

RAO PAHLAD SINGH DEGREE COLLEGE

(Approved by DGHE / Govt. of Haryana & Affiliated to Indira Gandhi University, Meerpur)

Satnali Road Balana, Mohindergarh Haryana-123029 Telephone: 01285-241432 Fax: 241431

E-mail: rpsbalana@gmail.com, Website: www.rpsdegreecollege.org

DEPARTMENT OF GEOGRAPHY

PROGRAMME OUTCOMES

- Prepare students to perform in theory and practical aspect of geography.
- Make students able to understand the feature, pattern and nature of landscapes and associated environment.
- Make students able to understand cause-effect relationships of various geographical phenomenons.
- Enable students to understand the spatial and temporal dimensions of development related issues and working for sustainability.
- Enable students to apply their theoretical and practical knowledge for solving the real world problems

PROGRAMME SPECIFIC OUTCOMES

After successful completion of Master of Science in Geography, the students will be able to

- Students will be able to explain the process of physical and human environments in their spatial and temporal dimensions.
- Student will demonstrate proficiency in handling the updated geospatial tools and techniques
- Students will be able to understand current geographical issues & research trends in the field of geography. It will also make them able to give meaningful contribution.

Subject: Geography of India Class: B.A. 1st Sem.

Course Objective

- 1. Students will get an introduction to the main regions of the India in terms of both their uniqueness and similarities.
- 2. Students will be exposed to historical, economic, cultural, social and physical characteristics of India.
- 3. Students will learn the relationships between the global, the regional and the local, particularly how places are inserted in regional and global processes.
- 4. In addition to the ability of understanding and reading maps, students will develop cartography skills and will be able to create maps on their own.
- 5. Students will be introduced to demographic, social and cultural attributes such as migration, social relations and cultural identity.

Course Outcomes

- 1. Identifying and explaining the Indian Geographical Environment, from global to local scales.
- 2. Applying geographical knowledge to everyday living.
- 3. Applying knowledge of global issues to a unique scientific problem.
- 4. Showing an awareness and responsibility for the environment and India.
- 5. Evaluating the impacts of human activities on natural environments special reference to India.

Subject: Physical Geography I Class: B.A. 2nd Sem.

Course Objective

- 1. Students will understand the concept of place and how it is connected to people's sense of belonging to the physical environment, landscape and culture.
- Students will understand the fundamental concepts of spatial interaction and diffusion, which explain how human activities are influenced by the concept of distance.
- 3. Students will be exposed to the nature of physical systems such as geomorphologic processes and natural hazards.
- 4. Students will be able to read and interpret information on different types of physical features maps.
- 5. Students will learn how human, physical and environmental components of the world interact.

Course Outcomes

- 1. Describing human-environment, and nature-society interactions as well as global human and environmental issues.
- 2. Identifying and explaining the planet's human and physical characteristics and processes, from global to local scales.
- 3. Evaluating the impacts of human activities on natural environments.
- 4. Applying knowledge of global issues to local circumstances to evaluate the local effects of the issues.
- 5. Showing an awareness and responsibility for the environment.

Subject: Physical Geography II Class: B.A. 3rd Sem.

Course Objective

- 1. The broad objective of the course is to introduce to the students the fundamentals of atmospheric phenomena, global climate systems and climate change.
- 2. The atmosphere and climate are a critical part of the earth system, and climatic variability and change are central to the issue of current and future global environmental change.
- 3. To grasp the techniques for modelling the climate, covering both theoretical and technical aspects.
- 4. To understand the dynamics of the atmosphere, the ocean and the overall climatologically system.
- 5. To be able to analyse and interpret climatic data

Course Outcomes

- 1. Understand the physical basis of the natural greenhouse effect, including the meaning of the term radioactive forcing.
- 2. Know something of the way various human activities are increasing emissions of the natural greenhouse gases, and are also contributing to sulphate aerosols in the troposphere.
- 3. Demonstrate an awareness of the difficulties involved in the detection of any unusual global warming 'signal' above the 'background noise' of natural variability in the Earth's climate and of attributing (in whole or in part) any such signal to human activity.
- 4. Understand that although a growing scientific consensus has become established through the IPCC, the complexities and uncertainties of the science provide opportunity for climate sceptics to challenge the Panel's findings.
- 5. On successful completion of this course, students should be able to understand the mean global atmospheric circulations and disturbances, world climate systems, climatic variability and change.

Subject: Human Geography Class: B.A. 4th Sem.

Course Objective

- 1. Students will develop a solid understanding of the concepts of "space," "place" and "region" and their importance in explaining world affairs.
- 2. Students will understand general demographic principles and their patterns at regional and global scales.
- 3. Students will be able to locate on a map major physical features, cultural regions, and individual states and urban centers.
- 4. Students will understand global and regional patterns of cultural, political and economic institutions, and their effects on the preservation, use and exploitation of natural resources and landscapes

Course Outcomes

- 1. Students will acquire an understanding of and appreciation for the relationship between geography and culture.
- 2. Students will read, interpret, and generate maps and other geographic representations as well as extract, analyze, and present information from a spatial perspective.
- 3. Students will have a general understanding of global human population patterns, factors influencing the distribution and mobility of human populations including settlement and economic activities and networks, and human impacts on the physical environment.
- 4. Students will be able to think in spatial terms to explain what has occurred in the past as well as using geographic principles to understand the present and plan for the future.
- 5. Students will have a general understanding of how the physical environment, human societies, and local and global economic systems are integral to the principles of sustainable development.
- 6. Students will have a general understanding of the various theoretical and methodological approaches in both physical and human geography and be able to develop research questions and critically analyze both qualitative and quantitative data to answer those questions.
- 7. Students will be able to present completed research, including an explanation of methodology and scholarly discussion, both orally and in written form and, wherever possible, utilize cartographic tools and other visual formats.

Subject: Economic Geography Class: B.A. 5th Sem.

Course Objective

- 1. This course offers an introduction to the ways in which economic activities are organized over the earth's surface.
- 2. We all are witnessed to rapidly increasing integration of state economies.
- 3. The economic processes operating at different geographical scales are depending on the complex economic-political-social interactions that are framed at the global level.
- 4. The course explores the processes of globalization.
- 5. Seeks to provide understanding of today's increasingly interdependent world.

Course Outcomes

- 1. Recognize the significance of geographic concepts for understanding socio-economic processes and outcomes.
- 2. Appraise the different ways in which time and space interact and constrain each other with regards to economic activities and articulate how economic processes can be broken down into changes over time and variations across space.
- Assess how society and economic actors organize themselves in space, the factors
 driving these complex spatial patterns, and the implications these spatial
 configurations have for the socioeconomic well-being of affected groups and
 societies.
- 4. Appreciate the complexity of economic development processes taking place across the world and how these are influenced by space.
- Relate course content to current economic, social, and political events, and identify some of the geographical trends in economic processes and likely outcomes for societies.

Subject: Remote Sensing & GIS Class: B.A. 6th Sem.

Course Objective

- 1. The aim of this course is to apprise the students to various aspects of Aerial photographs.
- 2. Also introduce about Remote Sensing and GIS.
- 3. It will be teach about the important elements of the Geospatial technology.
- 4. This course introduce about the earth revolutionary and rotation system.
- 5. It gives the technical knowledge of satellite system.

Course Outcomes

- 1. Students will demonstrate knowledge of the foundations and theories of geographic information systems (GIS) and use the tools and methods of GIS.
- 2. Students will demonstrate their knowledge of physical geography and the methods and techniques for observing, measuring, recording and reporting on geographic phenomena.
- 3. Students will demonstrate their competence to work individually and as a team to develop and present a client-driven GIS solution.
- 4. Student will be familiar with modern techniques in Geography.
- 5. Students will be prepared to apply their skills in professional careers.

Subject: Climatology Class: M.Sc. Geography 1st Sem.

Course Objective

- 6. The broad objective of the course is to introduce to the students the fundamentals of atmospheric phenomena, global climate systems and climate change.
- 7. The atmosphere and climate are a critical part of the earth system, and climatic variability and change are central to the issue of current and future global environmental change.
- 8. To grasp the techniques for modelling the climate, covering both theoretical and technical aspects.
- 9. To understand the dynamics of the atmosphere, the ocean and the overall climatologically system.
- 10. To be able to analyse and interpret climatic data.

Course Outcomes

- 6. Understand the physical basis of the natural greenhouse effect, including the meaning of the term radioactive forcing.
- 7. Know something of the way various human activities are increasing emissions of the natural greenhouse gases, and are also contributing to sulphate aerosols in the troposphere.
- 8. Demonstrate an awareness of the difficulties involved in the detection of any unusual global warming 'signal' above the 'background noise' of natural variability in the Earth's climate and of attributing (in whole or in part) any such signal to human activity.
- 9. Understand that although a growing scientific consensus has become established through the IPCC, the complexities and uncertainties of the science provide opportunity for climate sceptics to challenge the Panel's findings.
- 10. On successful completion of this course, students should be able to understand the mean global atmospheric circulations and disturbances, world climate systems, climatic variability and change.

DEPARTMENT OF GEOGRAPHY

Course Objective & Outcomes

Subject: Geomorphology Class: M.Sc. Geography 1st Sem.

Course Objective

- 1. Students will understand the concept of place and how it is connected to people's sense of belonging to the physical environment, landscape and culture.
- 2. Students will understand the fundamental concepts of spatial interaction and diffusion, which explain how human activities are influenced by the concept of distance.
- 3. Students will be exposed to the nature of physical systems such as geomorphologic processes and natural hazards.
- 4. Students will be able to read and interpret information on different types of physical features maps.
- 5. Students will learn how human, physical and environmental components of the world interact.

Course Outcomes

- 1. Describing human-environment, and nature-society interactions as well as global human and environmental issues.
- 2. Identifying and explaining the planet's human and physical characteristics and processes, from global to local scales.
- 3. Evaluating the impacts of human activities on natural environments.
- 4. Applying knowledge of global issues to local circumstances to evaluate the local effects of the issues.
- 5. Showing an awareness and responsibility for the environment.

Subject: Statistical Methods in Geography Class: M.Sc. Geography 1st Sem.

Course Objective

- 1. The objective of this course is to provide an understanding for the graduate business student on statistical concepts to include measurements of location and dispersion, probability, probability distributions, sampling, estimation, hypothesis testing, regression, and correlation analysis, multiple regression
- 2. How to calculate and apply measures of location and measures of dispersion -- grouped and ungrouped data cases.
- 3. How to apply discrete and continuous probability distributions to various business problems.
- 4. Perform Test of Hypothesis as well as calculate confidence interval for a population parameter for single sample and two sample cases.
- 5. Compute and interpret the results of Bivariate and Multivariate Regression and Correlation Analysis, for forecasting.

Course Outcomes

- 1. Keeping in view the nature of data and purpose of study, students would be able to make a rational choice amongst listed various statistical methods.
- 2. Demonstrate understanding of basic concepts of probability and statistics embedded in their courses.
- 3. Show proficiency in basic statistical skills embedded in their courses.
- 4. Students shall know how to organize, manage, and present data.
- 5. Students shall know how to organize, manage, and present data.
- 6. Demonstrate ability to write reports of the results of statistical analyses giving summaries and conclusions using nontechnical language.

Subject: Geography of India Class: M.Sc. Geography 1st Sem.

Course Objective

- 1. Students will get an introduction to the main regions of the India in terms of both their uniqueness and similarities.
- 2. Students will be exposed to historical, economic, cultural, social and physical characteristics of India.
- 3. Students will learn the relationships between the global, the regional and the local, particularly how places are inserted in regional and global processes.
- 4. In addition to the ability of understanding and reading maps, students will develop cartography skills and will be able to create maps on their own.
- 5. Students will be introduced to demographic, social and cultural attributes such as migration, social relations and cultural identity.

Course Outcomes

- 1. Identifying and explaining the Indian Geographical Environment, from global to local scales.
- 2. Applying geographical knowledge to everyday living.
- 3. Applying knowledge of global issues to a unique scientific problem.
- 4. Showing an awareness and responsibility for the environment and India.
- 5. Evaluating the impacts of human activities on natural environments special reference to India.

Subject: Resource geography Class: M.Sc. Geography 1st Sem.

Course Objective

- 1. It is an introductory course of resource geography which is aimed at providing knowledge about the concepts of resources, classification, models of natural resource processes, their use and misuse, conservation and management of resources for sustainable development.
- 2. Which is aimed at providing knowledge about the concepts of resources?
- 3. It's also give knowledge about natural resource processes.
- 4. Conservation and management of resources for sustainable development.
- 5. Students will be able to read and interpret information on different types of physical features maps.

Course Outcomes

- 1. Students will become sensitized to concept of resources.
- 2. Students will become sensitized the classification of resources.
- 3. Learn about use and misuse of resources.
- 4. Will learn conservation methods and techniques.
- 5. Showing an awareness and responsibility for the environment.

Subject: Hydrology Class: M.Sc. Geography 2nd Sem.

Course Objective

- 1. Hydrology is the science that deals with all aspects of the water available on the earth.
- 2. It includes study of occurrence of water, its properties, its distribution and circulation.
- 3. Its effects on the living beings and their surroundings.
- 4. Students can compute hydrologic mass balance in a closed basin.
- Students understand the essential components and function of the hydrologic cycle including precipitation, evaporation/evapotranspiration, overland flow and surface storage, groundwater flow and storage, and channel flow, storm water runoff and water quality

Course Outcomes

- 1. At the end of the semester students will different physical aspects of water as a natural resource.
- 2. They will learn some strategies of water resource management.
- 3. Learn Also about the conservation of water.
- 4. Students can compute critical flow and critical depth in floodplain hydraulics.
- 5. Students can delineate watersheds and stream polylines from digital elevation data.

Subject: Biogeography 2nd Sem.

Course Objective

- 1. To introduce the student to the concept of biogeography.
- 2. To introduce the components, interpretation and application of biogeography.
- 3. Interaction between living organisms and non-living organisms.
- 4. Living organisms with climate and physical environment.
- 5. Know about biogeochemical cycle.

Course Outcomes

- 1. Students will get familiarized with interface between biology & ecology.
- 2. Able to Geography converging and forming our biosphere.
- 3. Students will be able to discuss about ecosystem services.
- 4. Able to apply interaction of biotic and abiotic resources.
- 5. They can identify ecological aspects of environment.

Subject: Geographical Thought Class: M.Sc. Geography 2nd Sem.

Course Objective

- 1. Main objectives of this course are to acquaint the students with the philosophy.
- 2. Also teach the Methodology and historical development of geography as a professional field.
- 3. The idea is to address the spirit and purpose of the changing geographies and to what we as geographers contribute towards knowledge production.
- 4. The course aims at developing critical thinking and analytical approaches.
- 5. Students will acquire an understanding of and appreciation for the relationship between geography and culture.

Course Outcomes

- 1. This should enable the student to critically look at the contents of other courses at Postgraduate level as logically integrated with the broad currents of thought the subject has witnessed in the distant and recent past.
- 2. Students will demonstrate an advanced understanding of the historical development of geographical thought.
- 3. They can understand the major current philosophical and theoretical debates in geography.
- 4. Students will demonstrate an understanding of current research within the breadth of geography, as well as more in depth knowledge of research in their specialty areas.
- 5. Students will develop a solid understanding of the concepts of "space," "place" and "region" and their importance in explaining world affairs.

Subject: Economic Geography Class: M.Sc. Geography 2nd Sem.

Course Objective

- 1. This course offers an introduction to the ways in which economic activities are organized over the earth's surface.
- 2. The economic processes operating at different geographical scales are depending on the complex economic-political-social interactions that are framed at the global level.
- 3. The course explores the processes of globalization and seeks to provide understanding of today's increasingly interdependent world.
- 4. Students will be familiarized with economic processes such as globalization, trade and transportation and their impacts on economic, cultural and social activities.
- 5. Students will learn about the variety of political systems and nation states which administratively subdivide the regions of the world.
- 6. How human activities are regulated and under the jurisdiction of a variety of geographical units and how these relations shape the economic and social space are of particular relevance.
- 7. Students will be exposed to the nature of physical systems such as geomorphologic processes and natural hazards.

Course Outcomes

- 1. Students would be able to understand how in an increasingly globalized world, economic activities occur unevenly over geographical space; how local places and global economy are intertwined, and how the regime of neoliberal policies are generating uneven geography of capitalist development.
- 2. Students will be introduced to demographic, social and cultural attributes such as migration, social relations and cultural identity. The main objective is to underline that human activities are subject to adaptation and change.
- 3. Understand the processes driving spatial economic differences in a global era, and the roles of key factors such as transnational firms and the state.
- 4. Abstract and utilize information on economic change from a range of different sources.

Subject: Population Geography Class: M.Sc. Geography 2nd Sem.

Course Objective

- 1. This course introduces the spatial distribution of population with causative factor.
- 2. It also deals with various theories and concepts related with population
- 3. Study of population is an essential component in planning of various human related issues.
- 4. It also helpful in knowing various kinds of demographic problems,
- 5. Population Geography also deals in population policies in developed & developing countries

Course Outcomes

- 1. Understand the distribution of population.
- 2. Population distribution and its problems.
- 3. Population dynamics
- 4. Understand population policies & its importance.
- 5. Students aware about the population policies.

Subject: Remote Sensing & GIS Class: M.Sc. Geography 3rd Sem.

Course Objective

- 6. The aim of this course is to apprise the students to various aspects of Aerial photographs.
- 7. Also introduce about Remote Sensing and GIS.
- 8. It will be teach about the important elements of the Geospatial technology.
- 9. This course introduce about the earth revolutionary and rotation system.
- 10. It gives the technical knowledge of satellite system.

Course Outcomes

- 6. Students will demonstrate knowledge of the foundations and theories of geographic information systems (GIS) and use the tools and methods of GIS.
- 7. Students will demonstrate their knowledge of physical geography and the methods and techniques for observing, measuring, recording and reporting on geographic phenomena.
- 8. Students will demonstrate their competence to work individually and as a team to develop and present a client-driven GIS solution.
- 9. Student will be familiar with modern techniques in Geography.
- 10. Students will be prepared to apply their skills in professional careers.

Subject: Geography of Transport Class: M.Sc. Geography 3rd Sem.

Course Objective

- 1. The objective of the course is to appraise the students about the geographic relevance of transportation.
- 2. About the various models of global relevance and modal characteristics of modes.
- 3. Structural analysis of transport network (accessibility and connectivity).
- 4. Development of Road Transport in India and Special Reference to Haryana.
- 5. Manually uses of geographical models.

Course Outcomes

- 1. Students shall learn about the significance of transport in multifaceted development.
- 2. Significance of various models.
- 3. Role of theories related to transport network.
- 4. About the Accessibility, connectivity and policy interventions.
- 5. They will be applying the various approaches of transport in daily life.

Subject: Biogeography 3rd Sem. Class: M.Sc. Geography 3rd Sem.

Course Objective

- 1. To introduce the student to the concept of biogeography.
- 2. To introduce the components, interpretation and application of biogeography.
- 3. Interaction between living organisms and non-living organisms.
- 4. Living organisms with climate and physical environment.
- 5. Know about biogeochemical cycle.

Course Outcomes

- 1. Students will get familiarized with interface between biology & ecology.
- 2. Able to Geography converging and forming our biosphere.
- 3. Students will be able to discuss about ecosystem services.
- 4. Able to apply interaction of biotic and abiotic resources.
- 5. They can identify ecological aspects of environment.

Subject: Geographical Thought Class: M.Sc. Geography 4th Sem.

Course Objective

- 1. Main objectives of this course are to acquaint the students with the philosophy.
- 2. Also teach the Methodology and historical development of geography as a professional field.
- 3. The idea is to address the spirit and purpose of the changing geographies and to what we as geographers contribute towards knowledge production.
- 4. The course aims at developing critical thinking and analytical approaches.
- 5. Students will acquire an understanding of and appreciation for the relationship between geography and culture.

Course Outcomes

- This should enable the student to critically look at the contents of other courses at
 Postgraduate level as logically integrated with the broad currents of thought the
 subject has witnessed in the distant and recent past
- 2. Students will demonstrate an advanced understanding of the historical development of geographical thought.
- 3. They can understand the major current philosophical and theoretical debates in geography.
- 4. Students will demonstrate an understanding of current research within the breadth of geography, as well as more in depth knowledge of research in their specialty areas.
- 5. Students will develop a solid understanding of the concepts of "space," "place" and "region" and their importance in explaining world affairs.