



Kumaun University offers Excellent Opportunity to Young Graduate to Become Master of Geography with Specialization in Sustainable Mountain Development

Kumaun University

Kumaun University established in 1973 is the biggest State University of the state Uttarakhand which caters the need of about 150000 students by providing a high quality educational experience in diverse learning environments and promoting the values and institutions of democracy that prepare students to lead lives of personal integrity and civic responsibility and service to in a global society. The University is well known for building and promoting a system, which is accessible to the students of diverse faiths, races, creeds and cultures. The University is striving hard for excellence in the creation and dissemination of knowledge, promoting the holistic development of students and preparing them to lead lives with personal integrity, civic responsibility and service to the society. The University has been

endeavouring to develop some of it's well recognized departments as centres of excellence in scientific and behavioural research. Keeping in view its overall the University achievements was accredited with 'A' Grade status in the year 2015 by the National Assessment and Accreditation Council (NAAC). The University has a regular membership of Association of Indian Universities. Kumaun University is a 'Full Member' of the Himalayan University Consortium' [HUC] International Centre for Integrated Mountain Development [ICIMOD], Kathmandu, Nepal.

Department of Geography

The department of Geography is one of the oldest and internationally recognized departments established in the year 1951, and since 1973 it is functioning as one of

the premier departments of the University. The Department has the honour of organizing Scientific Symposium of 21st International Geography Congress [IGC] of the International Geographical Union [IGU] in 1968; and hosting the first International Summer School on Land Use Studies in association with Aligarh Muslim University [AMU], Aligarh in 1965. The Department is equipped with state of art Remote Sensing [RS] and Geographic Information System [GIS] facilities. The Department has been playing a very significant role in the creation and dissemination of state-of-art new knowledge in various emerging issues of global to local significance, such as the implementation of the United Nations Sustainable Development Goals [SDGs]; Climate Change Impact, Adaptation and Mitigation; Water, Health, Livelihood and Food Security; Disaster Risk Reduction; Gender Mainstreaming; Natural Resource Management, Green and Resilient Urban Growth, Institutions and Governance with a specific focus on Sustainable Mountain Development in context of the Indian Himalayan Region [IHR]. The Department is promoting wider applications of the emerging and frontier areas of science and technology, particularly Remote Sensing, Geographic Information System [GIS] and Global Positioning System [GPS] both in teaching-learning and research.

Department is collaborating with a large number of Universities and Institutions of





excellences across the world in the abovementioned thrust areas through international projects supported by the Australian Agency for International Development [AUSAID]; Ministry of Education, Japan; Federal Ministry of Education and Research, Germany; The Norwegian Agency for Development Cooperation [NORAD]; Indo-US 21st Century Knowledge Initiative; French Ministry of Research; Ganges Water and Land Ecosystem [WLE] Programme of Group for International Consultative Research Agricultural [CGIAR]: International Water Security Network [ISWN]; Indian Himalaya Climate Change Adaptation Programme [IHCAP] of the Swiss Agency for Development and Cooperation [SDC]; UK India Education and Research Initiative [UKIERI] of the International Urban British Council; Climate Change Research Network [UCCRN)]; International City Management Association [ICMA]; United States Agency for International Development [USAID]; the Finland Research Council; and Asia Pacific Network for Global Change Research [APN], Japan. The Department is also one of the partners of international collaborative project on 'Urban Climate Change Vulnerability Assessment Across

Hindu Kush Himalaya' with Yale University, USA; International Centre for Integrated Mountain Development [ICIMOD], Nepal; and University of British Columbia, Canada, funded by Aeronautics and National Space Administration [NASA], USA. Besides, the Department is also implementing joint field-based Educational and Research Programme with the University of Bergen, Norway supported by the Norwegian Centre for International Cooperation in Education [SIU]. The Department is also participating in International Multistakeholder 'Global Challenges Programme' with Newcastle University, the United Kingdom sponsored by the Royal Society, UK.



The Department has some of the best faculty members and researchers of the country who are not only involved as Member of Steering Committee of various international organizations. such as different Commissions of the International Geographical Union [IGU] and Global Mountain Commission [GMC], but also serve as Resource Pool of Experts and Consultants for a large number of National Training and Research Institutions and Government Agencies. The Faculty members of the Department have been making a remarkable contribution towards building the new generation of enthusiastic researchers, and many Doctoral Students of the Department have had the opportunity of participating in a number of International Training Programmes and Summer Schools in the institutions of repute in Taiwan, Switzerland and Austria during the recent years. The Department has organized a number of International Conferences, Seminars and Workshop during the recent past sponsored by the apex international and national agencies, and attended by the leading experts of the world. The Department is also the headquarters of the Himalayan Geographical Association which publishes the Journal of 'Regional Science and Development'.



Courses Offered by the Department of Geography

The department offers a range of courses in all prominent and emerging streams of geography both at Under Graduate and Post Graduate levels. In order to make teaching-learning and knowledge creation a tune to local, regional, national and global environmental and developmental priorities the Department has launched a wide range of interdisciplinary and mountain-specific courses, such as Natural Resources Management; Integrated Development; Integrated Mountain Development; Urban Watershed Environmental Planning; Environmental Management and Sustainable Development; Agro-ecosystem Management; Rural Development and Planning; Climate Change Impacts and Adaptation; and Disaster Management during recent years. The emerging and frontiers are frontier areas of science and technology, such as Remote Sensing [RS], Geographic Information System [GIS] and Global Positioning System [GPS] constitute the core components of the academic curriculum of the Department. Both the Under Graduate and Post Graduate Programmes are Semester based, and equally open to the students of Arts as well as Science streams. The Department has been organizing online Short Term Course on Application of Remote Sensing and Geographic Information System in natural resource management, sponsored by Indian Space Research Organization [ISRO], Government of India under its 'Outreach Programme' since 2016.





New Courses Introduced by the Department

Besides. the Department also is contributing towards the dissemination of the state of art recent knowledge created through international collaboration to a range of stakeholders including higher education faculty, researchers, policy planners and community-based institutions through organizing conferences, seminars, dissemination workshops, training courses, capacity building programmes and other outreach events from time to time. The Department of Geography is one of the Lead Partner institutions of the multiinstitutional collaborative Educational and Research Capacity Building Project on 'Sustainable Natural Resource Use in Arctic and High Mountain Areas'

[SUNRAISE] along-with nine Universities of excellence in Europe, funded by the European Union [EU]. The Department has modernized it's Post Graduate Curriculum with experiences gained from the SUNRAISE Partner and Collaborative Institutions and a range of other stakeholders, and made the Post Graduate Academic Programmes more mountain and community oriented.

The following new courses have been introduced since 2019:

[1] Climate Change Impacts and Adaptation in Himalaya

This one full semester course provides the M.A./M.Sc. Semester-III students of Geography basic understanding of climate change and its fundamental concepts; and knowledge about the rends of Climate Change in Himalaya. Besides, it will also introduce students to climate change induced natural disasters, climate change vulnerability assessment; and methods, techniques and approaches of climate change adaptation in Himalaya. The course includes individual assignments.



Aims and Objectives

This course has been designed with a view students in developing to help a comprehensive understanding and knowledge of the impacts of climate change in Himalaya and the need of evolving and implementing effective adaptation strategies. The main objectives of the course are: (i) to help students in understanding the increasing impacts of climate change on natural and socioeconomic systems in Himalaya; (ii) to provide students with the state-of-art recent knowledge about the climate change induced natural disasters in Himalaya; and (iii) to appraise students about the need of developing effective climate change adaptation strategies and mainstreaming climate change adaptation in development planning.

General Learning Outcomes

By the end of the course, successful students will:

- Understand the fundamental concept and science of climate change,
- Gain adequate knowledge of the climate change induced natural disasters,
- Understand climate change vulnerability assessment techniques, tools and methods,
- Develop comprehensive understanding of climate change adaptation approaches and strategies for the Himalayan mountains
- Understand the concept of sciencepolicy interfaces in climate change adaptation,
- Understand the role of local institutions in climate change adaptation



[2] Integrated Mountain Development with Special Reference to the Indian Himalayan Region

Course-Summary

This one full semester course provides the M.A./M.Sc. Semester-I students of Geography the basic understanding of the environmental significance of the mountain regions and the need of their sustainable development. It will present a comprehensive socio-ecological overview of the world's mountains and the impacts of the process of global environmental changes including climate change on high mountain regions, specifically Himalaya. Besides, it will also introduce students to mountain natural resources and role of local institutions mountain environmental governance; and need, approaches and for sustainable strategies mountain development. The includes course individual assignments.

Aims and Objectives

This course has been designed with a view help students in developing to a comprehensive understanding and knowledge of the critical environmental and developmental issues of important mountain regions of the world and need of their sustainable development in context of the Indian Himalayan Region. The main objectives of the proposed course are: (i) to help students in understanding the environmental and socio-cultural significance of mountain regions; (ii) to equip the students with the state-of-art recent knowledge about process, drivers and impacts of the environmental changes in the high mountains; (iii) to educate students about the role and significance of mountain institutions in environmental governance and sustainability; and (iv) to make students to realize to need of development of mountain sustainable regions and their people.

General Learning Outcomes:

By the end of the course, successful students will:

- Understand the global significance and importance of mountain regions
- Learn the trends and impacts of global environmental changes on mountains
- Gain adequate knowledge of the natural resources of mountains
- Understand frangibility, marginality, vulnerability and productivity of mountains
- Develop comprehensive understanding of the role of mountain institutions in environmental governance Understand the concept of science-policy interfaces in climate change adaptation,
- Understand the approaches and techniques of sustainable mountain development

The following existing courses have been revised in 2019:

[1] Natural Resource Management

Course Summary

This one full semester course provides the M.A./M.Sc. Semester-I students of Geography the basic understanding of the significance and relevance Integrated Watershed Management in the management of natural resources in the mountain regions. It will present a comprehensive overview of the relevance and significance of Integrated Watershed Management approach for sustainable development of high mountain ecosystem in the era of global environmental changes, climate particularly change and environmental degradation with specific reference to Himalaya. It will also highlight the importance of watershed management in mainstreaming climate change adaptation and disaster risk reduction in mountain regions, particularly in developing countries. The course includes individual assignments.

Aims and Objectives

This course has been designed with a view to help students in developing a comprehensive understanding and knowledge of the Integrated Watershed Management approach and its significance and rationale for sustainable mountain development in context of the Indian Himalayan Region. The main objectives of the revised course are: (i) to help students in understanding the significance of watershed approach in sustainable mountain development; (ii) to provide students with the state-of-art recent knowledge about the relevance of watershed approach in climate change adaptation and Disaster Risk Reduction mountains; (iii) to educate students about the rationale and importance of Transboundary Watershed Management in Himalaya; and (iv) to make students to understand upstream and downstream linkages in river-basin system

General Learning Outcomes:

By the end of the course, successful students will:

- Understand the significance and importance of watershed management in mountains
- Comprehend the role of watershed management in addressing impacts of global environmental changes on mountains
- Gain adequate knowledge of watershed as ideal unit for integrated development planning in mountains
- Understand significance of watershed approach in integrating climate change adaptation and disaster management
- Develop comprehensive understanding of the role of watershed management in environmental governance
- Understand the approaches and techniques of Integrated Watershed Management

[2] Integrated Watershed Management

Course-Summary

This one full semester course provides the M.A./M.Sc. Semester-IV students of Geography the basic understanding of the fundamental concept of natural resources and of the process of resource development. The students would learn the applications of remote sensing and Geographic Information System in natural

resources analysis and mapping in the mountain regions. It will present a comprehensive overview of the carrying capacity and productivity of natural resources in high mountains with specific reference to Himalaya. It will also impart education to the students about the various approaches of natural resource management in high mountains in context of Himalaya. The course includes individual assignments.



विश्वविद्यालय के पाठ्यक्रम में शामिल किया जाए पहाड़ का परंपरागत ज्ञान

असरण संवयदात्र, भेतीका : भारतु के सार्थापरिक जन भेज भारते मिंविक मन्यता भा सिल पुश्चे है। यूरोपिश्वन सुवेश्वन कारावेश में नेतीका में अवाधील कारावेश में नेतीका में स्वार्थ में सार्थ कारावेश में नेतीका में सार्थ में सार्थ के लिए पार्थपिक जान को विवि के लिए पार्थपिक जान को विवि के लिए पार्थपिक जान को विवि के लिए पार्थ का सार्थ में सार्थ में सार्थ के लिए पार्थ कि जान को जिन के लिए पार्थ का सार्थ में का सार्थ कि पार्थ का सार्थ के सार्थ के कारावे कि सार्थ का सार्थ के कि सार्थ के कि विवि में भारते के विवयस के विवयस के विवयस के भारती के विवयस के विवयस के विवयस के विवय भारती के विवयस के विवयस के विवयस के विवय भारती के विवयस के विवयस के विवय स्वी के

पुरुषका रहे यह में ही सिक्क उज्यतन के बाद रहा बुषा खाह के विकास के बाद रहा बुषा खाह के विकास का स्वर्थ । पिता जाई मई मई में स्वर्थ बुखाओं को देखा मही के दिस देसे के बुखाओं को देखा मही के दिस देसे पर्वतीय के के विकास के विकास की सांस्याद को दरमिटन भाषा की सांस्याद की दरमिटन भाषा की का कि दिस मार्ट के साह के प्रार्थ के अंतर्गत की साह कि साह के प्रार्थ के प्रा का का की के दरमुद्द काती हुए कहा म कि दिसान के देखा के दिलाज की विका का का की का उज्य तरक पत्नीत के प्रार उत्यों पद्रप्रकाम में अंतरीय तरका कि स्वार करना की का उज्य तरक पत्नीत के प्रारं प्र



टार्यराला • त्र्वेषियन यूनियन के सहयोग से विरोषस्त्रां ने रसे अपने विवार • कुमार्ड विवि मुमोल विमाग की ओर से हिमालकी क्षेत्र के विकास पर कर्कशोध लामू करने के जीर तरीफे शामिल करने

क तम्मू करने के तोर सराक भागनत करन सर जते दिवा। या आदिएया से मुद्दे में, जुलल प्रोस्टी ये, ने हैंदनों जातते हुए कहा कि अब तक में चाहद में रोजपर सुरान करने काले तरा पाठ्यकम क्यों तैवर नहीं किए गए। छा भोध निदेशक था, राजीव उपाणम, के भोध निदेशक था, राजीव उपाणम, देव रोट राखीर संवेत में अन्तर निवार है। रखी संवेतेफक को, जिबारी ने बातवा कि का इस बामल् ने ने प्र अल्पती कार्यवाला भर

नेशाल में आयोजिश करवीरता में बोल्डो प्रो. किसरी, प्रो. संदर प्रो. जुरालन ७ जजराव हस मौके पर जो. अलीता पांडे, जॉ. साह, जो एससे सड़ी, रिव्या के ही पंकत नवती जोवी जूरी, प्रे अस्य पन्थान, प्रो. तिवयी ने प्रायं, विनेदी जोवी ताला पंत्र की होती मांच रह, जॉ.रिजा के नाक्यन उजरिंदी भा

Aims and Objectives

This course will help in developing a complete understanding of concept of and process of natural resource development, and their conservation and management using application of Remote Sensing (RS) and Geographic Information System (GIS) with special reference to high mountains and Himalaya. To help students in understanding the concepts of natural resources, learning methods of resource analysis and mapping, and developing natural resources information system using geo-spatial techniques. The main objectives of the course are: (i) to understand the process of natural resource development in varying natural and socioeconomic, and legal environment; (ii) to demonstrate the application of state-of-art Remote Sensing (RS) and Geographic Information System (GIS) with special reference to high mountains specifically Himalaya; (iii) to help students in learning concepts and approaches of natural resources management and understanding its inter-linkages with sustainable mountain development in context of Himalaya

General Learning Outcomes:

By the end of the course, successful students will:

- Understand the significance and importance of understanding the concept of natural resources and their application in natural resource management
- Learn the application of the recent and emerging areas of science and technology in natural resource management
- Gain adequate knowledge of ecological processes and ecosystem functions
- Understand significance of adaptive natural resource management under climate change in high mountains, especially in context of Himalaya
- Develop comprehensive understanding of the necessity of sustainable resource development in Himalaya
- Understand the approaches and techniques of natural resource Management in context of Himalaya



Country	Institution	City
Austria	University of Salzburg (PLUS)	Salzburg
Bhutan	Royal University of Bhutan (RUB)	Thimphu
Estonia	Estonian University of Life Sciences (EULS)	Tartu
Germany	University of Bremen (UniHB)	Bremen
India	Lawaharlal Nehru University (JNU)	New Delhi
	Kumaun University (KU)	Nainital
	Central Himalayan Environment Association	Nainital
Russia	Altai-Sayan Mountain Partnership (ASMP)	Gorno-Altaisk
	Gorno-Altaisk State University (GASU)	Gorno-Altaisk
	Russian State Hydro-meteorological	StPetersburg
	Siberian Federal University (SibFU)	Krasnojarsk

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