



Swami Rama Himalayan University

NAAC A+



Sustainability

Environmental Education

Climate Science & Environmental Sustainability



Environmental Education

The University demonstrates a strong commitment to Environmental Sustainability by embedding climate action perspectives into its academic programs, research, and extension activities. The university's Environmental Science course is meticulously designed to formulate and implement academic programs and campus-based projects that focus on environmental sustainability and Climate science.

As part of its holistic educational approach, SRHU mandates a core course on 'Environmental Studies' for all undergraduate programs, ensuring that students gain a foundational understanding of environmental issues, sustainability, and climate change in their very first year. This course also highlights the critical connections between climate change and the Sustainable Development Goals (SDGs), fostering climate literacy and empowering students to become proactive contributors to global climate action. Through these initiatives, University integrates sustainability into its educational framework, equipping students with the knowledge and skills necessary to address the challenges of climate change. The specific course in various programs of the university that also address the climate change and environmental issues are listed below in the Table 1.

Table 1: List of courses in alignment with Environmental Sustainability and Climate science

Program Name	Course Code	UG/PG	Course Title	Course Description
B.Com(Hons.)	BCM207	UG	Environment Studies	This course explores the relationships between humans and the natural world. It covers ecological principles, environmental issues, sustainability, conservation, and the impact of human activities on ecosystems, address global environmental challenges like climate change and promote sustainable development for a balanced future.
B.Sc Nursing	N- COMH (I) 310	UG	Community Health Nursing I including Environmental Science & Epidemiology - Theory	It focuses on health promotion, disease prevention, and community care. It includes Environmental Science and Epidemiology to understand health determinants, environmental impacts like climate change and disease patterns for effective public health practice.

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Post Basic B.Sc. Nursing	PBN207	UG	Environmental Science	This course explores the relationships between humans and the natural world. It covers ecological principles, environmental issues, sustainability, conservation, and the impact of human activities on ecosystems, address global environmental challenges like climate change.
BRT	EVS301	UG	Environmental Science	This course explores the relationships between humans and the natural world. It covers ecological principles, environmental issues, sustainability, conservation, and the impact of human activities on ecosystems, address global environmental challenges like climate change.
BRIT	EVS301	UG	Environmental Science	This course explores the relationships between humans and the natural world. It covers ecological principles, environmental issues, sustainability, conservation, and the impact of human activities on ecosystems, address global environmental challenges like climate change.
BMLT	EVS301	UG	Environmental Science	This course explores the relationships between humans and the natural world. It covers ecological principles, environmental issues, sustainability, conservation, and the impact of human activities on ecosystems, address global environmental challenges like climate change.



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B.Optom.	EVS301	UG	Environmental Science	This course explores the relationships between humans and the natural world. It covers ecological principles, environmental issues, sustainability, conservation, and the impact of human activities on ecosystems, address global environmental challenges like climate change.
BASLP	EVS301	UG	Environmental Science	This course explores the relationships between humans and the natural world. It covers ecological principles, environmental issues, sustainability, conservation, and the impact of human activities on ecosystems, address global environmental challenges like climate change.
BOT	EVS301	UG	Environmental Science	This course explores the relationships between humans and the natural world. It covers ecological principles, environmental issues, sustainability, conservation, and the impact of human activities on ecosystems, address global environmental challenges like climate change.
BBA	BBA 107	UG	Environment Studies	This course explores the relationships between humans and the natural world. It covers ecological principles, environmental issues, sustainability, conservation, and the impact of human activities on ecosystems, address global environmental like climate change.



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MBBS		UG	Community Medicine	This course focuses on preventing disease, promoting health, and improving community well-being through education and public health initiatives. It aligns with SDG-13 by addressing climate-related health impacts and promoting resilience to environmental changes.
B.Sc. (H) Biotechnology	AECC 111	UG	Environmental Science-I	This course explores the relationships between humans and the natural world. It covers ecological principles, environmental issues, sustainability, conservation, and the impact of human activities on ecosystems, address global environmental challenges like climate change.
B.Sc. (H) Biotechnology	BBTC 233	UG	Chemistry-I	It introduces fundamental concepts of matter, chemical reactions, and their applications in daily life. It aligns with SDGs by promoting sustainable chemical practices, reducing environmental pollution, and supporting climate action through green chemistry innovations.
B.Sc. (H) Biotechnology	BBTOE 231	UG	Bioethics and Biosafety	This course focus on ethical principles, safety measures, and responsible conduct in biological research and biotechnology. It aligns with the SDGs by promoting sustainable scientific practices, protecting human and environmental health, and ensuring ethical innovation for global well-being.
B.Sc. (H) Biotechnology	BBTSE 231	UG	Microbial Quality Control in Food and Pharmaceutical Industries	It focuses on detecting, preventing, and managing microbial contamination to ensure product safety and quality. It aligns with SDGs by promoting sustainable production, reducing waste, and



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				minimizing environmental impact through eco-friendly quality assurance practices.
B.Sc. (H) Biotechnology	AECC 231	UG	Environmental Sciences-II	This course explores the relationships between humans and the natural world. It covers ecological principles, environmental issues, sustainability, conservation, and the impact of human activities on ecosystems, address global environmental challenges like climate change.
B.Sc. (H) Biotechnology	BBTOE 241	UG	Beverage biotechnology	It explores the microbial and biochemical processes involved in producing beverages like beer, wine, and juices. It aligns with SDGs by promoting sustainable production methods, reducing resource waste, and minimizing environmental impact in the beverage industry.
B.Sc. (H) Biotechnology	BBTOE 242	UG	Biotechnology and Human Welfare	This course explores the application of biotechnological tools to improve health, agriculture, and industry. It aligns with SDGs by promoting sustainable biotechnological practices and developing solutions to address environmental and climate challenges.
B.Sc. (H) Biotechnology	BBTSE 241	UG	Nano Biotechnology	The application of nanotechnology in biological systems for medicine, agriculture, and industry. It advances targeted drug delivery, diagnostics, and sustainable technologies, contributing to innovative solutions for health and environmental challenges.



Program Name	Course Code	UG/PG	Course Title	Course Description
B.Sc. (H) Biotechnology	BBTC 502	UG	Industrial Biotechnology	It applies biological systems, organisms, and processes to produce chemicals, fuels, and materials sustainably. It promotes eco-friendly manufacturing, resource efficiency, and reduced environmental impact, supporting SDG goals.
B.Sc. (H) Biotechnology	BBTC 503	UG	Environmental Biotechnology	This course focuses biological processes and organisms to address environmental challenges, such as pollution control, waste management, and ecosystem restoration. It supports SDG-12 and SDG-13 by promoting sustainable resource use and climate-resilient environmental solutions.
B.Sc. (H) Biotechnology	BBTE 501 B	UG	Bioprocess Engineering	This course explores Bioprocess Engineering, focusing on the design, optimization, and scale-up of biological production systems for sustainable industrial applications.
B.Sc. (H) Biotechnology	BBTE 501 C	UG	Food Biotechnology	This course covers Food Biotechnology, exploring the use of microorganisms and enzymes to enhance food quality, safety, and sustainability.
B.Sc. (H) Biotechnology	BTBC 601	UG	Biostatistics, Bioethics, Biosafety, IPR & Computers	This course focus on ethical principles, safety measures, and responsible conduct in biological research and biotechnology. It aligns with the SDGs by promoting sustainable scientific practices, protecting human and environmental health, and ensuring ethical innovation for global well-being.
B.Sc. (H) Biotechnology	BBTE 601 A	UG	Molecular Farming	This course explores molecular farming using genetically engineered plants to sustainably produce biomolecules like pharmaceuticals



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				and enzymes advancing eco-efficient biomanufacturing in line with SDGs.
B.Sc. (H) Biotechnology	BBTE 601 B	UG	Downstream Processing	This course covers Downstream Processing, focusing on the separation, purification, and recovery of bioproducts from complex mixtures. It emphasizes sustainable, efficient bioprocess design.
B.Sc. (H) Biotechnology	BBTE 601 C	UG	Industrial Waste Management	This course focuses on Industrial Waste Management, emphasizing waste minimization, treatment, and resource recovery strategies for sustainable industry practices.
B.Sc. (H) Microbiology	BMBSE 111	UG	Mushroom Farming	This course focuses on Mushroom Farming, covering cultivation methods, substrate formulation, and value-added processing to promote sustainable food production and waste utilization.
B.Sc. (H) Microbiology	AECC 111	UG	Environmental Science-I	This course explores the relationships between humans and the natural world. It covers ecological principles, environmental issues, sustainability, conservation, and the impact of human activities on ecosystems, address global environmental challenges like climate change.
B.Sc. (H) Microbiology	BMBC 122	UG	Industrial Microbiology	This course explores the use of microorganisms in industrial processes for producing biochemicals, enzymes, and biofuels. It emphasizes sustainable biotechnological practices supporting SDG-13 through eco-friendly innovations.

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B.Sc. (H) Microbiology	BBTC 233	UG	Chemistry-I	It introduces fundamental concepts of matter, chemical reactions, and their applications in daily life. It aligns with SDGs by promoting sustainable chemical practices, reducing environmental pollution, and supporting climate action through green chemistry innovations.
B.Sc. (H) Microbiology	BBTOE 231	UG	Bioethics and Biosafety	This course focus on ethical principles, safety measures, and responsible conduct in biological research and biotechnology. It aligns with the SDGs by promoting sustainable scientific practices, protecting human and environmental health, and ensuring ethical innovation for global well-being.
B.Sc. (H) Microbiology	BBTSE 231	UG	Microbial Quality Control in Food and Pharmaceutical Industries	It focuses on detecting, preventing, and managing microbial contamination to ensure product safety and quality. It aligns with SDGs by promoting sustainable production, reducing waste, and minimizing environmental impact through eco-friendly quality assurance practices.
B.Sc. (H) Microbiology	AECC 231	UG	Environmental Sciences-II	This course explores the relationships between humans and the natural world. It covers ecological principles, environmental issues, sustainability, conservation, and the impact of human activities on ecosystems, address global environmental challenges like climate change.



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B.Sc. (H) Microbiology	BBTOE 242	UG	Biotechnology and Human Welfare	This course explores the application of biotechnological tools to improve health, agriculture, and industry. It aligns with SDGs by promoting sustainable biotechnological practices and developing solutions to address environmental and climate challenges.
B.Sc. (H) Microbiology	BBTSE 241	UG	Nano Biotechnology	The application of nanotechnology in biological systems for medicine, agriculture, and industry. It advances targeted drug delivery, diagnostics, and sustainable technologies, contributing to innovative solutions for health and environmental challenges.
B.Sc. (H) Microbiology	BMBC 503	UG	Industrial Microbiology	This course introduces the use of microorganisms in large-scale production of enzymes, biofuels, and pharmaceuticals, promoting sustainable bioprocessing.
B.Sc. (H) Microbiology	BMBC 504	UG	Environmental Microbiology	This course covers the roles of microorganisms in ecosystems, bioremediation, and pollution control, fostering sustainable environmental management.
B.Sc. (H) Microbiology	BMBE 501 B	UG	Food & Dairy Microbiology	This course covers the role of microorganisms in food production, preservation, and safety, promoting sustainable and hygienic practices.
B.Sc. (H) Microbiology	BMBE 501 C	UG	Microbiological Analysis of Air and Water	This course focuses on microbiological analysis of air and water, teaching techniques to detect, quantify, and control microbial contaminants, supporting safe, sustainable environmental management.



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B.Sc. (H) Microbiology	BMBE 601 A	UG	Bio-fertilizers and Bio-pesticides	This course covers bio-fertilizers and bio-pesticides, exploring the use of beneficial microorganisms to enhance soil fertility and pest management sustainably.
Bachelor of Pharmacy	BP206T	UG	Environmental Sciences	This course explores the relationships between humans and the natural world. It covers ecological principles, environmental issues, sustainability, conservation, and the impact of human activities on ecosystems, address global environmental challenges like climate change.
B.Tech CSE	HST112	UG	Environmental Studies	This course explores the relationships between humans and the natural world. It covers ecological principles, environmental issues, sustainability, conservation, and the impact of human activities on ecosystems, address global environmental challenges like climate change.
B.Tech CSE	GES471	UG	Disaster Management	It covers preparedness, response, recovery, and mitigation strategies to reduce the impact of natural and human-made disasters. It aligns with SDG-13 by enhancing community resilience to climate-related hazards and promoting climate-adaptive disaster planning.
BCA	HS112T	UG	Environmental Studies	This course explores the relationships between humans and the natural world. It covers ecological principles, environmental issues, sustainability, conservation, and the impact of human activities on ecosystems, address global environmental challenges like climate change.



Program Name	Course Code	UG/PG	Course Title	Course Description
BCA	BCA309	UG	Disaster Management	Disaster Management focuses on preparedness, response, recovery, and mitigation strategies to reduce the impact of natural and human-made disasters. It aligns with SDG-13 by enhancing community resilience to climate-related hazards and promoting climate-adaptive disaster planning.
B.Sc. Data Science	MD121T	UG	Environmental Studies	This course explores the relationships between humans and the natural world. It covers ecological principles, environmental issues, sustainability, conservation, and the impact of human activities on ecosystems, address global environmental challenges like climate change.
B.Sc. Yoga Science and Holistic Health	BYSC105	UG	Public Health and Hygiene	This course covers the principles of public health, disease prevention, and community hygiene practices. It promotes environmental health strategies aligned with SDG-13 to mitigate climate-related health risks.
B.Sc. Yoga Science and Holistic Health	BYS603	UG	Fundamentals of Environmental Science	This course explores the relationships between humans and the natural world. It covers ecological principles, environmental issues, sustainability, conservation, and the impact of human activities on ecosystems, address global environmental challenges like climate change.
MSc Epidemiology	CMEC001	PG	Environmental and Occupational Epidemiology	This course covers Environmental and Occupational Epidemiology, focusing on the study of disease patterns related to environmental and workplace exposures, promoting health risk reduction.



Program Name	Course Code	UG/PG	Course Title	Course Description
M.Sc. Clinical Research	CMCR517	PG	Environmental & Regulatory Physiology	This course covers Environmental & Regulatory Physiology, focusing on how environmental factors influence physiological processes and regulatory mechanisms, promoting climate-conscious health and sustainability practices.
MD Community Medicine	1101509	PG	Nutrition, Environmental Health, Primary Health Care system, Panchayat Raj system, National health Programs, RCH, Demography and Family Welfare, Health Care Administration, Health Management and Public Health Leadership.	This course covers integrated strategies for sustainable community health, resource-efficient healthcare delivery, and leadership in public health.
Master of Hospital Administration	MHA122	PG	Hospital Planning and Operations	This course covers Hospital Planning and Operations, focusing on the design, management, and sustainable operation of healthcare facilities to optimize resource use, reduce environmental impact, and enhance patient care.
Master of Hospital Administration	MHA126	PG	Human Resource Management	This course covers Human Resource Management, focusing on effective workforce planning, development, and organizational leadership to optimize productivity and sustainability.
M.Sc. Microbiology	MMBT 302	PG	Industrial Microbiology	This course explores Mushroom Farming, focusing on cultivation techniques, substrate preparation, and post-harvest management for sustainable food and income generation.



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M.Sc. Microbiology	MMBE 301	PG	Microbial Technology	This course covers the application of microorganisms in industry, agriculture, and environmental management for sustainable production and pollution mitigation.
M.Sc. Microbiology	MMBE 302	PG	Industrial Waste Management	This course focuses on methods for minimizing, treating, and recycling industrial waste to protect ecosystems. It integrates sustainable waste management practices supporting SDG-13 through pollution reduction and resource conservation.
M.Sc. Microbiology	MMBE 304	PG	Soil and Agriculture Microbiology	This course covers the role of microorganisms in soil fertility, crop productivity, and sustainable farming practices.
M.Sc. Microbiology	MMBE 309	PG	Nano Biotechnology	The application of nanotechnology in biological systems for medicine, agriculture, and industry. It advances targeted drug delivery, diagnostics, and sustainable technologies, contributing to innovative solutions for health and environmental challenges.
M.Sc. Microbiology	MMBE 310	PG	Bioprocess Technology	This course covers the use of biological systems for sustainable production of biochemicals, pharmaceuticals, and biofuels, promoting eco-efficient practices.
M.Sc. Biotechnology	MBTT 303	PG	Food and Industrial Biotechnology	This course covers the application of biological processes and microorganisms to produce food, enzymes, and bio-based products.
M.Sc. Biotechnology	MBTE 302	PG	Advanced Environmental Biotechnology	This course covers advanced environmental biotechnology, focusing on cutting-edge microbial and bioprocess strategies for pollution control, waste treatment,



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M.Sc. Biotechnology	MBTE 305	PG	Agrobiotechnology	It covers the use of biotechnological tools to improve crop yield, resistance, and supporting eco-friendly agricultural practices
M.Sc. Biotechnology	MBTE 306	PG	Metabolic Engineering	It covers the optimization of cellular pathways for enhanced production of biofuels, pharmaceuticals, and biochemicals, promoting resource-efficient bioprocesses
M.Sc. Biotechnology	MBTE 308	PG	Nanobiotechnology	This course focusing on the application of biotechnological tools to enhance crop productivity, pest resistance, and sustainable agriculture production.
M.Sc. Biotechnology	MBTE 310	PG	Energy & Environment	This course covers sustainable energy production, environmental conservation, and the mitigation of climate impacts, promoting practices aligned with SDGs.
M.Sc. Biotechnology	MBTE 311	PG	Synthetic Biology	This course focusing on the design and engineering of biological systems for innovative, sustainable applications in medicine, industry, and the environment.
M.Sc. Biochemistry	MBCT 301	PG	Environmental Biochemistry & Toxicology	This course focusing on the biochemical impacts of pollutants and toxic substances on ecosystems and human health, promoting sustainable environmental management.

Evidence: <https://srhu.edu.in/wp-content/uploads/2025/11/Course-Mapping-SDGs.pdf>