





SSR 5thCYCLE 2023

1.3.1 Curriculum Enrichment



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Incorporating environmental issues into educational syllabi is crucial for several reasons:

- 1. Awareness and Education: By including environmental topics in the curriculum, students gain a comprehensive understanding of the challenges facing the environment. This knowledge empowers them to become informed and responsible global citizens.
- 2. Urgency and Relevance: The current environmental crisis, including climate change, biodiversity loss, and pollution, requires immediate attention. Teaching these issues in schools highlights their significance and urgency, motivating students to take action.
- 3. Interdisciplinary Learning: Environmental issues are multifaceted, involving aspects of science, economics, politics, and social justice. Integrating these topics into the curriculum encourages interdisciplinary learning, fostering a holistic understanding of complex problems.
- 4. Critical Thinking and Problem-Solving: Addressing environmental issues encourages students to think critically and develop problem-solving skills. It prompts them to analyse causes, evaluate solutions, and make informed decisions about sustainable practices.
- 5. Preparation for the Future: As future leaders and decision-makers, students need to be equipped with the knowledge and skills to tackle environmental challenges. Integrating these topics into education prepares them for careers in fields related to sustainability and environmental conservation.
- 6. Ethical and Moral Development: Understanding environmental issues fosters a sense of responsibility towards the planet and future generations. It encourages ethical and moral development, promoting values such as empathy, stewardship, and respect for nature.
- 7. Community Engagement and Action: Education about environmental issues often extends beyond the classroom, encouraging students to engage with their communities and take part in environmental initiatives and activism, fostering a sense of civic responsibility.
- 8. Global Perspective: Environmental issues transcend borders. Teaching about these issues provides students with a global perspective, helping them understand the interconnectedness of environmental challenges and the need for international cooperation.

Incorporating environmental issues into educational syllabi not only addresses the immediate concerns related to the environment but also contributes to the development of environmentally conscious and responsible individuals who are better equipped to tackle the challenges of the future.



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The list of courses that address environmental issues in Mahatma Gandhi University curriculum is listed below.

OVERVIEW

The syllabus consists of many courses which address more than one cross cutting issue.



SSR 5th CYCLE 2023

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l courses of all programmes	Cross cutting issues addressed		Issue		No of courses	
784	324		HUMAN	VALUES	170	
			PROFES	SIONAL ETHICS	55	
Integration of Cross cutting issues in syllabus				NMENT & NABILITY	183	
Sylidi	ous .		GENDE	R	122	
				No of co	ourses	
204		200 -				
324		180 -				
		160 -				
		140 -				
		120 -				
		100 -				
		60 -				
	784	40				
		20 -				
		0 -				
			HUMAN VALUES	PROFESSIONAL ETHICS	ENVIRONMENT & SUSTAINABILITY	GENDER
Total courses of all programmes	■ Cross cutting issues addressed					



SSR 5th CYCLE 2023

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ENVIRONMENT & SUSTAINABILITY 183 courses

SLNO	COURSE CODE	COURSE TITLE	NAME OF THE PROGRAMME	NATURE OF THE COURSE
1	EC1CRT01	Perspectives And	BA	Core Course
		Methodology of Economics	Economics	
2	EC4CRT05	Macro Economics - I	BA	Core Course
			Economics	
3	EC5CRT09	Environmental Economics	BA Economics	Core Course
4	EN2CRT02	Introducing Language and Literature	BA English	Core Course
5	EN5CRT01	Environmental studies and Human Rights	BA English	Core Course
6	EN6CRT10	Postcolonial Literature	BA English	Core Course
7	EN6CRT12	American Literature	BA English	Core Course
8	EN6CRT13	Modern World Literatures	BA English	Core Course
9	EN6CBT01	Comparative Literature	BA English	Choice Based Elective
10	HY1CRT01	Perspectives and Methodologies in Social Sciences	BA History	Core Course
11	HY3CRT04	Cultural Trends in Pre Colonial Kerala	BA History	Core Course
12	HY4CRT05	Making of Modern Kerala	BA History	Core Course
13	HY4CRT06	Researching the Past	BA History	Core Course
14	HY5CRT09	State and Society in Ancient and medieval world	BA History	Core Course
15	HY5CRT10	Environmental Studies and Human Rights in Historical Outline	BA History	Core Course
16	HY6CRT11	Making of contemporary India	BA History	Core Course
17	HY6CRT12	Understanding Modern World	BA History	Core Course
18	ML1CCT01	കഥാസാഹിത്യം	BA Malayalam	Common Course



SSR 5th CYCLE 2023

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19	ML1CRT01	നവീന കവിത	BA Malayalam	Core Course
20	ML1CMT01	മലയാളത്തിന്റെ രീതിശാസ്ത്രം	BA Malayalam	Core Course
21	ML1CMT02	നാടകവും സിനിമയും	BA Malayalam	Complementary Course
22	ML2CCT02	കവിത	BA Malayalam	Common Course
23	ML2CRT02	മലയാള കവിത എഴുത്തച്ഛൻ മുതൽ കവിത്രയം വരെ	BA Malayalam	Core Course
24	ML2CMT03	ആധുനിക ലോക കവിത	BA Malayalam	Complementary Course
25	ML2CMT04	ഫോക്ലോർ വിജ്ഞാനം	BA Malayalam	Complementary Course
26	ML3CCT03	ദൃശൃ കലാസാഹിത്യം	BA Malayalam	Common Course
27	ML4CCT04	മലയാള ഗദ്യരചനകൾ	BA Malayalam	Common Course
28	ML4CMT06	ആധുനിക മലയാളഭാഷ	BA Malayalam	Complementary Course
29	SC3CMT02	സാസ്ക്കത്ര – Prose, Vrutha, Alankara, Theories of Poetics and Grammeroetry, Rhetoric's and Basics of Grammer	BA Malayalam	Complementary Course
30	ML5CRT05	പരിസ്ഥിതി വിജ്ഞാനവും മനുഷ്യാവകാശ പഠനവും	BA Malayalam	Core Course
31	ML5CRT06	സാഹിത്യമീമാംസ	BA Malayalam	Core Course
32	ML5CRT07	ചെറുകഥ നോവൽ	BA Malayalam	Core Course
33	ML5CRT08	ഭാഷാശാസ്ത്രം	BA Malayalam	Core Course
34	ML6CRT11	ഗദ്യസാഹിത്യം, നിരൂപണം	BA Malayalam	Core Course
35	ML6CB701	മലയാളത്തിലെ സ്ത്രീ രചനകൾ	BA Malayalam	Choice Based Elective
36	BOCRT01	Methodology of Science and an Introduction to Botany Practical -I	BSc Botany	Core Course



SSR 5th CYCLE 2023

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37	ZY1CMT01	Animal Diversity Non-	BSc Botany	Complementary
		Chordata Practical-II		Course
38	BO2GRTO2	Micro Biology, Mycology	BSc Botany	Core Course
		and Plant Pathology	-	
		Practical - II		
39	ZY2CMT02	Animal Diversity, Chordata	BSc Botany	Complementary
		Practical - II		Course
40	BO3GRT03	Phycology and Bryology	BSc Botany	Core Course
41	ZY03CA902	Human Physiology and	BSc Botany	Complementary
	210001002	Immunology	BSC Bottainy	Course
42	BO4CRT04	Pteridology Gymnosperm and	BSc Botany	Core Course
.2	Botekiot	Paleo Botany + Practical- IV	BSC Bottainy	Core course
43	ZY04CA903	Applied Zoology	BSc Botany	Complementary
	210101100	Tipplied Zoology	BSC Bottainy	Course
44	BOSCRT05	Anatomy, Reproductive	BSc Botany	Core Course
' '	Boscition	Botany,	BSC Bottainy	
		Micro technique		
45	BO5CRT07	Plant Physiology and Bio	BSc Botany	Core Course
15	Bosckio	Chemistry	BSC Bottainy	Core course
46	BO5CRT08	Environmental Sciences and	BSc Botany	Core Course
		Human Rights		
47	BO6CRT09	Genetics Plant Breeding and	BSc Botany	Core Course
		Horti Culture	, , , , , , , , , , , , , , , , , , , ,	
48	BO6CRT10	Cell and Molecular Biology	BSc Botany	Core Course
49	BO6CRT11	Angiosperm Morphology,	BSc Botany	Core Course
		Taxonomy and Economic		
		Botany		
50	BO6CRT12	Biotechnology and	BSc Botany	Core Course
		Bioinformatics		
51	BO6PET01	Agri Business	BSc Botany	Choice Based
				Elective
52	BO6PET02	Plant Genetic Resources	BSc Botany	Choice Based
		Management		Elective
53	BO6PET03	Phytochemistry and	BSc Botany	Choice Based
		Pharmacognosy		Elective
54	CH5CRT05	Environment, Ecology and	BSc Chemistry	Core Course
		Human Rights		
55	CS5CRT13	IT and Environment	BSc Computer	Core Course
			Science	
56	MM5CRT04	Environmental Mathematics	BSc Mathematics	Core Course
		and Human Rights		



SSR 5th CYCLE 2023

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57	PH5CRT08	Environmental Physics and Human Rights	BSc Physics	Core Course
58	PH5OPT02	Physics in Daily Life	BSc Physics	Choice Based Elective
59	PY3CRT07	Living in the Social World	BSc Psychology	Core Course
60	PY5CRT15	Environmental Psychology and Human Rights	BSc Psychology	Core Course
61	ZY1CRT01	General Perspectives in Science and Protistan Diversity	BSc Zoology	Core Course
62	ZY2CRP01	General Perspectives in Science and Protistan Diversity and Animal Diversity – Non Chordata Practical	BSc Zoology	Core Course
63	BO1CMT01	Cryptogams, Gymnosperms and Plant Pathology	BSc Zoology	Complementary Course
64	ZY2CRT02	Animal Diversity – Non Chordata	BSc Zoology	Core Course
65	ZY2CRP01	General Perspectives in Science, Protistan Diversity and Animal Diversity – Non Chordata Practical	BSc Zoology	Core Course
66	BO2CMT02	Plant Physiology	BSc Zoology	Complementary Course
67	HY3CRT03	Animal Diversity- Chordata	BSc Zoology	Core Course
68	ZY4CRP02	Animal Diversity-Chordate, Research Methodology, Biophysics and Biostatistics (Practical)-	BSc Zoology	Core Course
69	ZY4CRP02	Practical 2-Animal Diversity-Chordate, Research	BSc Zoology	Core Course
70	ZY5CRTO5	Environmental Biology and Human Rights	BSc Zoology	Core Course
71	ZY5CRT06	Cell Biology and Genetics	BSc Zoology	Core Course
72	ZY5CRT07	Evolution, Ethology & Zoogeography	BSc Zoology	Core Course
73	ZY5CRT08	Human Physiology, Biochemistry & Endocrinology	BSc Zoology	Core Course



SSR 5th CYCLE 2023

Affiliated to Mahatma Gandhi University, Kottayam, India NAAC Re-Accredited with A Grade in 4th Cycle www.uccollege.edu.in

74	ZY6CRP03	Environmental Biology, Toxicology, Cell Biology & Genetics (Practical)	BSc Zoology	Core Course
75	ZY6CRP04	Evolution, Ethology, Zoogeography, Human Physiology, Biochemistry & Endocrinology (Practical)	BSc Zoology	Core Course
76	ZY6CRT09	Developmental Biology	BSc Zoology	Core Course
77	ZY6CRT11	Biotechnology, Bioinformatics & Molecular Biology	BSc Zoology	Core Course
78	ZY6CRT12	Occupational Zoology (Aquaculture, Apiculture, Vermiculture &	BSc Zoology	Core Course
79	ZY6CRP05	Developmental Biology, Microbiology & Immunology (Practical)	BSc Zoology	Core Course
80	ZY6CRP06	Biotechnology, Bioinformatics, Molecular Biology & Occupational Zoology Practical	BSc Zoology	Core Course
81	SM1CRT01	Sociology of Sports	BSM	Core Course
82	SM3CRT10	Sports Marketing Strategy	BSM	Core Course
83	SM5CRT21	Environmental Studies & Human Rights in Sports	BSM	Core Course
84	EN2CCT03	Issues that Matter	ENGLISH-III	Common Course
85	EN4CCT06	Illuminations	ENGLISH-VI	Common Course
86	HN1CCT01	Prose and One-Act Plays	Second Language [HINDI]	Common Course
87	HN2CCT01	Short Stories & Novel	Second Language [HINDI]	Common Course
88	HN3CCT01	Poetry, Grammar & Translation	Second Language [HINDI]	Common Course
89	HN4CCT01	Drama & Long Poem	Second Language [HINDI]	Common Course
90	ML1CCT01	Kathasahithyam	Second Language [MALAYALAM]	Common Course
91	ML2CCT02	Kavita	Second Language [MALAYALAM]	Common Course
92	ML3CCT03	Drishyakalasahithyam	Second Language [MALAYALAM]	Common Course
93	ML4CCT04	Malayal Gadya Rachanakal	Second Language [MALAYALAM]	Common Course
94	EN5CROP01	Appreciating Films	English	Open Course



SSR 5th CYCLE 2023

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95	HY5OCT01	Introducing Environmental History	History	Open Course
96	ML5OPT01	Pathrapravarthanam	Malayalam	Open Course
97	BO5OPT02	Horticulture and Nursery Management	Botany	Open Course
98	CH5OPT01	Chemistry in Everyday Life	Chemistry	Open Course
99	ZY5OPT01	Vocational Zoology – Apiculture, Vermiculture, Ornamental Fish Culture		Open Course
100	EC010304	Environment Economics	MA Economics	Core Course
101	EC010305	Kerala Economy	MA Economics	Core Course
102	EC800401	Agricultural Economics	MA Economics	Elective
103	HY010401	Situating Environmental History of India	MA History	Core Course
104	ML010102	മലയാളഭാഷ ചരിത്രവും വർത്തമാനവും	MA Malayalam	Core Course
105	ML010103	മലയാള ചെറുകഥ	MA Malayalam	Core Course
106	ML010204	മലയാള നോവൽ	MA Malayalam	Core Course
107	ML010303	മലയാള നിരൂപണം	MA Malayalam	Core Course
108	ML010402		MA Malayalam	Core Course
109	BY010102	Mycology and Crop Pathology	M.Sc.Botany	Core Course
110	BY010103	Bryology and Pteridology	M.Sc.Botany	Core Course
111	BY010104	Gymnosperms, Paleobotany and Evolution	M.Sc.Botany	Core Course
112	BY010105	Microbiology, Phycology, Mycology and Crop Pathology- Practical	M.Sc.Botany	Core Course
113	BY010106	Bryology, Pteridology, Gymnosperms, Paleobotany and Evolution - Practical	M.Sc.Botany	Core Course
114	BY010201	Plant Anatomy, Developmental Biology and Horticulture	M.Sc.Botany	Core Course
115	BY010202	Cell Biology, Genetics and Plant Breeding	M.Sc.Botany	Core Course
116	BY010203	Plant Physiology and Biochemistry	M.Sc.Botany	Core Course
117	BY010205	Plant anatomy, Developmental Biology, Horticulture, Cell Biology,	M.Sc.Botany	Core Course



SSR 5th CYCLE 2023

Affiliated to Mahatma Gandhi University, Kottayam, India NAAC Re-Accredited with A Grade in 4th Cycle www.uccollege.edu.in

		Genetics and Plant Breeding- Practical		
118	BY010206	Plant Physiology, Biochemistry and Molecular Biology	M.Sc.Botany	Core Course
		Practical		
119	BY010303	Angiosperm Taxonomy, Economic Botany and Ethnobotany	M.Sc.Botany	Core Course
120	BY010304	Environmental Science	M.Sc.Botany	Core Course
121	BY010306	Angiosperm Taxonomy, Economic Botany and Environmental Science - Practical	M.Sc.Botany	Core Course
122	BY800401	Plant Tissue Culture and Microbial Biotechnology	M.Sc.Botany	Core Course
123	BY810404	Plant Tissue Culture and Microbial Biotechnology - Practical	M.Sc.Botany	Core Course
124	PY010401	Contemporary Social Issues and Role of Psychology In Social Engineering	M.Sc. Psychology	Core Course
125	ZL010101	Animal Diversity: Phylogenetic and Taxonomic Approaches	MSc Zoology	Core Course
126	ZL010102	Evolutionary Biology and Ethology	MSc Zoology	Core Course
127	ZL010105	Practical 1- Animal Diversity: Evolutionary, Ethological and Biochemical Methods and Approaches	MSc Zoology	Core Course
128	ZL010201	Field Ecology	MSc Zoology	Core Course
129	ZL010202	Developmental Biology	MSc Zoology	Core Course
130	ZL010203	Genetics and Bioinformatics	MSc Zoology	Core Course
131	ZL010205	Practical 2- Diversity of Life: Ecological, Embryological, Hereditary and Microbial Methods and Approaches	MSc Zoology	Core Course
132	ZL010301	Animal Physiology	MSc Zoology	Core Course
133	ZL010302	Cell and Molecular Biology	MSc Zoology	Core Course
134	ZL810401	Environmental Science: Concepts and Approaches	MSc Zoology	Elective Course



SSR 5th CYCLE 2023

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135	ZL810402	Environmental Pollution and Toxicology	MSc Zoology	Elective Course
136	ZL810403	Environmental Management and Development	MSc Zoology	Elective Course
137	ZL810404	Practical 4: Environmental Science	MSc Zoology	Core Course
138	ZB1CRT01	Introduction to Biological Sciences	BT & SP	Core Course
139	ZB1CRT02	Collection & Preservation of Biological Specimens 1- Plants	BT & SP	Core Course
140	ZB1CRT03	Collection & Preservation of Biological Specimens 1- Animals	BT & SP	Core Course
141	BC1CMT01	Complementary -1: Biochemistry 1	BT & SP	Complementary Course
142	ZY1CMT01	Complementary 2: Animal Diversity - Non-chordate	BT & SP	Complementary Course
143	ZY2CMP01	Non-chordate Diversity + Chordate Diversity (Practical)	BT & SP	Complementary Course
144	ZB2CRP01	Introduction To Biological Sciences and General Biological	BT & SP	Core Course
145	ZB2CRP02	Collection & Preservation of Biological Specimens 1- Plants and Teaching Laboratory Techniques Practical	BT & SP	Core Course
146	ZB2CRP03	Collection & Preservation of Biological Specimens 1- Animals, Food Microbiology & Biotechnology (Practical)	BT & SP	Core Course
147	ZB2CRT04	General Biological Techniques	BT & SP	Core Course
148	ZB2CRT05	Teaching Lab Techniques	BT & SP	Core Course
149	ZB2CRT06	Food Microbiology & Biotechnology	BT & SP	Core Course
150	ZY2CMT02	Complementary —2: Animal Diversity — Non-chordata	BT & SP	Complementary Course
151	ZY2CMP01	Non-chordate Diversity + Chordate Diversity (Practical)	BT & SP	Complementary Course
152	ZB2CRP01	Introduction to Biological Sciences and General Biological Techniques	BT & SP	Core Course



SSR 5th CYCLE 2023

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		(Practical)		
153	ZB2CRP02	Collection & Preservation of Biological Specimens 1 – Plants and Teaching Laboratory Techniques (Practical)	BT & SP	Core Course
154	ZB2CRP03	Collection & Preservation of Biological Specimens 1- Animals, Food Microbiology and Biotechnology (Practical)	BT & SP	Core Course
155	ZY3CMT03	Complementary - 2: Zoology -Physiology and Immunology	BT & SP	Complementary Course
156	ZY4CMP02	Zoology - Physiology and Immunology and Applied Zoology (Practical)	BT & SP	Complementary Course
157	BC4CMP02	Biochemistry- Enzymology and Metabolism & Nutritional and Clinical Biochemistry (Practical)	BT & SP	Core Course
158	ZY04CMT04	Complementary - 2: Applied Zoology	BT & SP	Complementary Course
159	ZY4CMP02	Zoology - Physiology & Immunology and Applied Zoology (P)	BT & SP	Complementary Course
160	ZY5CRT05	Environmental Biology & Human Rights	BT & SP	Core Course
161	ZY5CRT06	Cell Biology & Genetics	BT & SP	Core Course
162	ZY5CRT07	Evolution, Ethology & Zoogeography	BT & SP	Core Course
163	ZY6CRP03	Environmental Biology, Toxicology, Cell Biology & Genetics (Practical)	BT & SP	Core Course
164	ZY6CRP04	Evolution, Ethology, Zoogeography, Human Physiology, Biochemistry & Endocrinology (Practical)	BT & SP	Core Course
165	ZY6CRT10	Microbiology & Immunology	BT & SP	Core Course
166	ZY6CRT11	Biotechnology, Bioinformatics and Molecular Biology	BT & SP	Core Course
167	ZY6CRT12	Occupational Zoology (Aquaculture, Apiculture, Vermiculture and Quail Farming)	BT & SP	Core Course



SSR 5th CYCLE 2023

Affiliated to Mahatma Gandhi University, Kottayam, India NAAC Re-Accredited with A Grade in 4th Cycle www.uccollege.edu.in

168	ZY6CRP03	Environmental Biology, Toxicology, Cell Biology & Genetics (Practical)	BT & SP	Core Course
169	ZY6CRP04	Evolution, Ethology, Zoogeography, Human Physiology, Biochemistry & Endocrinology (Practical)	BT & SP	Core Course
170	ZY6CRP06	Biotechnology, Bioinformatics, Molecular Biology & Occupational Zoology (Practical)	BT & SP	Core Course
171	CO5CRT15	Environment Management and Human Rights	B Com M -I & II	Core Course
172	HN1CCT05	HINDI : Prose, Commercial Correspondence & Translation	B Com M-II	Common Course
173	ML2CCT06	MALAYALAM : Atmakadha, Lekhanam	B Com M-I	Common Course
174	HN2CCT04	HINDI : Poetry, Commercial Correspondence & Translation	B Com M-I	Common Course
175	ML2CCT12	MALAYALAM : Gadhyam, Yathravivaranam	B Com M-II	Common Course
176	HN2CCT05	HINDI : Poetry and Mass Media	B Com M-II	Common Course
177	EL5CRT15	Environmental Awareness, E- waste Management and Human Rights	BSc E & CM	Core Course
178	BT010101	Fundamentals of Cell Biology and Biochemistry	M.Sc. Bioinformatics	Core Course
179	BT010102	Introduction to Genetics and Molecular Biology	M.Sc. Bioinformatics	Core Course
180	BT020102	Cell Biology and Genetics	M.Sc. Biotechnology	Core Course
181	BT020302	Recombinant DNA Technology	M.Sc. Biotechnology	Core Course
182	BT020303	Environmental Biotechnology	M.Sc. Biotechnology	Core Course
183	BT020304	Plant and Animal Biotechnology	M.Sc. Biotechnology	Core Course