

GDC Memorial College, Bahal (Bhiwani)

Department of Geography

2018-19 (Odd)

Learning Objective & Outcomes

M.Sc. (Geography) 1st Semester

Subject: Climatology

Subject Code: GEO - 101

Learning 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.

Learning Outcomes

After the completion of the course, Students will be able to

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.

GDC Memorial College, Bahal (Bhiwani)

Department of Geography

2018-19 (Odd)

Learning Objective & Outcomes

M.Sc. (Geography) 1st Semester

Subject: Geomorphology

Subject Code: GEO - 102

Learning 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.

Learning Outcomes

After the completion of the course, Students will be able to

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.

GDC Memorial College, Bahal (Bhiwani)

Department of Geography

2018-19 (Odd)

Learning Objective & Outcomes

M.Sc. (Geography) 1st Semester

Subject: Statistical Methods in Geography

Subject Code: Geo - 103

Learning 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.

Learning Outcomes

After the completion of the course, Students will be able to

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.

GDC Memorial College, Bahal (Bhiwani)

Department of Geography

2018-19 (Odd)

Learning Objective & Outcomes

M.Sc. (Geography) 1st Semester

Subject: Geography of India

Subject Code: Geo-104

Learning 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.

Learning Outcomes

After the completion of the course, Students will be able to

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.

GDC Memorial College, Bahal (Bhiwani)

Department of Geography

2018-19 (Odd)

Learning Objective & Outcomes

M.Sc. (Geography) 1st Semester

Subject: Resource geography

Subject Code: Geo - 105

Learning 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.

Learning 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.

GDC Memorial College, Bahal (Bhiwani)

Department of Geography

2018-19 (Even)

Learning Objective & Outcomes

M.Sc. (Geography) 2nd Semester

Subject: Hydrology

Subject Code: GEO - 201

Learning 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.
5. 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.

Learning Outcomes

After the completion of the course, Students will be able to

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.

GDC Memorial College, Bahal (Bhiwani)

Department of Geography

2018-19(Even)

Learning Objective & Outcomes

M.Sc. (Geography) 2nd Semester

Subject: Biogeography

Subject Code: Geo - 202

Learning 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.

Learning Outcomes

After the completion of the course, Students will be able to

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.

GDC Memorial College, Bahal (Bhiwani)

Department of Geography

2018-19(Even)

Learning Objective & Outcomes

M.Sc. (Geography) 2nd Semester

Subject: Geographical Thought

Subject Code: GEO - 203

Learning 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.

Learning Outcomes

After the completion of the course, Students will be able to

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.

GDC Memorial College, Bahal (Bhiwani)

Department of Geography

2018-19(Even)

Learning Objective & Outcomes

M.Sc.2nd Semester

Subject: Economic Geography

Subject Code: GEO - 204

Learning 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.

Learning Outcomes

After the completion of the course, Students will be able to

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.

GDC Memorial College, Bahal (Bhiwani)

Department of Geography

2018-19(Even)

Learning Objective & Outcomes

M.Sc. (Geography) 2nd Semester

Subject: Population Geography

Subject Code: GEO -205

Learning 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.

Learning Outcomes

After the completion of the course, Students will be able to

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.

GDC Memorial College, Bahal (Bhiwani)

Department of Geography

2018-19 (Odd)

Learning Objective & Outcomes

M.Sc. Geography 3rd Semester

Subject: Oceanography

Subject Code: GEO - 301

Learning Objective

1. The course on oceanography will discuss the physiography of ocean floors.
2. It is introduced about the dynamics of ocean water.
3. It will also provide an understanding about ocean-human interface including weather and climate.
4. As soon as about the navigation, security and resource utilisation.
5. To introduce the properties of water and application of oceanography.
6. To introduce the comparative study of Physical Geography.

Learning Outcomes

After the completion of the course, Students will be able to

1. Student will be able to understand the dynamics of ocean physiography.
2. Student will be able to understand the water movement system.
3. It will help them to have an understanding of relevance of oceans as a resource in times to come.
4. It will help them to have an understanding the living and non living organism of water.
5. Able to apply interaction of biotic and abiotic resources.

GDC Memorial College, Bahal (Bhiwani)

Department of Geography

2018-19 (Odd)

Learning Objective & Outcomes

M.Sc. Geography 3rd Semester

Subject: Geographical Information System

Subject Code: GEO - 302

Learning 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.

Learning Outcomes

After the completion of the course, Students will be able to

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.

GDC Memorial College, Bahal (Bhiwani)

Department of Geography

2018-19 (Odd)

Learning Objective & Outcomes

M.Sc. Geography 3rd Semester

Subject: Remote Sensing

Subject Code: GEO - 303

Learning 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.

Learning Outcomes

After the completion of the course, Students will be able to

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.

GDC Memorial College, Bahal (Bhiwani)

Department of Geography

2018-19 (Odd)

Learning Objective & Outcomes

M.Sc. (Geography) 3rd Semester

Subject: Urban Geography

Subject Code: GEO - 304

Learning Objective

1. To introduce the student to the concept of Urban Geography.
2. To introduce how the Cities have become the centre of social, political, and economic activities.
3. About the now govern the lives of the majority of human kind.
4. There are new geographical patterns forming within and between cities.
5. They serve both as the cores of, and means for connecting, events taking place on the local, regional, national, and international levels, with all these tiers spatially interacting.

Learning Outcomes

After the completion of the course, Students will be able to

1. It will help students gain a better understanding of the the process of urbanization.
2. It will help, how the urbanisation origin, growth of urban settlements with various theoretical viewpoints in the literature explaining them.
3. They would be able to understand the key aspects of cities and get an indication of the breadth of material that can be covered when examining cities.
4. Students will also get sensitized to the evolving urban planning visions.
5. They can identify the real approach of Urban Geography.

GDC Memorial College, Bahal (Bhiwani)

Department of Geography

2018-19 (Odd)

Learning Objective & Outcomes

M.Sc. 3rd Semester

Subject: Geography And Water Resources Management

Subject Code: GEO - 305

Learning Objective

1. Water scarcity is a global problem in the present century.
2. Knowledge of this natural resource is essential to meet the future demands.
3. This will make the students aware about the various problems relating to water resources.
4. Provide a broad background on the occurrence, use, management, and conservation of water and water resources at worldwide.
5. Explore water supply and demand, irrigation and agriculture, water allocation law and policy, and flood hazards and hydrology.
6. Critically examine the role government policy plays in the environment, specifically with regard to water resource development, formulation of water allocation law, and the tenets of the Clean Water Act.

Learning Outcomes

After the completion of the course, Students will be able to

1. They will learn some strategies of water resource management.
2. Various components of hydrologic cycle that affect the movement of water in the earth.
3. Various Stream flow measurements technique.
4. The concepts of movement of ground water beneath the earth
5. The basic requirements of irrigation and various irrigation techniques, requirements of the crops
6. Distribution systems for canal irrigation and the basics of design of unlined and lined irrigation canals design
7. Apply math, science, and technology in the field of water resource Engineering.

GDC Memorial College, Bahal (Bhiwani)

Department of Geography

2018-19 (Even)

Learning Objective & Outcomes

M.Sc. 4th Semester

Subject: Geography And Disaster Management

Subject Code: GEO - 401

Learning Objective

1. This course introduces the basic concepts of disaster management.
2. It emphasizes the management of disasters.
3. Special focus has been laid on use of latest geospatial technologies in disaster management.
4. The basic objectives of the course are to apprise the students about our environment, to understand its interrelationship with man and his linkages with other organisms, which vary in different biomes.
5. Also, to sensitise the students with the Environmental problems and degradations.

Learning Outcomes

After the completion of the course, Students will be able to

1. On completion of the course a student should be able to understand how geography permeates each and every aspect that concerns our living on this earth It emphasizes the management of disasters.
2. They would know how Geography can use its versatility and multi-factor approach, co-existence between physical and human aspects, construction of ideas around space which are politically and administratively relevant, to its best advantage.
3. The course is to apprise the students about our environment, to understand its interrelationship with man and his linkages with other organisms, which varies in different biomes.
4. Students would be able to learn about hazards and their management.

GDC Memorial College, Bahal (Bhiwani)

Department of Geography

2018-19 (Even)

Learning Objective & Outcomes

M.Sc. Geography 4th Semester

Subject: Application of GIS and Remote Sensing

Subject Code: GEO - 402

Learning 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.

Learning Outcomes

After the completion of the course, Students will be able to

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.

GDC Memorial College, Bahal (Bhiwani)

Department of Geography

2018-19(Even)

Learning Objective & Outcomes

M.Sc. Geography 4th Semester

Subject: Regional Development Planning

Subject Code: GEO - 403

Learning Objective

1. Improve knowledge, learning, and scholarship about important planning issues and the practice of planning.
2. Regional Development and planning are the core areas of geographical inquiry
3. Decentralised planning has a profound role in managing the evolved situation.
4. Maximize the career potential of graduates who will seek professional positions, providing them with entry-level skills as well as the depth and flexibility needed to progress in the field.
5. Students will be exposed to historical, economic, cultural, social and physical characteristics of regions, notably how they came to be, their main role and function and how they are changing.

Learning Outcomes

1. Students will acquire a solid base of knowledge in the principles and practices of learning, including urban spatial structure, local public finance, and economics of development, infrastructure provision, and globalization.
2. Students will develop the skills necessary for the effective practice of planning, including its purpose, meaning and history; methods that envision future change; elements of plans; adoption, administration, and implementation of plans; speaking for the disadvantaged; laws and policies of environmental planning.
3. Students will develop the values necessary for the effective practice of planning, including problem-solving skills; research skills; written, graphical, and oral skills; computational skills; collaboration with peers; meeting professional standards; forecasting and scenarios; implementation of plans; working with diverse communities.
4. Students will learn the values and ethical standards affecting the practice of planning, including the values of justice, equity, fairness, efficiency, order, and beauty; the values of fair representation and equal opportunity; and respecting complex legacies.
5. The student will get familiarised with the theoretical foundations and conceptual grounding of this branch, understand and evaluate the concept of region in geography and its role and relevance in regional planning and to comprehend the regional development and planning process in India.

GDC Memorial College, Bahal (Bhiwani)

Department of Geography

2018-19 (Even)

Learning Objective & Outcomes

M.Sc. Geography 4th Semester

Subject: Social Geography

Subject Code: GEO - 404

Learning Objective

1. Social Geography is an important aspect to understand the development of society and different social groups in India.
2. Students will learn how human, physical and environmental components of the world interact.
3. Students will be familiarized with economic processes such as globalization, trade and transportation and their impacts on economic, cultural and social activities.
4. Students will be exposed to historical, economic, cultural, social and physical characteristics of regions.
5. Students will learn how the human being develops their society.

Learning Outcomes

After the completion of the course, Students will be able to

1. The student will make better known with the theoretical, philosophical and conceptual base of this branch.
2. They understand and evaluate the concept of society in geography.
3. It improves a student as a good human being in India.
4. The programme qualifies students for participation in research, analysis and development work, by emphasizing independent research work, critical reflection and research ethics awareness in relation to the development and use of knowledge.
5. Society's reactions to local and global deterioration of the environment, particularly in connection with climate change

GDC Memorial College, Bahal (Bhiwani)

Department of Geography

2018-19 (Even)

Learning Objective & Outcomes

M.Sc. Geography 4th Semester

Subject: Agricultural Geography

Subject Code: GEO - 405

Learning Objective

1. The course should fully acquaint the students with the understanding of agricultural geography as a developed branch of geography.
2. To examine the spatial distribution of crops, livestock and other agricultural activities. The cropping patterns and crop and livestock combinations vary in space and time.
3. To ascertain the spatial concentration of agricultural phenomena
4. Understand the basic characteristics of physical environments for agriculture in tropical and temperate zones.
5. Recognize the relationship between physical environments, culture, and political economy in the historic development of food and agricultural systems.
6. Investigate current issues related to food and agricultural geography.

Learning Outcomes

After the completion of the course, Students will be able to

1. Describe the nature of economics as a science that deals with solving the problems of scarcity.
2. Using analysis of supply and demand to analyze economic developments in the market.
3. Assess the factors affecting the production and costs.
4. Analyze business of enterprises in different market structures.
5. Explain how market factors of production are functioning.
6. Analyze business cycle using aggregate demands and aggregate supplies.
7. Recognize how economics laws affect the market of agricultural and food products market.
8. Evaluate and argument how to use knowledge about economics categories applied in daily work of agricultural subjects.