SSJDVSSS Govt. P. G. College Ranikhet, Almora

DEPARTMENT OF GEOGRAPHY

Brief Introduction of the Department

Department of Geography is one of the oldest departments of SSJDVSSS Govt. P. G. College Ranikhet, Almora. It was established in the academic session 1979-80 as degree course (BA/BSc) in undergraduate level. It was during 2001-2002 the Post Graduate (MA/MSc) in Geography started in Govt PG College Ranikhet. Presently there are 120 seats in Geography at UG level and 20 seats in PG Level. The UG level is three-year course which is divided in six different semesters of six months each. Similarly, the PG level is two years course and is divided in four different semesters of six months each.

Presently there are three faculty position in the Department as sanctioned by Directorate of Higher Education, Govt of Uttarakhand. All three Faculty positions have been filled by permanent Assistant Professors. The faculty members of the department have participated in number of national and international conferences, seminars and workshop and have published research papers in various International and National Journals and also written 3 books. Besides, there is one position of Laboratory Assistant

Vision of the Department

Geography being a multidisciplinary natured subject covers both Physical and Cultural aspects and thereby provides scope to students at Undergraduate and Post Graduate levels to inculcate in them the knowledge of earth physical features and its cultural manifestations. As a discipline it also provides the knowledge of regional variations, environment and most importantly the man-environment interactions. Besides, being a filed oriented practical subject, it also offers skills and experience-based learning opportunities.

Mission of the Department

- Promote understanding of physical features of the earth surface
- To understand the regional variations in the physical features of the earth surface
- To make student understand the cultural aspects and its diversity

- To promote among students the importance of regional planning with respect to the physical and cultural variation and endowments
- To facilitate skills of informed decision-making process through the accurate knowledge about earth surface and its resources
- To provide students practical knowledge of the subject and field exposures of the real earth phenomena

Courses Framework in BA Geography

Sl No	Semester	Course Type	Course Code	Course Title
1	BA I Sem	Theory I	GUGP-101	Physical Geography
		Theory II	GUGP-102	Geography of Asia
		Practical	GUGP-P-103	Basic Cartographic Techniques
2	BA II Sem	Theory I	GUGP-201	Geomorphology
		Theory II	GUGP-202	Geography of India
		Practical	GUGP-P-203	Map Reading & Interpretation
2	BA III Sem	Theory I	GUGP-301	Climatology & Biogeography
		Theory II	GUGP-302	Human Geography
		Practical	GUGP-P-303	Thematic Cartography
3	BA IV Sem	Theory I	GUGP-401	Urban Geography
		Theory II (optional)	GUGP-402 (a)	Environmental Geography
		Theory II (optional)	GUGP-402 (b)	World Regional Geography
		Practical	GUGP-P-403	Surveying
4	BA V Sem	Theory I	GUGP-501	Evaluation of Geographical Thought
		Theory II (optional)	GUGP-502 (a)	Oceanography
		Theory II (optional)	GUGP-502 (b)	Agricultural Geography
		Theory II (optional)	GUGP-502 (c)	Population Geography
		Practical	GUGP-P-503	Map Projections
5	BA VI Sem	Theory I	GUGP-601	Economic Geography
		Theory II (optional)	GUGP-602 (a)	Regional Planning & Development
		Theory II (optional)	GUGP-602 (b)	Political Geography
		Theory II (optional)	GUGP-602 (c)	Geography Tourism
		Practical	GUGP-P-603	Statistical Techniques & Geoinformatics

Program Outcomes (POs) of BA Geography Program

PO1	Comprehensive understanding of structure and processes of the earth, atmosphere and ocean.
PO2	Having better understanding of the Asian continent and its geographical regions.
PO3	Basic knowledge and skills of cartography including map reading through toposheets
PO4	Undersetting the different macro, meso and micro landform processes.
PO5	Knowledge about the resources, agriculture, industries and population processes of India
PO6	Students will learn the fundamental skills of toposheet and weather map interpretations.
PO7	Student will have the knowledge of weather processes and climate types along with different ecosystems and ecological processes.
PO8	Student will have broad knowledge about racial evolution and classification, present world population and settlement patterns.
PO9	Students will practically learn the skills of representing population, economic, agricultural and other geographical data through various techniques.
PO10	Students will come across the urbanization processes and its trends, types and functions of towns.
PO11	Students will have the knowledge of environmental processes, environmental problems and environmental conservation.
PO 12	Students will have the basic knowledge of world geography and demography.
PO13	Students will also learn the basic principles and techniques of surveying and mapping.
PO 14	Students will have the knowledge of the evolution of geography through ages and the contribution of scholars in the development of geography as a discipline.
PO15	Students will also have in-depth knowledge of ocean in terms of distribution, composition and ocean processes.
PO16	Students will learn the basic concepts, measurements, patterns and types of agriculture along with agricultural regions and regionalization
PO17	In-depth knowledge of world demographic processes (mortality, fertility, migration and transition) composition, growth and distribution
PO18	Students will learn the skills of drawing map projection along with the knowledge of the importance of various types of map projection.
PO19	Students will have the understanding of resources, production, regional planning and development.
PO 20	Students will learn basic statistical technics to analyze geographical data and also learn geospatial techniques to digitally collect, manipulate, process and analyze earth real data.

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Program Specific Outcome (PSOs) of BA Geography

PSO1	Imbibe students with an out look to understand the physical setup whereupon the interplay of human action paves the way for cultural landscape which provides an insight of man-environment interactions.
PSO2	Better appraisal of the physical and cultural resources in a regional framework helps students to identify problems and prospectus and thereby they will be in a position to assist in regional planning and development.
PSO3	Integration of Geography knowledge with various social and natural sciences will help students to enlarge their understanding about the society.
PSO4	Developing geography as an important professional discipline and identifying new areas for the application of Space and Geo-spatial Sciences.
PSO5	Develop capacity to find solutions to new and emerging risks and challenges that theglobal society is facing currently.

Course outcomes (COs) of BA Geography

BA/BSc I Semester	
GUGP-101 PHYSICAL GEOGRAPHY - Theory Paper I	
CO1	Students know about the origin, interior and different rock types of the earth
CO2	Students have the idea about the origin of continents and oceans along with various associated theories besides knowing mountain building, gradation, weathering and erosion processes.
CO3	Students also have basic idea of the composition and structure of atmosphere and insolation, distribution of temperature, pressure, winds, etc
CO4	Student know about bottom topography of oceans, salinity, ocean temperature, ocean currents, tides, coral reefs and their effects
GUGP-102 GEOGRAPHY OF ASIA (EXCLUDING INDIA)- Theory Paper II	
CO1	Students know about the location, extent and geopolitical significance of Asia along with its topography, drainage, climate, natural vegetation, soils and natural regions.
CO2	Understanding of population distribution, agriculture, mineral resources, power resources, major industries and trade in Asia
CO3	Can have better understanding about the diversity of the Asia with emphasis on regions of Asia
GUGP-P-103 BASIC CARTOGRAPHIC TECHNIQUES- Practical	
CO1	Students will know about cartography, its origin, history, types significance and elements of maps
CO2	Students will have better understanding about types and significance of scales with practical exercises of constructing different type of scales and through enlargement and reduction of maps (change of scales)
CO3	Students are given to practically employ different methods of relief representation –

	Hachures, Contours, Spot Heights, Bench Marks and Interpolation of Contours
BA/BSc II Semester	
GUGP-201 GEOMORPHOLOGY – Theory Paper I	
CO1	Develop an idea of Geomorphology its contemporary methodologies and spatio-temporal context of Geomorphology
CO2	Know different Models of Landscape Evolution – Davis, Penck, King, Heck, etc
CO3	Learn about Isostasy, Seismicity, Vulcanicity, Tectonic and Neo-Tectonic Landforms
CO4	Understand Mass Wasting and landforms and also know how Mass Wasting, Running Water, Underground Water, Glaciers, Waves and Winds play role in developing and shaping different landforms
GUGP-202 GEOGRAPHY OF INDIA- Theory Paper II	
CO1	Familiarization with Physical Features, Geological Structures, Climate System, Natural Vegetation, Soils, Drainage System and Natural Regions of Indian Sub-continent.
CO2	Learn about India's agricultural systems, crops, production, Irrigation, Agricultural Regions, Livestock raising and fishing
CO3	Have basic idea of Industries, Minerals, Power Resources, Multipurpose Projects, Transport, Trade and Regional Development and planning in India.
CO4	Also help studying population density, growth, distribution and urbanization in India.
GUGP-P-203 MAP READING AND INTERPRETATION- Practical	
CO1	Gives introduction to students about the Indian Topographical Map System, Types and Classifications of Topographical Maps.
CO2	Students learn to identify different physical and cultural features in topographical maps with the help of conventional signs and also learn to interpretation it.
CO3	Students are given to know preparation of Base Map, Index Map, Drainage Map, Orographic Map, Settlement Maps, Transport and Network Maps from Toposheets.
CO4	Students will acquire an understanding about weather maps, interpretation of weather maps and weather reports.
BA/BSc III Semester	
GUGP- 301 CLIMATOLOGY AND BIOGEOGRAPHY – Theory Paper I	
CO1	Students will have general understanding about atmospheric circulation, the monsoon, local winds, humidity, fog and clouds, precipitation, cyclones and anti-cyclones.
CO2	Help student understand the classification of climate based on Keoppen's and Thornwaite's schemes and also learn about climate type, their distribution and climate change.
CO3	Gives students opportunity to understand fundamental concepts of Ecosystem, Biosphere, Bio-geography, Ecology, components and functioning of ecosystem.
CO4	Have general understanding about the distribution of plants and animals in different ecosystems, ecological conditions and environmental degradation.

GUGP- 302 HUMAN GEOGRAPHY- Theory Paper II	
CO1	Gives students basic idea of Human Geography, Branches of Human Geography along with concepts of man and environment relationship, Determinism, Possibilism and Neo-determinism.
CO2	Student know about evolution of human, classification of races, characteristics of races their broad distribution and Human adaptation to the environment
CO3	Know about the growth and distribution of world population and its factor, major human agglomerations, internal and international migration.
CO4	Also study about rural settlement- types and pattern and urban settlement- evolution and classification and also about cultural regions of the world
GUGP-P-303 THEMATIC CARTOGRAPHY- Practical	
CO1	Students will learn to represent geographical data by (a) dot method (b) proportional sphere method and circle method.
CO2	Students will also learn to depict the climatic data: Climatograph, Climograph and Hythergraph
CO3	They will also be given the practical skill about how to represent economic data and population data through various graphical and map-based methods.
CO4	They will have the knowledge of drainage ordering, slope analysis through various methods (Wentworth's and Smith's methods)
SEMESTER-IV	
GUGP-P-401, URBUN GEOGRAPHY – Paper I	
CO1	Students will be given to know the concept of urban geography, urbanism and urbanization and trends of urbanization in the world
CO2	Students will know about towns and culture, origin and growth of ancient towns, modern towns and their problems
CO3	They will have the clear idea about urban areas and conurbation, rural-urban fringe, Umland
CO4	Know about the functional classification of towns, hierarchy of urban settlement and most immortally about the town planning-meaningand principles
GUGP-P-402-(a) ENVIONOMENT GEOGRAPHY- Paper II	
CO1	Learn the concept, scope and evolution of Environmental Geography, Environment, man andenvironmental processes
CO2	Students will be able to describe ecosystem and its productivity, energy flow, circulation of element and Geo-biochemical cycle
CO3	Students know about ecosystem services, biomes, bio-diversity, soil system, man and climate
CO4	Students can understand environmental degradation, environmental events and hazards, environmental conservation and planning
GUGP-P-402-(b) - WORLD REGIONAL GEOGRAPHY (EXCEPT ASIA)- Paper II (b)	
CO1	Students will be able to comprehend meaning of regional geography, regions and regionalism, population-environment and sustainable development.
CO2	Know the physical structure, economy and demographic pattern of Europe and of United Kingdom

CO3	Know the physical structure, economy and demographic pattern of North America and United States of America
CO4	Know the physical structure, economy and demographic pattern of Latin America
GUGP-P-403 - PRACTICAL- SURVEYING- Paper III (MM 50)	
CO1	Understand the fundamentals of surveying including primary divisions of survey and classification
CO2	Know the use of Prismatic Compass and its different methods of surveying such as Radiation, Intersection, Close Traverse and Open Traverse
CO3	Learn the use of Plane Table Surveying through various methods like Radiation, Intersection, Close Traverse, Open Traverse and Resection
CO4	Students will be able to use Indian Pattern Clinometer to measure height or depth
SEMESTER-V	
GUGP-501- EVOLUTION OF GEOGRAPHICAL THOUGHTS – Paper I (MM 50)	
CO1	Students will be able to comprehend the concept, purpose and philosophy of geography along with the knowledge of Techniques and tools in Geography and different branches of Geography
CO2	Know the evolution of geographical knowledge in classical times by the early contributions of Greek and Roman Geographers followed by the contribution by Arab Geographers,contribution of age of discoveries and Eighteenth-century Geography
CO3	Also able to know about formulation of scientific Geography by the contributions of German, French, British, American and former Soviet Union geographers
CO4	Able to know Dualism in Geography, Dichotomism of scientific and regional Geography and Recent Trends in Geography
GUGP-502(a) – OCEANOGRAPHY – Paper II (a) (MM 50)	
CO1	Student will know concept, scope and development of Oceanography and understand distribution of water over the globe
CO2	Know about the relief of the ocean floor, continental drift and ocean floor spreading along with composition of sea water
CO3	Have the idea of temperature in oceans, salinity, density and water masses in oceans and marine deposits
CO4	Know about Coral landforms, waves and tides, ocean currents and marine life
(GUGP-502(b) - AGRICULTURAL GEOGRAPHY – Paper II (b) (MM 50)	
CO1	Student will know the nature, scope, significance and development of Agriculture Geography, and also the origin and dispersal of agriculture
CO2	Have the idea about Determinants of agricultural land use; techniques and methods of agricultural measurements; methods of delimiting crop combination, cropping pattern, crop concentration, intensity of cropping, crop diversification and specialization
CO3	Know the theories of agriculture geography such as Von Thunen's theory (model) of agricultural location, Whittlesey's classification of agricultural regions; Land use and land capability; etc
CO4	Able to understand regional pattern of productivity in India, Green Revolution, White Revolution, Food deficit and food surplus regions; and patterns of agriculture in the world.

GUGP-502(c) - POPULATION GEOGRAPHY – Paper (c) (MM 50)	
CO1	Understand the nature, scope and development of population Geography along with source and types of Population Data.
CO2	Develop an outlook to analyze world population: Growth, Causes and Consequences; besides understanding factors affecting population distribution; Demographic Transition Theory and Migration Types and Determinants
CO3	Understand the Population Characteristics such as fertility and mortality; age and sex structure; occupational structure; Human Resource Development and Human Development Index; etc.
CO4	Know population resource region of India vis-à-vis population growth and distribution in India including population problems and population Policy in India
GUGP-P-503 - PRACTICAL- POJACTION- Paper III (MM 50)	
CO1	Understand the map projection, its necessity and classification, mathematical method of drawing projection.
CO2	Able to construct Simple conical projection with one and two standard parallels, Bonne's projection, Polyconic projection
CO3	Learn to construct Equidistant and Equal area cylindrical projections,Mercator's, and Gall's stereographic projection
CO4	Learn to construct Polar zenithal equidistant, Equatorial zenithal equidistant, Polar zenithal equal-area and Equatorial zenithal equal area
SEMESTER-VI	
	GUGP-601- ECONOMIC GEOGRAPHY- Paper I (MM 50)
CO1	To know the concept, aim and scope of economic geography, resources, classification of resources, and conservation of resources
CO2	Know about primary production, vegetation & forest economy, soil resources, mineral resources and power resources
CO3	Able to define agricultural regions, principle crops, theory of agriculture location, theory of industrial location and industrial regions.
CO4	Know about the world transportation, international trade, patterns and trends of trade, major trade blocks, Globalization and developing countries
GUGP-602(a) - REGIONAL PLANNING AND DEVELOPMENT- Paper II (a) (MM 50)	
CO1	Students will understand the regional concept in geography along with the scope and purpose of regional planning
CO2	Know about the planning process and its sectoral, temporal and spatial dimensions and the short term and long-term perspective planning.
CO3	Understand the indicators of development and their data sources, measuring levels of regional development and disparities, Planning for a region's development and multi-regional planning in a national context
CO4	Have idea about the regional development strategies with case studies for plans of developed and developing countries.
CO5	Understand the concept of multi-level planning, decentralized planning, people's participation in the planning process and application of remote sensing and Geographic Information System in Development Planning

GUGP-602(b) - POLITICAL GEOGRAPHY- Paper II (b)	
CO1	Understand the concepts, scope, approaches and development of political geography and know about politics and geopolitics.
CO2	Know about the concept of nation, State and Nation-State; Geographic Characteristics of States: Size, Shape, Location, Cores and Capitals; Frontier and Boundaries.
CO3	Know about the Global Geo-politics and Mahan, Mackinder, Spykman and Seversky Views Related to Heartland and Rimland.
CO4	Learn the Political Geography of India, Resource Development and Power Politics, Geopolitical Study of Indian Ocean, political geography of SAARC region and Electoral Geography.
GUGP-602- GEOGRAPHY OF TOURISM- Paper II (c)	
CO1	Know the fundamental Concepts and classification of tourism while learning Resources and Infrastructure for tourism
CO2	Able to assess physical, economic, social and cultural impacts of tourism and know about concept of ecotourism, and new emerging trends in tourism
CO3	Understand the tourism marketing, tourist product, tourism circuits and tour agencies
CO4	Know about Globalization and Tourism, tourism in India, National Tourism Policy in India; tourism organizations and tourism in Uttarakhand
GUGP-P-603- PRACTICAL- STATISTICAL TECHNIOUES AND GEOINFORMATICS	
CO1	Students will understand types of data, collection of data, methods of sampling and measures of central tendency.
CO2	Know about the measures of dispersion and correlation coefficient
CO3	Know about remote sensing, its platform and sensors, elements of image interpretation and Image processing techniques.
CO4	Able to perform geo-referencing and know about spatial and non-spatial data, raster and vector models , principal functions of GIS including Data Base Management System (DBMS); Geo-relational data model; Topological Data Structure; Attribute Data Management and Digital Elevation Model (DEM)

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