral communication, mass communication. transport communication, electronic media, satellite communication. The process of information dissemination</li> </ul>	5+1	I
II	<ul style="list-style-type: none"> <li>• Folk Media: Folk dance, drama, songs, tales, puppet show, storytelling, music, theatre and their communication potentiality.</li> <li>• Integrated use of folk media and mass media, art and visual communication. dormitories.</li> <li>• Mass Media: The elements of mass communication theories, new communication technologies and communication revolution, role of television - films, musicals, family serials and mythologies.</li> </ul>		II
III	<ul style="list-style-type: none"> <li>• Culture and Communication: Culture, history and technology.</li> <li>• Socialization as cultural communication</li> <li>• Language and communication: Verbal and non-verbal communication. Art in Anthropological perspectives, photographs and pictures, kinetics (gestural communication)</li> </ul>		III
IV	<ul style="list-style-type: none"> <li>• Development communication: Relationship between communication and development, communication and urbanization, modernization process. The effects of mass media on youth, children, women; disadvantaged group. The role of communication in education, agriculture, health and family welfare and national development - Communication and the dynamics of social and cultural change.</li> <li>• TV and educational media: UGC, IGNOU, National Geographic, Discovery, etc.</li> </ul>		IV

## Recommended Readings:

1. Rogers, E.M.                      Communication of Innovation
2. Nair, S.&White, S.              Perspective on Development Communication
3. Rogers, Everall.                Communication and Development : Critical Perspectives
4. Fisher, Audrey B.                Perspective on Human Communication
5. Kincaid, LowrenceD.            Communication Theories: Eastern and Western Perspective

## M.A/M.Sc. (Anthropology) Semester-IV

Program	Subject	Year	Semester
M.A/M.Sc.	Anthropology	2	IV
Course Code	Course Title		Course Type
ANTH 493	Anthropology of Gender		Elective
Credit	Hours Per Week (L-T-P)		
	L	T	P
5	4	1	-
Maximum Marks	CIA		ESE
100	25		75

\* L- Lecture, T- Tutorial, P- Practical

### Learning Objective (LO):

Understand concepts of gender, gender disparity, discrimination, gender-roles, socio-economic opportunities, and the politics of gender with especial reference to the Indian society.

### Course Outcomes (CO):

CO No.	Expected Course Outcomes	CL
	At the end of the course, the students will be able to:	
1	Explore the multifaceted concept of gender, covering its evolution, social and biological theories, social construction, and the intricate interplay between gender and socialization. The syllabus also delves into the role of social structure, such as kinship, caste, and family, in shaping gender relations.	U
2	Explore the role of development initiatives in shaping and transforming gender dynamics. Understanding key terms and indices related to gender development will equip students with the necessary tools for critical analysis in the field of gender studies and development studies.	An
3	Critically analyze the effects of globalization on gender disparities in employment and economic participation. This knowledge is essential for individuals interested in advocating for gender-inclusive policies and contributing to sustainable and equitable economic development.	E
4	Examine gender in the context of Indian society and acquire a nuanced understanding of how gender roles and expectations vary across tribal, rural, and urban settings in different regions of India.	An

CL: Cognitive Levels (R-Remember; U-Understanding; Ap-Apply; An-Analyze; E-Evaluate; C-Create).

## CO-PO/PSO Mapping for the course:

PO CO	POs											PSO				
	1	2	3	4	5	6	7	8	9	10	11	1	2	3	4	5
CO1	3	3	-	-	2	3	3	1	3	3	3	3	3	2	1	3
CO2	3	3	-	-	2	3	3	1	3	3	3	3	3	-	1	-
CO3	3	3	-	-	2	3	3	2	3	3	3	3	3	-	1	-
CO4	3	3	--	-	2	3	3	2	3	3	3	3	3	-	1	-

"3"-Strong;"2"-Moderate;"1"-Low;"-"No Correlation

### Detailed Syllabus: ANTH493- Anthropology of Gender

Unit No.	Topics	No. of Lectures	CO No.
I	<ul style="list-style-type: none"> <li>• Concept of Gender: evolution of concept of gender, social and biological theories of gender, social construction of gender, gender and socialization, cross cultural concept of gender, approaches to gender studies.</li> <li>• Gender Role and Social Structure: gender role, gender differences in social role, social, psychological and cultural factors determining gender relationship, role of social structure (kinship, caste, family) in determining gender relation. Theoretical framework for gender role analysis, gender role analysis with specific reference to patriarchal and matriarchal societies.</li> </ul>	5+1	I
II	<ul style="list-style-type: none"> <li>• Gender and socio-cultural change: comparative status of men and women in society, impact of changing cultural values on the role, status and gender relationship, sources of change and its differential impact across cultures.</li> <li>• Gender and development: concept of development, need to consider development from gender perspective. Theories, models, and strategies, for gender development. Definitions of terms like gender sensitive, gender equity and gender discrimination. Gender Development Index.</li> </ul>		II
III	<ul style="list-style-type: none"> <li>• National and international policies of development and their impact on the gender. Discuss gender and community development with reference to various gender sensitive projects.</li> <li>• Gender and Economy: impact of globalization on gender, participation of gender in national and local economy, gender and employment, discussion on participation of women in economic activity with reference to some facts and figures from World development report.</li> </ul>		III
IV	<ul style="list-style-type: none"> <li>• Gender and Health: concepts and their assessment in Gender framework: fertility, sexuality, reproductive health needs. Issues in gender, health and development. Gender construct and mental health, gender and abuse, violence and its link to the social structure and culture. Gender and violence: definition and</li> </ul>		IV

	<p>dilemmas, cultural difference in the expression of gender violence.</p> <ul style="list-style-type: none"> <li>• Gender in the context of Indian Society: explain concept of gender with reference to tribal, rural and urban context. Compare and contrast status of women and gender role across various regions in India.</li> </ul>		
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### Recommended Readings:

1. Monica Dasgupta, 1995 Women's health in India Risk and Vulnerability, Oxford University Press  
Lincoln C.Chen, T.N. Krishnan(Eds.)
2. Ardener, Shirley 1985 The social anthropology of women and feminist anthropology, Anthropology Today, 1, 5, 24
3. Atkinson, Jane M and Power and Difference : Gender in island south east Asia, Stanford: Shelly Errington, (Eds) Stanford University Press 1990
4. Chanana, Karuna Socialization, education and women : Explorations in Gender (ed) 1988 identity, Nehru Memorial Museum and Library and Orient Longman
5. Srinivas, M.N. Caste : Its 20<sup>th</sup> century avatar, New Delhi, Viking Penguin, India (Ed) 1996
6. Dube, Leela Comparative perspective on gender in South and Southeast Asia, Tokyo : United University Press, New Delhi: Vistaar 1997
7. Dube, Leela. Leacock, E. Visibility and Power : Essays on women in society and development, Delhi : Oxford University Press (Eds) 1986, 1989
8. Dube, Leela and Rajni Palriwala Structures and Strategies : Women, work and family, New Delhi, Sage (Eds) 1990
9. Moore, Henrietta 1988 Feminism and Anthropology, Minneapolis: University of Minnesota Press
10. Palawala, R. 1994 Changing Kinship, family and gender relations in South Asia : Processes, trends, issues Women and Autonomy Centre, University Leiden, Leiden
11. Sargent, C and 1996 Gender and Health : an International Perspective, Upper Brettell, Saddle River, NJ: Prentice Hall
12. World Bank Report Gender and Poverty in India 1991
13. Shireen Jejeebhoy, 1995 Women's education, Autonomy and reproductive health, Oxford University Press, New York

## Semester-I

**Skill Enhancement/Value Added Courses: (Offered to the PG students of SoS in Anthropology)**

Semester	Course Code	Course Title	Course Type (T/P)	Hrs/Week	Credits	Marks		
						CIA	ESE	Total
I	ANTH 510	Indian Knowledge System (IKS)	T	4	2	25	75	100

### M.A/M.Sc.(Anthropology)

Program	Subject	Year	Semester
M.A/M.Sc.	Anthropology	2	I
Course Code	Course Title		Course Type
ANTH510	Indian Knowledge System (IKS)		Core
Credit	Hours Per Week (L-T-P)		
	L	T	P
2	4	-	-
Maximum Marks	CI A	ESE	
100	25	75	

\* L- Lecture, T- Tutorial, P- Practical

#### **Learning Objective (LO):**

The course aims to equip students with a deep understanding of a holistic education that integrates traditional and indigenous knowledge systems with contemporary academic and practical applications. To foster appreciation and respect for diverse cultural practices and beliefs. To develop students' critical thinking skills in analyzing and applying traditional knowledge systems. Students with practical knowledge and skills for using traditional and indigenous knowledge in various fields such as healthcare, environmental conservation, and economic development.

#### **Course Outcomes (CO):**

CO No.	Expected Course Outcomes	CL
	At the end of the course, the students will be able to:	
1	Students should be able to critically engage with and apply their knowledge of the Indian Knowledge System in various contexts, appreciating its depth, diversity, and cultural significance.	U
2	Students should have a well-rounded understanding of how traditional and indigenous knowledge systems operate, their applications in various fields, and	Ap

	their significance in addressing modern-day challenges.	
3	The end of the course, students should be able to critically engage with ethnomedical practices, understand their cultural significance, and apply this knowledge in various contexts related to health and disease.	U
4	This course, students should be well-equipped to understand and appreciate the interconnectedness of biodiversity, culture, and folklore, and to apply this knowledge in various academic and practical contexts.	An

CL : Cognitive Levels (R-Remember; U-Understanding; Ap-Apply; An-Analyze; E-Evaluate; C-Create).

### CO-PO/PSO Mapping for the course:

PO CO	POs											PSO				
	1	2	3	4	5	6	7	8	9	10	11	1	2	3	4	5
CO1	3	3	3	-	3	3	3	-	3	3	3	3	3	3	3	3
CO2	3	3	3	-	3	3	3	-	3	3	3	3	3	3	3	3
CO3	3	3	3	-	3	3	3	-	3	3	3	3	3	3	3	3
CO4	3	3	3	-	3	3	3	-	3	3	3	3	3	3	3	3

"3"-Strong;"2"-Moderate;"1"-Low;"-"No Correlation

### Detailed Syllabus: ANTH 510- Indian Knowledge System (IKS)

Unit No.	Topics	No. of Lectures	CO No.
I	<ul style="list-style-type: none"> <li>Introduction to Indian Knowledge System Meaning, aim and scope of traditional and indigenous knowledge system Distinction between traditional and indigenous knowledge system. Ethical and Moral Issues of Traditional and Indigenous Knowledge system.</li> <li>Perception of body image, including body constitution, composition, elements that contribute to the survival of body and soul. Human body as a natural, social, cosmological, political and spiritual symbol in the context of ritual healing.</li> <li>Rituals of appeasing spirits, Rituals of compromise,</li> <li>Rituals of warding off pathogenic agents/evil effect Rituals of killing pathogenic agents.</li> <li>Rituals of purification Rituals of prevention, Thanks giving rituals Ethnomedical pathway the processes or stages through which a patient passes to get himself cured.</li> <li>Ecocosmology: Meaning, definition and basic concept.</li> </ul>		I
II	<ul style="list-style-type: none"> <li>Indigenous and local technology- Iron smelting, Carpentry, Oil pressing technology, Jaggery making, Beverage preparation technology- Mahua, Hadia, Landa, Tadi, Chhind, Salfi etc., Traditional Irrigation Technology.</li> <li>Indigenous knowledge for forecasting weather, rainfall,</li> </ul>		II



	<p>favorable conditions for agriculture fishing, horticulture etc.</p> <ul style="list-style-type: none"> <li>• Economy and poverty reduction with traditional knowledge system.</li> <li>• Indigenous Knowledge and Climate change challenges ahead. Indigenous knowledge and disaster.</li> </ul>	4	
III	<ul style="list-style-type: none"> <li>• Definition and concept of ethnomedicine, Definitions of disease, illness, health and sickness.</li> <li>• Natural and supernatural pathogenic agents. Etiological of illness &amp; disease.</li> <li>• People's perception of ethnophysiology</li> <li>• Ethno-nutritional concepts in relation to preventive, promotive and curative health and morbidity.</li> <li>• Mother and child health care beliefs and practices.</li> <li>• Medicinal plants administered for various diseases. Animal derivatives administered for various diseases. Medicines extracted from minerals</li> <li>• Healing rituals: rituals of inviting healing forces for diagnosis and treatment, collecting, preparing and administrating medicines.</li> <li>• Therapeutic rituals Magico-religious practices. Traditional and Indigenous Healers.</li> </ul>		III
IV	<ul style="list-style-type: none"> <li>• Biodiversity, conservation and culture, international and national policy on biodiversity indigenous and local communities</li> <li>• Indigenous knowledge for development, traditional knowledge and its role in the global perspectives.</li> <li>• Introducing Folklore and Folkloristics- Introduction to Folklore, Folklore and Folkloristics, Theories and Methods of Folkloristics</li> <li>• Describing and Transmitting Folklore- Genre and Typeset study, Normal form distribution study, Indexing and codification.</li> <li>• Folklore and Discourse- Folklore and Feminism, Folklore, Identity and Ideology, Folklore and Heritage</li> <li>• Current Trends in Folkloristics- Urban Folklore, Folklore and Media representation, Ecocriticism and Ethnopoetics</li> </ul>		IV

### Recommended Readings:

1. Sharma, A.N. "Indigenous Health Care and Ethno-Medicine" by, Stephen. The Aboriginal Tribes of India
2. Intangible Cultural Heritage of India - Ethno-Medicine in India: A Selective Bibliography - Vol. 2" by Kamal Kant Misra and Mohammad Rehan
3. "Ethno-psychopharmacology: Advances in Current Practice (Cambridge Medicine (Hardcover))" by Chee H Ng and Keh-Ming Lin
4. "Ethno-Veterinary Medicine Practices in Forest fringe area of WB,India" by Sourav Chanda and Sukanta Biswas
5. Lazar, G. & Mishra, K.K. (2019). Exploring Indigenous Knowledge System in India. Mittal Publication
6. Wilson, S. (2009). Research Is Ceremony: Indigenous Research Methods (Paperback)

7. Pant, R.M. & Srivastava, M.K. (2020). Indigenous Knowledge Systems for Sustainable Rural Development in North East India.
8. Elizabeth Sumida Huaman, Nathan D. Martin (). Indigenous Knowledge Systems and Research Methodologies
9. Ghosh, A.K. (2013). Indigenous Knowledge On Ethnobotany. Daya Publishing House.
10. Sengupta, S. (2012). Indigenous Knowledge Traditions. Gyan Publishing House
11. Gumbo, M.T. & Williams, P.J. (2023). Indigenous Technology Knowledge Systems: Decolonizing the Technology Education Curriculum (Contemporary Issues in Technology Education)
12. Mahadevan, B. Bhat, V. R. & Nagendra, P.R.N (2022) INTRODUCTION TO INDIAN KNOWLEDGE SYSTEM : CONCEPTS AND APPLICATIONS
13. Kapoor, K. & Singh, A.K. (2005). Indian Knowledge systems. D.K. Printworld. Vol. 1
14. Kapoor, K. & Singh, A.K. (2024). Indian Knowledge systems. D.K. Printworld. Vol. 2

## Semester-II

**Generic Elective Courses: (Offered to PG students of other Departments/ SoS only)**

Semester	Course Code	Course Title	Course Type (T/P)	Hrs/ Week	Credits	Marks		
						CIA	ESE	Total
II	ANTH 530	Anthropology of Crime & Criminology	T	2	1	15	50	100
			P	2	1	10	25	

## M.A/M.Sc.(Anthropology)

**Skill Enhancement/Value Added Courses: (Offered to the PG students of SoS in Anthropology)**

Program	Subject	Year	Semester
M.A/M.Sc.	Anthropology	1	I
Course Code	Course Title		Course Type
ANTH430	Anthropology of Crime and Criminology		Core
Credit	Hours Per Week (L-T-P)		
	L	T	P
2	2	-	2
Maximum Marks	CIA		ESE
100	25		75

\* L- Lecture, T- Tutorial, P- Practical

### Learning Objective (LO):

1. To apply cultural relativism to understand outlaw and law enforcement cultures from an emic perspective.
2. To critically evaluate the consequences of public policy and law enforcement strategies, both intended and unintended.
3. To discuss issues of research methods and research ethics with populations with highly vulnerable, possibly dangerous and highly politicized research populations and writing about said research for a variety of audiences. Anthropology 3533 Anth. of Crime and Crim. Syllabus Spring 2021 2
4. To apply anthropological theory to ethnographic material, especially in regard to concerns of power, inequality, and health. • To improve academic reading comprehension, summarization skills, analytical skills and presentation skills • To practice taking on the world view of others and self reflexively challenge one's own worldview and biases
5. To practice critical thinking and collegial discussion
6. To improve academic writing and editing skills through drafting, reviewing and revising written works.

## Course Outcomes(CO):

CO No.	Expected Course Outcomes	CL
	At the end of the course, the students will be able to:	
1	The anthropological understanding of crime, criminalization processes, and the various cultural and social factors that influence criminal behavior. The syllabus also touches on gender dynamics, organized crime, and the interactions between anthropology, law enforcement, and private security.	Ap
2	The historical development of anthropological approaches to crime, the debunking of criminological myths, and the multifaceted study of criminals encompassing physical, mental, and demographic aspects. The syllabus also explores the influence of environmental factors, heredity, and cultural variations in the understanding of crime and justice.	Ap
3	Students will gain a comprehensive understanding of the origins and diverse theoretical perspectives within the field of criminology. The syllabus emphasizes the interdisciplinary nature of criminology and introduces students to various schools of thought that have shaped the study of criminal behavior.	U
4	Students will gain a comprehensive understanding of the conceptualization of crime, the psychological aspects of criminal behavior, strategies for crime prevention, the legal framework governing social prevention, and various institutions within the criminal justice system.	An

CL : Cognitive Levels (R-Remember; U-Understanding; Ap-Apply; An-Analyze; E-Evaluate; C-Create).

## CO-PO/PSO Mapping for the course:

PO CO	POs											PSO				
	1	2	3	4	5	6	7	8	9	10	11	1	2	3	4	5
CO1	3	3	3	-	2	3	3	-	3	3	3	3	3	3	3	3
CO2	3	3	3	-	2	3	3	-	3	3	3	3	3	3	3	3
CO3	3	3	3	-	2	3	3	-	3	3	3	3	3	3	3	3
CO4	3	3	3	-	2	3	3	-	3	3	3	3	3	3	3	3

"3"-Strong;"2"-Moderate;"1"-Low;"-"No Correlation

## Detailed Syllabus: ANTH430- Anthropology of Crime and Criminology

Unit No.	Topics	No. of Lectures	CO No.
I	<ul style="list-style-type: none"> <li>Introduction to the anthropology of crime and criminalization. Crime and society. Criminal anthropology. Criminalizing race/culture. Criminalizing race/class. Gangster or Social Bandit. Ethnographic examples of social banditry. The Hustler. Producing delinquency. Gender and law. Gender, space/time, and danger. Narrative, self, and crime. Anthropology of organised crime and mafia. Anthropology, police and private security.</li> </ul>		I
II	<ul style="list-style-type: none"> <li>Anthropology and crime: A brief history. Image of the criminal: Born criminals and criminological myths. The Physique of</li> </ul>		II

	Criminals. Age as an Etiological Factor in Crime. The Criminal's Vital Statistics: Health, Disease, Mortality, Enumeration. The Mental Differentiation of the Criminal. The Influence of the "Force of Circumstances." The Fertility of Criminals. The Influence of "Heredity" on the Genesis of Crime. Cultures, law and justice.	4	
III	<ul style="list-style-type: none"> <li>• Definition, aims, nature and scope of Criminology. History and Development of Criminology. Relationship of Criminology with other sciences: Forensic science, Psychology, Anthropology, Sociology and Law. Schools of Criminology and its Concept. Pre-classical School: Demonological, School of Freewill, Classical School, Neo- Classical School, Geographical School, Socialistic School, Italian School, Psychological School, Multifactor Theory.</li> </ul>		III
IV	<ul style="list-style-type: none"> <li>• The Characteristics and Relationship of Concept of Crime. The Concept of Crime and its Socio-Legal Aspects. Criminal Psychology. Prevention of crime. The concept of Social Prevention and limits of its functioning. The basic principle of the Legal regulation of Social Prevention. Juvenile Court, Rehabilitation Homes, Reformatories. Objects of Punishment and its Critical Analysis. Modern concept of Penology. Capital Punishment.</li> </ul>		IV

### Recommended Readings:

1. Malinowski, Bronislaw. *Crime and Custom in Savage Society*. London: Routledge and Kegan Paul, 1926.
2. Galliher, John F. "The Willie Horton Fact, Faith, and Commonsense Theory of Crime." In *Criminology as Peacemaking*, edited by Harold E. Pepinsky and Richard Quinney, 245-250. Bloomington, Ind: Indiana University Press, 1991.
3. Gould, Stephen Jay. *The Mismeasure of Man*. New York: W.W. Norton, 1981. "Measuring Bodies: Two Case Studies on the Apishness of Undesirables": 113- 145 (focus on 122-145).
4. Murji, Karim. "Wild Life: Constructions and Representations of Yardies." In *Making Trouble: Cultural Constructions of Crime, Deviance and Control*, edited by Jeff Ferrell and Neil Websdale, 179-201. New York: Aldine de Gruyter, 1999.
5. Wacquant, Loïc. *Punishing the Poor: The Neoliberal Government of Social Insecurity*. Durham, N.C.: Duke University Press, 2009: "Prologue," "Social Security and the Punitive Upsurge," and "The Criminalization of Poverty in the Post-Civil Rights Era," xi-xxiii, 1-37, and 41-75.
6. Foucault, Michel. *Discipline and Punish: The Birth of the Prison*, trans. Alan Sheridan. New York: Vintage Books, 1977 [1975]: Selections from "Illegality and Delinquency," 275-292.
7. Spelman, Elizabeth V. and Martha Minow. "Outlaw Women: An Essay on 'Thelma and Louise.'" In *Gender, Crime, and Feminism*, edited by Ngaire Naffine, 229-244. Aldershot, England and Brookfield, Vt. Dartmouth Publishing, 1995.

8. Lamas, Marta. "By Night, a Street Rite: 'Public' Women of the Night in the Streets of Mexico City." In *Gender's Place: Feminist Anthropologies of Latin America*, edited by Rosario Montoya, Lessie Jo Frazier, and Janise Hurtig, 237-253. New York: Palgrave Macmillan, 2006.
9. Pain, Rachel. "Space, Sexual Violence and Social Control: Integrating Geographical and Feminist Analysis of Women's Fear of Crime." *Progress in Human Geography* 15 (4), 415-431.
10. Caldeira, Teresa P.R. *City of Walls: Crime, Segregation and Citizenship in Sao Paulo*. Berkeley: University of California Press, 2000: "Talking of Crime and Ordering the World," 19-51.
11. Wachs, Eleanor. *Crime Victim Stories: New York City's Urban Folklore*. Bloomington and Indianapolis: Indiana University Press, 1988: "Introduction," ix-xx.
12. Mattingly, Cheryl, Mary Lawlor and Lanita Jacobs-Huey. "Narrating September 11: Race, Gender, and the Play of Cultural Identities." *American Anthropologist* 104 (3): 743-753 (2002).
13. Barns & Teeters: *New Horizon in Criminology*.
14. Conkin: *Criminology*.
15. Suderland and cressy: *The Principals of Criminology*.
16. Siegel Laary, J: *Criminology*.
17. Singh Shyamdhar: *Essentials of Criminology (Hindi)*

### Semester-III

**Generic Elective Courses: (Offered to PG students of other Departments/ SoS only)**

Semester	Course Code	Course Title	Course Type (T/P)	Hrs/Week	Credits	Marks		
						CIA	ESE	Total
III	ANTH 540	Dermatology & Dermatoglyphics	T	2	1	15	50	100
			P	2	1	10	25	

### M.A/M.Sc.(Anthropology) Semester-III

Program	Subject	Year	Semester
M.A/M.Sc.	Anthropology	1	III
Course Code	Course Title		Course Type
ANTH440	Dermatology & Dermatoglyphics		Core
Credit	Hours Per Week (L-T-P)		
	L	T	P
2	2	-	2
Maximum Marks	CI A	ESE	
100	25	75	

\* L- Lecture, T- Tutorial, P- Practical

#### **Learning Objective(LO):**

1. To apply cultural relativism to understand outlaw and law enforcement cultures from an emic perspective.
2. To critically evaluate the consequences of public policy and law enforcement strategies, both intended and unintended.
3. To discuss issues of research methods and research ethics with populations with highly vulnerable, possibly dangerous and highly politicized research populations and writing about said research for a variety of audiences. Anthropology 3533 Anth. of Crime and Crim. Syllabus Spring 2021 2
4. To apply anthropological theory to ethnographic material, especially in regard to concerns of power, inequality, and health.
5. To improve academic reading comprehension, summarization skills, analytical skills and presentation skills • To practice taking on the world view of others and self reflexively challenge one's own worldview and biases
6. To practice critical thinking and collegial discussion

7. To improve academic writing and editing skills through drafting, reviewing and revising written works.

### Course Outcomes(CO):

CO No.	Expected Course Outcomes	CL
	At the end of the course, the students will be able to:	
1	Explain the historical development of Dermatoglyphics, its applications in various fields, and the role it plays in resolving paternity disputes. Additionally, the syllabus addresses the evolving trends and comparative aspects of Dermatoglyphics, providing students with a comprehensive understanding of this specialized field.	Ap
2	Describe the specific features, classification, and inheritance patterns associated with palm prints. The syllabus addresses the practical aspects of identification and typology, providing students with the knowledge needed to analyze and interpret palm prints in forensic and anthropological applications.	Ap
3	Understanding of the practical aspects of fingerprint analysis, including identification, classification, ridge counting, and quantitative measures. The syllabus addresses both the theoretical and applied aspects of fingerprint examination, preparing students for practical applications in forensic science and anthropology.	U
4	The practical aspects of sole print analysis, including identification, classification, genetic inheritance, and the unique characteristics of toe prints. This knowledge is crucial for forensic science and anthropology, providing students with the skills needed for practical applications in these fields.	An

CL : Cognitive Levels (R-Remember; U-Understanding; Ap-Apply; An-Analyze; E-Evaluate; C-Create).

### CO-PO/PSO Mapping for the course:

PO CO	POs											PSO					
	1	2	3	4	5	6	7	8	9	10	11	1	2	3	4	5	
CO1	3	3	3	-	2	3	3	-	3	3	3	3	3	3	3	3	3
CO2	3	3	3	-	2	3	3	-	3	3	3	3	3	3	3	3	3
CO3	3	3	3	-	2	3	3	-	3	3	3	3	3	3	3	3	3
CO4	3	3	3	-	2	3	3	-	3	3	3	3	3	3	3	3	3

"3"-Strong;"2"-Moderate;"1"-Low;"-"No Correlation



## Detailed Syllabus: ANTH 440- Dermatology and Dermatoglyphics

Unit No.	Topics	No. of Lectures	CO No.
I	<ul style="list-style-type: none"> <li>• Early history &amp; development of Dermatoglyphics; Development of ridges</li> <li>• Scope and importance of Dermatoglyphics in various field</li> <li>• Uses of Dermatoglyphics in Paternity Disputes -Recent trends in Dermatoglyphics</li> <li>• Comparative Dermatoglyphics and Population Variations.</li> </ul>	4	I
II	<ul style="list-style-type: none"> <li>• Palm prints: Identification, Typology</li> <li>• Main Line formula, Main Line Index and Transversality</li> <li>• atd angle and flexion creases.</li> <li>• Mode of Inheritance of Main Lines D, C, B &amp; A and the Patterns on the configurational areas of Palm.</li> </ul>		II
III	<ul style="list-style-type: none"> <li>• Finger prints: Identification, Typology.</li> <li>• Ridge counting</li> <li>• Pattern intensity Index, Furuhata Index and Dankmeijer's index.</li> <li>• Mode of Inheritance of Finger prints.</li> </ul>		III
IV	<ul style="list-style-type: none"> <li>• Sole Prints : Identification, Typology.</li> <li>• Main Line Formula, Main Line Index and Transversality</li> <li>• Mode of Inheritance of sole print</li> <li>• Identification of Toe prints.</li> </ul>		IV

### Recommended Readings:

1. Fingerprints, Palms and Soles- An Introduction to Dermatoglyphics. Harold Cummins and Charles Midlo. (1961) Dover Publications
2. Fingerprints. Francis Galton. MacMillan and Co., London. (1895), Paper Back June 2008.
3. Singh, I.P. Bhasin, M.K. Anthropometry. Bharti Bhawan, New Delhi.

### Practical/ Project

Dematoglyphics: Qualitative and Quantitative analysis:

- i. Palmar Print: Identification, Main line formula, main line Index, atd angle, Indices
- ii Finger Print: Identification of pattern types: Arch, Loop, Whorl and Composites, Ridge counting
- iii Sole Print: Identification of pattern types
- iv Toe Print: Identification of pattern types

Note: Dermatoglyphic prints of 05 specimens to be collected and analysed by each student in the above mentioned traits.

## Semester-IV

### Skill Enhancement/Value Added Courses: (Offered to the PG students of SoS in Anthropology)

Semester	Course Code	Course Title	Course Type (T/P)	Hrs/Week	Credits	Marks		
						CIA	ESE	Total
IV	ANTH 520	Applications of Social-cultural and Biological Anthropological Theories and Methods	T	4	2	25	75	100

### M.A/M.Sc. (Anthropology) Semester-IV

Program	Subject	Year	Semester
M.A/M.Sc.	Anthropology	2	IV
Course Code	Course Title		Course Type
ANTH520	Applications of Social-cultural and Biological Anthropological Theories and Methods		Core
Credit	Hours Per Week (L-T-P)		
	L	T	P
2	4	-	-
Maximum Marks	CI A	ESE	
100	25	75	

\* L- Lecture, T- Tutorial, P- Practical

#### Learning Objective(LO):

The objective of the course is to provide students a comprehensive understanding of human growth and development, factors influencing growth, nutrition concepts, and the evaluation of nutritional status. They should also be familiar with various programs and initiatives addressing malnutrition and health-related issues in India.

#### Course Outcomes(CO):

CO No.	Expected Course Outcomes	CL
1	At the end of the course, the students will be able to: Explain the diverse and intricate aspects related to tribes, both globally and specifically in the Indian context. The study encompasses historical perspectives, classifications, and the characteristics that define tribes in various regions.	U

2	Describe the diverse theories and perspectives on tribal development, ethical considerations in cultural relativism, and various research methodologies employed in anthropological studies related to tribal communities in India.	Ap
3	Students will gain a foundational understanding of Biological Anthropology, including its historical context, key theories of evolution, and principles of inheritance. The exploration of Lamarckism, Darwinism, and the Synthetic Theory provides a comprehensive view of the evolutionary concepts that form the basis of the discipline.	U
4	Describe the methods, patterns, and practical applications of human genetics, ranging from understanding inheritance patterns to exploring the ethical considerations in genetic practices.	Ap

CL : Cognitive Levels (R-Remember; U-Understanding; Ap-Apply; An-Analyze; E-Evaluate; C-Create).

### CO-PO/PSO Mapping for the course:

PO CO	POs											PSO				
	1	2	3	4	5	6	7	8	9	10	11	1	2	3	4	5
CO1	3	-	3	-	2	2	3	-	3	3	3	3	3	3	3	3
CO2	3	-	3	-	2	2	3	-	3	3	3	3	3	2	3	3
CO3	3	-	3	-	2	2	3	-	3	3	3	3	3	2	3	3
CO4	3	-	3	-	3	2	3	-	3	3	3	3	3	2	3	3

"3"-Strong;"2"-Moderate;"1"-Low;"-"No Correlation

### Detailed Syllabus: ANTH 460- Applications of Social-cultural and Biological Anthropological Theories and Methods

Unit No.	Topics	No. of Lectures	CO No.
I	<ul style="list-style-type: none"> <li>Tribe: definitions; critical assessment of conflicting definitions.</li> <li>General and specific characteristics.</li> <li>Tribes of the world-glimpses.</li> <li>Tribes in India: antiquity, historical, academic, administrative and anthropological importance.</li> <li>Historical perspectives in the study of tribes in India by travellers, administrators, scholars and by anthropologists.</li> <li>Geographical distribution, various classifications.</li> <li>Classification of tribes based on their economy, occupation and religion.</li> <li>Racial elements among the tribes.</li> </ul>	4	I
II	<ul style="list-style-type: none"> <li>Concept and Theories regarding Tribal Development in India: Varrier Elvin, G.S. Ghuriye, D.N. Majumdar, N.K. Bose and A. Desai, L.P. Vidyarthi, S.C. Dubey.</li> <li>Cultural Relativism.</li> <li>Cultural Relativism and Human Right.</li> <li>Ethnographic Method.</li> <li>Case Study Method.</li> <li>Action Research Method.</li> <li>Culture and Tribal Development.</li> </ul>		II

	<ul style="list-style-type: none"> <li>• Tribal Problems.</li> <li>• Tribal Unrest.</li> <li>• Naxalism.</li> </ul>		
III	<ul style="list-style-type: none"> <li>• Aim, scope and development of Biological Anthropology.</li> <li>• Theories of evolution: Larmarckism, Darwinism, Synthethic theory</li> <li>• Mendelian theory of inheritance, application of Mendel's theory in man.</li> <li>• Multiple gene theory, application of multiple gene theory in man.</li> </ul>		III
IV	<ul style="list-style-type: none"> <li>• Methods of studying human heredity: Pedigree method</li> <li>• Inheritance patterns: Autosomal Dominant and Recessive inheritance., Sex-linked, Sex-limited and Sex-influenced inheritance.</li> <li>• Applications of Human Genetics: Medico - Legal cases, Eugenics, Genetic screening, Genetic counseling, Genetic engineering.</li> </ul>		IV

### Recommended Readings:

1. Majumdar, D.N. Races and Cultures of India
2. Fuchs, Stephen. The Aboriginal Tribes of India
3. Bose, N.K. Tribal Life in India
4. Ghurye, G.S. The Scheduled Tribes of India
5. Tribal monographs by scholar administrators, foreign and Indian anthropologists such as by Elwin, Haimendorf, Mills, Fuchs, Roy and others.
6. Bhanage, N.P. Tribal Commissions and Committees in India
7. Bhudhury, Tribal Development in India Bhudadeb (Ed.)
8. Elwin, V. A Philosophy for NEFA 4. Govt of India. Report of the Scheduled Areas and Scheduled Tribes Commission, 1960
9. Haimendorf. The Tribes of India: The Struggle for Survival
10. Sharma, B.D. Basic Issues in Tribal Development
11. Singh, K.S. Tribal Movements in India, Vols I & II
12. Singh, K.S.(Ed.) Tribal Situation in India.
13. Hasnain Nadeem. Tribal India.
14. Comas, J. 1960. Manual of Physical Anthropology, Springfield, Charles C. Thomas.
15. Sarkar, R. M. 1976. Fundamentals of Physical Anthropology. Blackie (India).
16. Das, B. M. 1985. Outlines of Physical Anthropology, Kitab Mahal, New Delhi.
17. Shrivastav, A. R. N. 1994. Sharirik Manav Vigyan (in Hindi), GyandeepPrakashan, Allahabad.
18. Barnouw, V. 1979. Anthropology: A General Introduction, The Dorsey Press, Illinois.
19. Hooton, E. A. Up from the Ape, The Macmillan Co., New York.
20. Lasker, G.B. and Tyzzer, R.N. Physical Anthropology, Holt Rinechart& Winston, New York.

21. Shukla, B.R.K. and Rastogi, S. Physical Anthropology and Human Genetics: An Introduction, PalkaPrakashan, Delhi.
22. Buettner-Janusch, J. Origins of Man, Wiley Eastern Pvt. Ltd. New Delhi.
23. Montagu, M.F.A. The Concept of Race, The Free Press, New York.
24. Montagu, M.F.A. An Introduction to Physical Anthropology, Charles C Thomas, Springfield Illinois.
25. Tanner, J. M. 1962. Growth at Adolescence, Blackwell Scientific Publications, Oxford.
26. Lowrey, G. H. 1978. Growth & development of children, Year book Medical Publishers, Chicago – London.
27. Swaminathan, M. 1985. Essentials of Food and Nutrition, The Bangalore Printing and Publishing Co. ltd.
28. Gopalan, C., Rama Sastri, B., V. & Balasubremanian, S., C. 2002. Nutritive value of Indian foods, National Institute of Nutrition, ICMR, Hyderabad.
29. Parasmanidasgupta and Roland Hauspie , 2001. Perspectives in Human Growth, Development and Maturation, Kluwer Academic Publishers, London.
30. Marshall, W. A. 1977. Human Growth and its Disorders, Academic Press, London.
31. Harrison, G.A., Weiner, J.S., Tanner, J.M. and Barnicot, N.A. Human Biology: An Introduction to Human Evolution, Variation and Growth, Clarendon Press, Oxford.
32. Tanner, J.M., Fetus into Man.
33. Jelliff, D.B., Community Nutritional Assessment with Special Reference to Less Developed Countries.
34. Dixit. Human Nutrition: Principles and Applications in India.
35. Shanti, G. Nutrition and Child Care: A Practical Guide.
36. B. Srilaxmi, Nutrition Science.
37. MargartSchay, Nutrition.
38. Rao, V.K.R.V. Food Nutrition and Poverty.
39. Nelson, A Text Book of Pediatrics
40. Garrow, J.S. and James, W.P.T: Human Nutrition and Dietetics.
41. Swaminathan, M., Essentials of Food and Nutrition: Applied Aspect.
42. Eveleth, PB and Tanner, JM Worldwide Variation in Human Growth
43. Forbes, GB, Human Body Composition
44. Curt Stern. 1968. Principles of Human Genetics. Eurasia Publishing House (Pvt.) Ltd., Ram Nagar, New Delhi-1 (India).
45. Winchester, A. M. 1967. Genetics, Oxford & IBH Publishing Co.
46. Bhasin, V. 1994. People, Health and Disease: The Indian Scenario, Kamla- Raj Enterprises, Delhi.
47. Bhasin, M., K., Walter, H. and Danker-Hopfe, H. 1992. The Distribution of Genetical, Morphological and behavioural.

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