

*Chakda College, Chakda,
Nadia Under University of Kalyani
Department of Geography
Course Outcomes of Geography Honours and
Programme/General Course (B.A. & B.Sc.) according
to the CBCS System*

Geography is the science that deals with the description, distribution, and interaction of diverse physical, biological, and cultural features of the earth's surface. In modern time along with the study of places Or earth's surface, the relationship between people and their environment becomes the subject matter of Geography. Geographers explore both the physical properties of Earth's surface and human societies spread across it. They also examine how human culture interacts with the natural environment and the way that locations and places can have an impact on people. Geography also seeks to answer what, where, why, how the developed and will change over time. Now a days modern geography emerged as the spatial science.

Syllabus in Geography following Choice Based Credit System (CBCS):

INTRODUCTION: *In conformity with up to date directives from the University Grants Commission, the undergraduate syllabus for Geography is reframed into Choice Based Credit System largely following the model syllabus prepared by the West Bengal State Council of Higher Education.*

The main objective of this new curriculum is to give the students a holistic understanding of the subject, putting equal weightage to the core content and techniques used in Geography. The syllabus tries to give equal importance to the two main branches of Geography: Physical and Human.

The principal goal of the syllabus is to enable the students to secure a job at the end of the undergraduate programme. Keeping this in mind and in tune with the changing nature of Geography, adequate emphasis is rendered on applied aspects of the subject such as emerging techniques of mapping and field-based data generation, especially in the honours course. The syllabus emphasises on development of basic skills of the subject, so that everyone need not go for higher studies in search of professional engagement or employment.

LEARNING OUTCOMES: *This syllabus is designed to impart basic knowledge on geography as a spatial science and train the undergraduates to secure employment in the sectors of geospatial analysis, development and planning, mapping and surveying.*

Syllabus at a Glance:

Honours Course: Core Subjects

GEO/H/CC/T/01 – Geotectonic
and Geomorphology
GEO/H/CC/T&P/02 –
Cartographic Techniques and
Geological Map Study

GEO/H/CC/T/03 – Human Geography
GEO/H/CC/T&P/04 – Cartograms, Thematic
Mapping and Surveying
GEO/H/CC/T/05 –
Climatology
GEO/H/CC/T&P/06 – Statistical
Methods in Geography
GEO/H/CC/T/07- Geography of India
GEO/H/CC/T/08– Regional Planning
and Development
GEO/H/CC/T/09-
Economic Geography
GEO/H/CC/T&P/10- Environmental
Geography
GEO/H/CC/T&P/11 –
Research Methodology and Fieldwork
GEO/H/CC/T&P/12 – Remote
Sensing & GIS
GEO/H/CC/T/13 –
Evolution of Geographical Thought
GEO/H/CC/T&P/14 – Disaster
Management

Honours Course: Choices for Four Discipline Specific Electives (DSE)

GEO/H/DSE/T/01/A –
Settlement Geography
GEO/H/DSE/T/02/A -
Population Geography
GEO/H/DSE/T/03/A -
Resource Geography
GEO/H/DSE/T/04/A-Soil and Biogeography geography

Honours Course: Choices for Two Skill Enhancement Courses (SEC)

GEO/H/SEC/P/01/A –
Computer Basic and
Computer Application
GEO/H/SEC/P/02/A –
Advance Spatial Statistical
techniques

General Course:

Core Subjects

GEO/G/CC/T&P/01-

*Geotectonic and
geomorphology and
Scale and Cartography*

GEO/G/CC/T&P/02 –

*Climatology, Soil and Bio
Geography and Surveying
and leveling*

GEO/G/CC/T&P/03-

*Human Geography and
Map projection and Map
Interpretation*

GEO/G/CC/T&P/04-

*Environmental
Geography and Field Work*

General Course: Choices for Two Discipline Specific Electives (DSE)

GEO/G/DSE/T/01/A-

Geography of India

GEO/G/DSE/T/02/A-

Disaster Management

General Course: Choices for Four Skill Enhancement Courses (SEC)

GEO/G/SEC/P/01/B –

*Computer Basic and
Computer Application*

GEO/G/SEC/P/02/A – Advance Spatial

Statistical techniques

GEO/G/SEC/P/03/ B – Collection, Mapping

and Interpretation of Climatic Data
GEO/G/SEC/P/04/ B –Rock and Minerals and Their Megascopic Identification

Generic Elective: (GE)

GEO/H/GE/T/01/A– Disaster Management

GEO/H/GE/T/02/ B –Regional Development

GEO/H/GE/T/03/ B –Rural Development

GEO/H/GE/T/04/ B –Sustainable Development

COURSE OUTCOMES (Honours)

Following are the course outcomes of the different papers presented below. After ending of the course the student will be capable to:

Course Code	Course Title	Credits	Course Outcomes
GEO/H/C C/T/01	Geotectonics and Geomorphology	6	<ul style="list-style-type: none"> • Understand the theories and fundamental concepts of Geotectonic and Geomorphology. Understand earth's tectonic and structural evolution. Gain knowledge about earth's interior. Develop an idea about concept of plate tectonics, and resultant landforms. • Acquire knowledge about types of folds and faults and earthquakes, volcanoes and associated landforms. • Understanding crustal mobility and tectonics; with special emphasis on their role in landform development. • Overview and critical appraisal of landform development models. • Study landforms and related processes from the traditional concept to the contemporary development in Geomorphology.
GEO/H/C C/T&P/ 02	Cartographic Techniques	4+2=6	<ul style="list-style-type: none"> • Understand and prepare different kinds of scales. • Understand the map projection. • Development of the skill to draw projection. • Understand skill of drawing topographical maps. • Understand the conventional symbol. • Learning and interpretation of the topographical map. • Understand skill of drawing geological map.
GEO/H/C C/T/03	Human Geography	6	<ul style="list-style-type: none"> • Gain knowledge about major themes of human Geography. • Acquire knowledge on the history and evolution of humans. • Studies of races of man kinds. • Evaluate the cultural realms. • Understand the approaches and processes of Human Geography as well as the diverse patterns of habitat and adaptations. • Understand the relationship of man and

			<p>environment.</p> <ul style="list-style-type: none">• Develop an idea about space and society.
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GEO/H/C C/T&P/ 04	Thematic Mapping and Surveying	4+2=6	<ul style="list-style-type: none"> • Understand the significance and uses of cartograms. • Understand the uses of graphs and it's types. • Understand the maps and it's importance. • Learn the usages of survey instruments. • Apply the theoretical knowledge gained in the practical aspects by using Prismatic compass, Dumpy level and theodolite in the field. • Develop an idea about different types of thematic mapping techniques.
Course Code	Course Title	Credits	Course Outcomes
GEO/H/C C/T/05	Climatology	6	<ul style="list-style-type: none"> • Understand the elements of weather and climate, different atmospheric phenomena and climate change. • Learn to associate climate with other environmental and human issues. Approaches to climate classification. • To analyze the dynamics of the Earth's atmosphere and global climate. Assessing the role of man in global climate change. • Prepare various climatic maps and charts and interpret them. • Learn to use of various meteorological instruments. • Learn the interaction between the atmosphere and the earth's surface. Understand the importance of the atmospheric pressure and winds. • Understand how atmospheric moisture works.
GEO/H/C C/T&P/ 06	Statistical Method in Geography	4+2=6	<ul style="list-style-type: none"> □ Understand the basic of statistics. • Recognize the importance and application of Statistics in Geography • Interpret statistical data for a holistic understanding of geographical phenomena. <p>Know about different types of sampling.</p> <ul style="list-style-type: none"> • Develop an idea about theoretical distribution. • Learn to use tabulation of data. • Understand the mean, median, mode in statistics. • Evaluate the measures of dispersions. • <p>Gain knowledge about association and correlation.</p>

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GEO/H/C C/T/07	Geography of India	6	<ul style="list-style-type: none"> • Understand the location and physical features of India. • Understand the diversity of population and distribution. • Evaluate the economy and agricultural development in India. • Learning the industrial development and industrial technology.
Course Code	Course Title	Credits	Course Outcomes
GEO/H /SEC/P /01/A	Computer Basic and Computer Application	2	<ul style="list-style-type: none"> • Students will learn basic concept on computer • Attainment of knowledge on numeric and binary number system in computer technology • Microsoft excels, PowerPoint, Word etc of computer applications will be more helpful for representation of different geographical concept. • Different cartographic techniques can be shown with the help of computer applications for best understanding
GEO/H/C C/T/08	Regional Planning and Development	6	<ul style="list-style-type: none"> • Understand and identify regions as an integral part of geographical study. • Appreciate the varied aspects of development and regional disparity, in order to formulate measures of balanced development. • Analyzing the concept of regions and regionalization. Studying typical physiographic, planning, arid and biotic regions of India. Understanding the detailed geography of India. • Gain knowledge about definition of region, evolution and types of regional planning. Develop an idea about choice of a region for planning. • Build an idea about theories and models for regional planning. Know about measuring development indicators. • They can know about delineation of formal regions by weighted index method and also delineation of functional regions by breaking point analysis. • Gain knowledge about measuring inequality by Location Quotient, and also measuring regional disparity by Sopher Index

GEO/H/C C/T/09	Economic Geography	6	<ul style="list-style-type: none"> • Understand the concept of economic activity, factors affecting location of economic activity. Gain knowledge about different types of Economic activities • Assess the significance of Economic Geography, the concept of economic man and theories of choice. • Analyze the factors of location of agriculture and industries. • Understand the evolution of varied types of economic activities. • Map and interpret data on production, economic indices, transport network and flows.
GEO/H/CC/T &P/10	Environmental Geography	4+2=6	<ul style="list-style-type: none"> • Understand the components of environment. • Evaluate the functions of ecosystem. • Know causes and effects of pollution. • Understand how to induced changes in environment. • Understand how to conservation and manage of environment.

Course Code	Course Title	Credits	Course Outcomes
GEO/H/C C/T&P/ 11 –	Research Methodology and Fieldwork	4+2=6	<ul style="list-style-type: none"> • Have expertise in identification of area of study, methodology, quantitative and quantitative analysis, and conclusions to be drawn about the area – fundamental to geographical research. • Handle logistics and other emergencies on field. • Develop skills in photography, mapping and video recording.
GEO/H/ /SEC/P /02/A	Advance Spatial Statistical techniques	2	<ul style="list-style-type: none"> • Understand the concept of different advance spatial statistical techniques to analyze geographical data. • Develop skills on application of different techniques for analyzing geographical data for better evaluation and decision making. • Computer based statistical software will be more helpful for computing, analyzing data and its interpretation also. • Students will be able to make out about different aspect of statistical techniques which will be more helpful for socio economic data analysis.
Course Code	Course Title	Credits	Course Outcomes
GEO/H/C C/T&P/ 12	Remote Sensing, GIS	4+2=6	<ul style="list-style-type: none"> • Have knowledge of the principles of remote sensing, sensor resolutions and image referencing schemes.

			<ul style="list-style-type: none"> • Interpret satellite imagery and understand the preparation of false color composites from them. • Training in the use Geographic Information System (GIS) software for contemporary mapping skills. • Analyzing and interpreting remotely sensed satellite images and aerial photographs in order to understand topographical and cultural variations on the Earth's surface. • Comprehend the GIS and it's types. • Understand GPS and it's components. • Apply GIS to the preparation of thematic maps. • Use GNSS.

GEO/H/C C/T/13	Evolution of Geographical Thought	6	<ul style="list-style-type: none"> • Perceive the evolution of the philosophy of Geography. • Appreciate the contribution of the thinkers in Geography. • Give power point presentations on different schools of geographical thought. • Discussing the evolution of geographical thought from ancient to modern times. • Establishing relationship of Geography with other disciplines and man-environment relationships. • Analyzing modern and contemporary principles of Empiricism, Positivism, Structuralism, Human and Behavioral Approaches in Geography
GEO/H/C C/T&P/ 14	Hazard Management	4+2=6	<ul style="list-style-type: none"> • Understand the nature of hazards and disasters. • Assess risk, perception and vulnerability with respect to hazards. • Prepare hazard zonation maps. • Assessing the nature, impact and management of major natural and man-made hazards affecting the Indian subcontinent.

COURSE OUTCOMES

(DISCIPLINE SPECIFIC ELECTIVES)

Course Code	Course Title	Credits	Course Outcomes
GEO/ H/DS E/T/0 1/A	Cultural and Settlement Geography	6	<ul style="list-style-type: none">• Understand the scope and content of cultural geography• Trace the development of cultural geography in relation to allied disciplines• Understand the concept of cultural hearth and realm, cultural diffusion, diffusion of religion• Develop an understanding of cultural segregation and cultural diversity, technology and development• Learn about the various races and racial groups of the world• Identify the cultural regions of India.• Understand the settlement and its shape.• Acquire knowledge about Rural settlements- Definition, nature and characteristics• Analyze the morphology of rural settlements• Learn the rural house types, census categories of rural settlements and idea of social segregation• Understand the functional classification of urban settlement. • Evaluate the urban settlement theories.

			<ul style="list-style-type: none">• Understand the population and its approaches.• Acquired knowledge about demographic transition model.• Acquire knowledge about Malthusian and Marxism theory.• Knowledge on different aspects of population's society, growth, sex, fertility, mortality, migration, , gender disparity, etc will be developed amongst students.• Evaluate the population policies.• Gain knowledge about HDI.• Gain knowledge about contemporary issues in population.
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GEO/H/D SE/T/02/A	Population Geography	6	
GEO/H/D SE/T/03/A	Resource Geography	6	<ul style="list-style-type: none"> • Understand the concept and classification of resources. • Understand the approaches to resource utilization. • Appreciate the significance of resources. • Assess the pressure on resources. • Analyze the problems of resource depletion with special reference to forests, water and fossil fuels. • Understand the concept of Sustainable Resource development. • Understand the distribution, utilization, problems and management of metallic and non-metallic mineral resources. • Analyze the contemporary energy crisis and assess the future scenario. • Understand the concept of Limits to Growth, resource sharing and sustainable use of resources. <ul style="list-style-type: none"> • Analyze the decadal changes in state-wise production of coal and iron ore.
GEO/H/D SE/T/04/A	Soil and Biogeography	6	<ul style="list-style-type: none"> • Have knowledge about the character and profile of different soil types. • Understand the impact of man as an active agent of soil transformation, erosion and degradation. • Recognize land capability and classify it. • Explaining the Pedological and Edaphological Approaches to Soil Studies - Processes of soil formation, types of soil, and principles of soil and land classification; and management. • Understand the varied ecosystems and classify them. • Recognize the significance of biogeochemical cycles and biodiversity. • Comprehend the devastating impact of deforestation. • Identify soil types and derive their pH.

Programme Specific Outcomes

- Student will gain the knowledge of physical geography. They will gather knowledge about the fundamental concepts of Geography and will have a general understanding about the geomorphologic and geotectonic process and formation. Imbibing knowledge, skills and holistic understanding of the Earth, atmosphere, oceans and the planet through analysis of landform development; crustal mobility and tectonics, climate change.
- Associating landforms with structure and process; establishing man-environment relationships; and exploring the place and role of Geography vis-a-sis other social and earth sciences. Students can easily correlate the knowledge of physical geography with the human geography. They will analyze the problems of physical as well as cultural environments of both rural and urban areas. Moreover they will try to find out the possible measures to solve those problems
- Developing a sustainable approach towards the ecosystem and the biosphere with a view to conserve natural systems and maintain ecological balance.
- The physical environment, human societies and local and/or global economic systems are integrated to the principles of sustainable development
- Inculcating a tolerant mindset and attitude towards the vast socio-cultural diversity of India by studying and discussing contemporary concepts of social and cultural geography. Explaining and analyzing the regional diversity of India through interpretation of natural and planning regions.
- Analyzing the differential patterns of the human habitation of the Earth, through studies of human settlements and population dynamics. Understanding and accounting for regional disparities, poverty, unemployment and the impacts of globalization
- Understanding the history of the subject; over viewing ancient and contemporary geographical thought and its relationship with modern concepts of empiricism, positivism, radicalism, behaviouralism , idealism etc.
- Sensitization and awareness about the hazards and disasters to which the subcontinent is vulnerable; and their management.
- As a student of the Course they will enrich their observation power through field experience and in future this will be helpful for identifying the socio- environmental problems of their community.
- Training in practical techniques of mapping, cartography, software, interpretation of maps, photographs and images etc; so as to understand the spatial variation of phenomena on the Earth's surface. They will learn how to prepare map based on GIS by using the modern geographical map making techniques.
- Recognition and use of complex equipment and advance instruments.
- Improving research abilities.
- To make students competitive in pursuing higher studies.

