

Shivaji University, Kolhapur

Name of Department: GEOGRAPHY

Name of Programme: M.A. / M.Sc.

Vision

“To achieve the excellence in higher learning with academic integrity by dedicated teaching and promoting research in the discipline of Geography”

Mission

“Enlightening students to understand the processes, dynamics and outcomes of interactions of the Earth’s physical and human environments and it’s subsystems with changing time and space”

Program Outcomes

1. Students will have comprehensive knowledge in the discipline of Geography.
2. They will have ability of making comprehensive analysis, interpret spatial problems, and suggest proper solutions by using theoretical, methodological, and instrumental knowledge of Geography.
3. Good employability skills as per current need of the society to compete in the competitive world.
4. They will have good understanding about proper utilization of natural resources through geographical knowledge.
5. Aware about the regional and national environmental issues, recent trends, and technological advancements in the discipline of Geography.
6. Develop research interest to solve critical and emerging societal issues related to geography and the surrounding environment.

Program Specific Outcomes

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Course Outcomes

Part-I Semester-I

<p>Course code CC-101:</p>	<p>Course title Fundamentals of Geomorphology Course Outcomes</p>	<ol style="list-style-type: none"> 1. To understand the development of geomorphic thought throughout the time with a review of fundamental concepts of geomorphology. 2. To look into the evolution of continents and ocean basins with continental drift theory. 3. To know the endogenetic and exogenetic forces controlling landform development with special reference to the denudational processes. 4. To see the mountain building activities through different theories.
<p>Course code CC-102:</p>	<p>Course title Principles of Climatology Course Outcomes</p>	<ol style="list-style-type: none"> 1. To distinguish the weather and climate with an understanding of structure and composition of Atmosphere; 2. To understand the variations of weather systems in terms of Stability and Instability of atmosphere; 3. To enable the students to understand the vertical and horizontal distribution of atmospheric air; 4. To get complete information about Atmospheric Disturbances in terms of cyclones and anti-cyclones; 5. To know the significance of synoptic Climatology in pollution studies and navigation;
<p>Course code CC-103:</p>	<p>Course title Economic Geography</p>	<ol style="list-style-type: none"> 1. To understand the concepts and basis of economic processes 2. To get acquainted with theories and models in economic geography

		<ol style="list-style-type: none"> 3. To get comprehensive knowledge of World energy resources, situation and distribution 4. To know about the Nature, scope and Principles of Industrial Geography 5. To understand transport and Trade policies of country 6. To get detail knowledge of economic power determinants of country and able to analyze the economic development of country.
Course code CC-104:	Course title Geography of Population and Human Resource Development	<ol style="list-style-type: none"> 1. To develop an aptitude to infer factors influencing population distribution and density; 2. Acquire skill to describe regional patterns of population composition; 3. Compute and explore fertility, mortality and human development levels for micro, meso and macro regions. 4. Analyse the population-resource regions and discover problems arising due to over and under population. 5. Understand and create awareness about provincial aspects of gender equity, social well-being and quality of life.
CCPr-105.1:	Practicals in Geomorphology and Surveying	<ol style="list-style-type: none"> 1. To know the methods of representation of relief. 2. Understanding the topographical maps. 3. Identification and mapping of drainage patterns 4. To look into the drainage basin morphometry. 5. To understand the field surveying methods.
CCPr-105.2:	Analysis of Climatic Data	<ol style="list-style-type: none"> 1. To identify various sources of climate data 2. To understand the formats of Indian daily weather report and reading of weather signs and symbols 3. To represent meteorological elements diagrammatically and interpretation of results. 4. To know methods of measurement of meteorological elements 5. To analyse interrelationship between various meteorological elements 6. To analyse present and future trends of meteorological elements.
CCPr-105.3:	Analysis of Socio-Economic Data	<ol style="list-style-type: none"> 1. To identify the importance of population studies regarding the fertility, mortality, 2. To understand the socio-economic structure of population

		<p>3. To study various statistical methods for analysis of Agricultural activities.</p> <p>4. To determine the agriculture productivity and analyze results.</p> <p>5. To get basic understanding of the economic data and its analysis.</p>
Part-I Semester-II		
Course code CC-201:	Course title Applied Geomorphology	<p>1. To establish the relationship between the tectonism and geomorphology with the knowledge of interior of the Earth.</p> <p>2. To verify the impact of dynamic agencies on denudation and their work.</p> <p>3. To understand the cycle of erosion with different views with special reference to hill slope development.</p> <p>4. To see the application of geomorphology in the view of anthropogenic and environmental geomorphology.</p>
Course code CC-202:	Course title Applied Climatology and Climate Change	<p>1. To recognize the importance of climate on human life;</p> <p>2. To identify and categorize climate types and climatic regions of the world;</p> <p>3. To understand the regional and seasonal variations of weather systems in India;</p> <p>4. To get comprehensive knowledge about causes and impacts of atmospheric pollution, GHGs emission, ozone layer depletion, acid rain and el-nino;</p> <p>5. To know about the history, recent trends, impacts and dynamics of climate change on earth;</p> <p>6. To assess future risks of climate change and the adaptation and mitigation options;</p>
Course code CCS-203:	Course title Advanced Cartography and Surveying	<p>1. To understand basic principles of cartography and surveying</p> <p>2. To explain various cartographic methods and techniques for preparation of maps and diagrams.</p> <p>3. To compare the difference between manual and digital cartography</p> <p>4. To acquaint with the skills regarding digital cartography</p> <p>5. To identify sources and types of errors occurs during surveying</p> <p>6. To get familiar with the basic aspects of linear, vertical and angular measurements of surveying.</p>
Course code	Course title	1. To study and identify the philosophical base,

CCS-204:	Social and Cultural Geography	<p>problems associated with society & its culture.</p> <p>2. To know about the culture, cultural regions, hearths and their diffusion, realms, and distribution of races.</p> <p>3. To study and knowing of socio-cultural diversity of India, and processes of social changes.</p> <p>4. To understand the social justice and well-being of society, to find out the level of well-being in India.</p>
CCPr-205.1:	Computer Applications in Geography	<p>1. To learn the representation of geographic data using various computational methods;</p> <p>2. To know about sources and uses of online educational resources and e-learning methods;</p> <p>3. To develop writing, editing, and presentation skill for representation of geographical information;</p> <p>4. To compute statistical parameters with the help of computer;</p> <p>5. To prepare and design maps and graphs with the help of computer software;</p> <p>6. To apply computational techniques relevant in the discipline of Geography;</p>
CCPr-205.2:	Statistical Techniques in Geography	<p>1. To understand the importance and use of statistical techniques in geography</p> <p>2. To form frequency distributions tables and graphically interpret the results.</p> <p>3. To measure central tendency and dispersion of data.</p> <p>4. To examine relationship between two or more variables with correlation and regression analysis.</p> <p>5. To apply comprehensive knowledge of statistics for analysis of geographical data</p>
CCPr-205.3:	Quantitative Techniques in Geography	<p>1. To understand correlation and regression among spatio-temporal data</p> <p>2. To learn what is Spatial Analysis</p> <p>3. For The Measurement Levels and Spatial Data</p> <p>4. To Measures probability</p> <p>5. To became expert in techniques for analysis of data in research</p> <p>6. For Exploratory Data Analysis</p>
Part-II Semester-III		
Course code CC-301:	Course title Geohydrology and	<p>1. To know about the development of methods of scientific observation in hydrology and Oceanography;</p>

	Oceanography	<ol style="list-style-type: none"> 2. To understand the origin, importance and distribution of water on Earth; 3. To learn about the hydro-geological, coastal and marine processes, landforms and resources; 4. To recognize the role of oceans to deal with the vulnerability of the dynamic earth system; 5. To comprehend about the recent trends in research in Geohydrology and Oceanography;
Course code CCS-302:	Course title Fundamentals of Remote Sensing and DIP	<ol style="list-style-type: none"> 1. To understand the basic concept and principles of remote sensing and digital image processing. 2. To understand the role of remote sensing and DIP in data collection and analysis. 3. To know the different types of sensor and digital image processing techniques. 4. To understand the use and importance of satellite images and aerial photographs to assess the geographical phenomena. 5. To apply the knowledge of remote sensing and DIP in various thematic studies
Course code DSE-303:	Course title Geography of Environment	<ol style="list-style-type: none"> 1. To educate students in the contents and methods of Geography of Environment as an academic and professional discipline. 2. To understand elements of environment and acquire knowledge about biodiversity 3. To get knowledge about natural hazards and management 4. To understand the various environmental issues and policies
Course code DSE-303:	Course title Biogeography	<ol style="list-style-type: none"> 1. To understand the concepts and historical development of biogeography 2. To get comprehensive knowledge of different classification of animal and plants 3. To know about pattern of biogeography 4. To understand different processes in biogeography 5. To get detail knowledge about influencing factors on biogeography
DSE-304:	Settlement Geography	<ol style="list-style-type: none"> 1. To study the fundamentals of settlement geography 2. To understand the approaches to rural settlement geography; rural services; hierarchy; morphology etc. 3. To know the concept and processes of urban settlement studies; urban problem & their planning; concept smart cities, urban agriculture,

		<p>etc.</p> <p>4. To study the theories and models of settlement geography to understand the structure of settlements.</p>
DSE-304:	Geography of India	<p>1. To understand the main regions of the India in terms of both their uniqueness and similarities. 2. Identifying and explaining the Indian Geographical Environment, from global to local scales. 3. To generate an awareness and responsibility for the environment and India. 4. To Study the impacts of human activities on natural environments of India</p>
DSE-304:	Political Geography	<p>1. To identify the geostrategic locations and areal extent of counties in the world 2. To understand the correlation between geography and political actions and processes 3. To get familiar with the electoral system in India 4. To evaluate intrastate and interstate conflicts and disputes of India</p>
CCPr-305.1	Research Methodology and Geographical Excursion	<p>1. To develop skill to identify the objectives and significance of research in geography; 2. Prepare schedule and questionnaire in geography; 3. Collect data of physical and human elements; 4. Tabulate data, formulate research design and represent data by using most appropriate methods; 5. Effective writing, maintaining research ethics and academic integrity; 6. Organize and carry out geographical excursion and field visits;</p>
305.2	Dissertation/ Project	<p>1. Recognize the objectives and significance of research work; 2. Formulate research design and methods; 3. Organize and carry out field visits, collect field data and/or conduct review of literature; 4. Effective writing, maintaining research ethics and academic integrity; 5. Preparation and dissemination of research output having scientific and/or social relevance.</p>
Part-II semester-IV		
Course code	Course title	1. Acquire knowledge about the historical

CC-401:	Development of Modern Geographical Thought	development of the subject during different time scales. 2. Apprehend the place of geography in the field of science, social science and natural science. 3. Understand all the concepts of philosophy in geography. 4. Recognize different types of dualism and find solutions to terminate them by applying various types of scientific explanations.
Course code CCS-402:	Course title Regional Planning and Development	1. To understand the basic concepts in regional planning 2. To study different methods in order to compute regional development 3. To get acquainted with theories and models for regional development 4. To get a specialized knowledge of policies and experiences of regional planning in India.
Course code DSE-403:	Course title Fundamentals and Applications of GIS and GPS	1. To understand the basic concepts of Geographical Information System and GPS. 2. To know various components of GIS and to learn about map projection and coordinate system. 3. To know various applications of GIS and GPS in various fields. 4. Students will become familiar with modern techniques of geography. 5. Students will be prepared to apply their skills in professional careers.
DSE-403:	Fundamentals of Soil Geography	1. To understand the concepts and principles of soil formation. 2. To study the role of essential nutrient for plant growth and development. 3. To determine the physical and chemical properties of soils. 4. To enable the students to realize the Soil and environmental problems; 5. To know the significance of soil conservation and methods of Soil reclamation.
Course code DSE-404:	Course title Agricultural Geography Course Outcomes	1. To educate students about nature, scope and significance of agricultural geography as an academic and professional discipline. 2. To understand the fundamental concept, crop combination, diversification, agricultural productivity and study the determinants of agricultural patterns. 3. To get knowledge about agricultural systems of

		<p>the world.</p> <p>4. To understand the agrarian revolution, socio-economic constraints, agricultural problems and policies</p>
DSE-404:	Tourism Geography	<p>1. To understand the concepts and components in tourism geography</p> <p>2. To get comprehensive knowledge of different types of infrastructure and tourism</p> <p>3. To know about pattern & tourism in the world and impact of globalization</p> <p>4. To understand different elements of marketing in tourism</p> <p>5. To get detail knowledge about planning process in tourism</p>
DSE-404:	Geography of Health and Nutrition	<p>1. Acquaint the students with the role of geographical factors, viz., physical, demographic, social and economic, influencing the spatial distribution of diseases;</p> <p>2. Highlight the relation of health with nutrition, environmental degradation and urbanization;</p> <p>3. Decipher the causes of the changing disease pattern, and</p> <p>4. Make the students abreast of existing health-care facilities, so as to train them with better health care planning for the country.</p>
CCPr-405.1:	Photogrammetry, Remote Sensing and DIP	<p>1. To apply photogrammetry & Remote Sensing techniques to generate geospatial data.</p> <p>2. To understand digital data analysis techniques of remote sensing data</p> <p>3. To know about different types of digital image processing techniques</p> <p>4. To understand the use and importance of satellite images and aerial photographs</p> <p>5. To apply the knowledge of remote sensing and DIP in various thematic studies and problem solving</p>
CCPr-405.2:	Introduction to GIS Software and GPS	<p>1. To learn the graphical user Interface and tools of GIS software.</p> <p>2. To apply the knowledge of GIS software in various application fields.</p> <p>3. To apply Comprehensive knowledge of GIS software and GPS for analysis of geographical data and to solve real world problems.</p> <p>4. To understand the role of GIS as decision support system.</p>

		<p>5. To understand and develop the different types of models for GIS spatial analysis</p> <p>6. To examine the various functions of GPS for surveying and mapping.</p>
CCPr-405.2:	Soil and Water Analysis	<p>1. To study about the soil sample collection during the soil survey/ field work.</p> <p>2. To analyse the physical properties of soils.</p> <p>3. To analyse the chemical properties of soils</p> <p>4. To determine the physical and chemical properties of water samples.</p>
GE:407	Fundamentals of Geographical Information System and GPS	<p>1. To understand concepts of Geographical Information System.</p> <p>2. To understand basic functioning of GPS.</p> <p>3. To know various applications of GIS and GPS in various fields.</p> <p>4. Students will be prepared to apply their skills in professional careers.</p>