CHATRA RAMAI PANDIT MAHAVIDYALAYA DEPARTMENT OF GEOGRAPHY

Course Objective

The principal objectives of this undergraduate course in Geography are:

- i. To understand the core content and techniques particularly modern techniques in geography.
- ii. To explore the theories and techniques used in regional planning and development.
- iii. The syllabus also aims to develop basic skills of the subject to prepare students to pursue higher studies in geography and to make them successful in search of suitable employment.

Course Outcome

The Geography is the study of distribution of elements over space as well as the mutual and reciprocal relationship between man and environment. It also studies different activities of man in different milieu of life in changing the face of the earth, how 'space' turns into 'place' with different values added to it by man's varied modes of life with due emphasis on major empirical questions of 'what', 'why', 'how' and 'where'. Therefore, the study of this discipline at undergraduate level would have the following learning outcomes in general:

- i. It helps to develop a holistic understanding of the earth as the home of man.
- ii. Student can understand what Geography really is. They shall come to know that geography is not merely a 'science of placenames', rather it is true science of distribution with expertise in various modern skills and techniques.
- iii. Students will be to find their place in job market both in academic as well as corporate sector.
- iv. Students also can explore the engineering aspects of the discipline particularly Geoinformatics, Geoinformation Science, Geomatics Engineering etc.
- v. At the end of the course, students will be capable of segmenting the whole discipline in three different components- physical, human and applied.

Course Specific Outcome

Geography is widely accepted as the most emerging science in recent years due to its versatile character to include contents of both science and humanities. Therefore, students from both the streams can choose the subject at their undergraduate level. Bankura University offers B.Sc, degree in Geography keeping in view the demand of the students as well as towards making it more suitable for higher education where stiff competition is prevailed from other science students. Since its inception, the university follows CBCS curriculum based on UGC guidelines with slight modification in view of the local aspects. Geography basically deals with space. The spatial aspects of the earth, their guiding laws and theories, nature and evolution are recorded and represented through a number of instrumental and mechanical ways. A holistic view of the Earth as an entity and the features within the earth are taught to students. The evolution of natural landscape to cultural landscape is illustrated. The mapping techniques are guides to represent all the physical, social, cultural features through proper scaling and elaborative description. The project based

studies and analysis are very helpful in building up a research outlook among the students. They learn about the sample drawing procedures and detailed idea about the important issues around them. The course is intersected into several small sections and put under expert faculties of that field to provide the students the desired benefit of the course.

The course outcome/learning outcome along with the broad divisions of the syllabus are represented as under:

UG (Semester I)

Course Title: Geotectonics and Geomorphology

Course Outcomes:

- 1. Understanding origin and evolution of Earth with special reference to cross-cutting approach like Big Bang Model
- 2. To have an idea of our dynamic earth and its geological make up.
- 3. Understanding major processes that are responsible for its surface features.

Course Title: Cartographic Techniques

Course Outcomes:

- 1. Learning measurement of the various features of the earth by developing expertise on cartographic methods and techniques
- 2. Developing concepts in projecting the earth as a planet.
- 3. Measuring the earth's surface features on horizontal and vertical planes through learning of different surveying and levelling operations.

UG (Semester II)

Course Title: Human Geography

Course Outcomes:

- 1. Understanding the nature and principles of human geography with special emphasis on cultural aspects of man.
- 2. Developing concepts on the evolution of mankind and spatial population characters
- 3. Students will learn to analyse man-environment interrelations.

Course Title: Cartograms and Thematic Mapping

Course Outcomes:

- 1. Students would learn graphical representation of statistical data.
- 2. Develop skills of map making and basics of cartography.
- 3. Understanding topographical map (OSM)- its nomenclature and develop practical skills of interpreting man-environment interrelations.

UG (Semester III)

Course Title: Climatology

Course Outcomes:

- 1. Ability to apply various laws of physics learnt at school level to understand atmospheric processes particularly monsoon circulation.
- 2. Capable of understanding day to day changes of weather and their impacts.
- 3. Understanding the origin and trajectory of tropical cyclone is pertinent to real life as the region falls within the most devastating cyclone regime.

Course Title: Geography of India

Course Outcomes:

- 1. Able to understand the geological and climatic makeup of the country in general and the state of West Bengal in particular.
- 2. Will learn the socio-economic profiles of India as well as West Bengal.

Course Title: Statistical Methods in Geography Course Outcomes:

- 1. Students will learn various quantitative techniques to supplement regular qualitative interpretation.
- 2. Statistics as a tool of geography provides strong scientific footing to geographical interpretation and it helps students to

make any geographical study and empirical base.

Course Title: Computer Basics and Applications

Course Outcomes:

- 1. Students will learn basics of computer architecture- hardware and software components, operating systems, input and output devices etc.
- 2. They will be made capable of handling MS-EXCEL particularly statistical calculations, formula making and graphical representation of data which has immense application in higher studies.

UG (Semester IV)

Course Title: Regional planning & Development

Course Outcomes:

- 1. Students will learn processes and methods of planning for regional economic development.
- 2. Have an understanding on various theoretical perspectives of regional planning at different levels.
- 3. Have an idea of the present status of a number regional development programmes and policies taken at national and regional level.

Course Title: Geography of Economic Activities Course Outcomes:

- 1. Would learn theoretical background of agriculture which is very pertinent to the country like India where nearly two thirds of population is dependent on agriculture in the country.
- 2. It also aims to develop students' knowledge on the tourism as an alternative means of economic development.

Course Title: Environmental Geography Course Outcomes:

- 1. The world is going through environmental crisis. In this backdrop the curriculum is very relevant where students will have practical experience on various impact assessment methods.
- 2. Students will also learn various techniques of measurements of environmental parameters.
- 3. The project based learning will have deeper understanding of the techniques and concepts.

Course Title: GIS and GNSS

Course Outcomes:

- 1. Students will have practical experience on handling GIS softwares and its theoretical background.
- 2. They will also be able to handle GPS/GNSS devices, collect waypoints and working with them in MS-EXCEL as well as GIS platforms.
- 3. At the UG level, students will also be able to make their own maps in GIS software and they will have hands on experience on Digital Cartography.

UG (Semester V)

Course Title: Evolution of Geographical Thought Course Outcomes:

- 1. Students will learn the growth and development of the discipline during its entire course of jouney.
- 2. It helps to understand the basic philosophy of geography which is broadly considered as "Areal Differentiation".
- 3. It highlights various schools of thought evolved in different areas of the world with a thrust into the

paradigm shift in the discipline during its making.

Course Title: Remote Sensing Techniques

Course Outcomes:

- 1. Students will learn to understand basic concepts of remote sensing as a modern data acquisition tool.
- 2. It will give practical idea of data downloading, classification and further analysis of georeferenced earth data which they can further use in various research endeavours.

Course Title: Hydrology and Oceanography

Course Outcomes:

- 4. Have an understanding of the controlling factors and flow pattern of surface runoff as well as underground water- its recharge and discharge.
- 5. Students will be able to understand various air-sea interaction processes by studying oceanography.

Course Title: Cultural and Settlement Geography

Course Outcomes:

- 1. Students will be able to correlate different cultural traits with their own and the cultural transformation with time.
- 2. Understanding of the patterns of rural as well as urban settlements and their distribution over space.

Course Title: Urban Geography

Course Outcomes:

- 1. During recent phase of unprecedented urbanization, students will learn concepts and theories of urbanization.
- 2. They will also learn different aspects and problems of urbanization with special reference to India.

UG (Semester VI)

Course Title: Disaster Management

Course Outcomes:

- 1. In the present context, it is pertinent to study disaster preparedness, techniques of mitigation and management.
- 2. Will develop concepts of disaster risk perception and will have an idea of various types of disasters in the country in its different geographical regions.
- 3. Will develop knowledge on various kinds of environmental hazards, management techniques particularly earthquake, landslide, cyclone, floods etc.

Course Title: Research Methodology and Field Work Course Outcomes:

- 1. Geography is basically a field based science. Students can enhance their understanding level of field observation and interpretation skill along with report writing and presentation skill in front of experts.
- 2. Students will be empowered to do their research work right at the UG level.
- 3. They will get practical experience in undertaking research projects on their own which will ultimately build confidence among them in their higher studies and research.

Course Title: Soil and Biogeography Course Outcomes:

- 1. Students will learn the factors and processes of soil formation and their physical and chemical properties.
- 2. Have an understanding on the role of man in changing the face of the earth particularly the biosphere.

Course Title: Population Geography Course Outcomes:

- 1. Have an idea on the concepts of different aspects of population and students will be able to understand the reasons behind population problems in different regions of the country.
- 2. They will also build concepts on population policies and different contemporary issues on population geography.

Course Title: Geography of Health and Well Being Course Outcomes:

- 1. Students will be made well aware of different types of health risks and diseases and their impact on society.
- 2. They will develop concepts on how climatic change impacts on the distribution of diseases and spread of new types of vector borne diseases around the world.

CHATRA RAMAI PANDIT MAHAVIDYALAYA DEPARTMENT OF GEOGRAPHY

Programme Objectives

The principal objective of Geography Programme is to impart knowledge on geography- its different skills and techniques with special emphasis on modern geospatial techniques of Remote Sensing (RS), Geographical Information System (GIS) and Global Navigation Satellite System (GNSS). This curriculum is also intended to impart training on these new fields to make them suitable for further higher studies and job market.

Programme Outcome

The Geography Programme students will be given training in understanding the diverse nature and techniques of the subject. They will develop skills in studying man-environment interrelations through field excursions. The study of geography as a programme also enables students in understanding the threats that endanger earth's natural systems as well as it helps to develop skills in finding out the relevance of anthropogenic factors in changing the face of the earth. The students will also gather knowledge about the fundamental concepts of geography and will have a general understanding about different natural processes and factors such as geology, tectonics, climate, soil, vegetation, ocean resources etc. and human society and culture. Training in practical geography with special emphasis on geospatial techniques will help students to understand maps- the geographers' basic tool and how these maps can be prepared.

Programme Specific Outcome

Geography is widely accepted as the most emerging science in recent years due to its versatile character to include contents of both science and humanities. Therefore, students from both the streams can choose the subject at their undergraduate level. Bankura University offers B.Sc, degree in Geography keeping in view the demand of the students as well as towards making it more suitable for higher education where stiff competition is prevailed from other science students. Since its inception, the university follows CBCS curriculum based on UGC guidelines with slight modification in view of the local aspects. Geography basically deals with space. The spatial aspects of the earth, their guiding laws and theories, nature and evolution are recorded and represented through a number of instrumental and mechanical ways. A holistic view of the Earth as an entity and the features within the earth are taught to students. The evolution of natural landscape to cultural landscape is illustrated. The mapping techniques are guides to represent all the physical, social, cultural features through proper scaling and elaborative description. The project based studies and analysis are very helpful in building up a research outlook among the students. They learn about the sample drawing procedures and detailed idea about the important issues around them. The course is intersected into several

small sections and put under expert faculties of that field to provide the students the desired benefit of the course.

The course outcome/learning outcome along with the broad divisions of the syllabus are represented as under:

UG (Semester I)

Course Title: Physical Basis of Earth

Course Outcomes:

- 1. Understanding origin and evolution of Earth with special reference to cross-cutting approach like Big Bang Model
- 2. To have an idea of our dynamic earth and its geological make up.
- 3. Understanding major processes that are responsible for its surface features.

UG (Semester II)

Course Title: Human Geography

Course Outcomes:

- 1. Understanding the nature and principles of human geography with special emphasis on cultural aspects of man.
- 2. Developing concepts on the evolution of mankind and spatial population characters
- 3. Students will learn to analyse man-environment interrelations.

UG (Semester III)

Course Title: Maps and Diagrams

Course Outcomes:

- 1. Students would learn graphical representation of statistical data.
- 2. Develop skills of map making and basics of cartography.
- 3. Understanding topographical map (OSM)- its nomenclature and develop practical skills of interpreting man-environment interrelations.

Course Title: Computer Basics

Course Outcomes:

1. Students will learn basics of computer architecture-hardware and software components, operating systems, input and output devices etc.

UG (Semester IV)

Course Title: Economic Geography

Course Outcomes:

- 1. Would learn theoretical background of agriculture which is very pertinent to the country like India where nearly two-thirds of population is dependent on agriculture in the country.
- 2. It also aims to develop students' knowledge on the tourism as an alternative means of economic development.

Course Title: Computer Applications Course Outcomes:

- 1. They will be made capable of handling MS-EXCEL particularly statistical calculations, formula making and graphical representation of data which has immense application in higher studies. The world is going through environmental crisis. In this backdrop the curriculum is very relevant where students will have practical experience on various impact assessment methods.
- 2. Students will also learn various techniques of measurements of environmental parameters.
- 3. The project based learning will have deeper understanding of the techniques and concepts.

UG (Semester V)

Course Title: Remote Sensing Techniques

Course Outcomes:

- 1. Students will learn to understand basic concepts of remote sensing as a modern data acquisition tool.
- 2. It will give practical idea of data downloading, classification and further analysis of georeferenced earth data which they can further use in various research endeavours.

Course Title: Hydrology and Oceanography Course Outcomes:

4. Have an understanding of the controlling factors and flow

pattern of surface runoff as well as underground water- its recharge and discharge.

5. Students will be able to understand various air-sea interaction processes by studying oceanography.

Course Title: Urban Geography

Course Outcomes:

- 1. During recent phase of unprecedented urbanization, students will learn concepts and theories of urbanization.
- 2. They will also learn different aspects and problems of urbanization with special reference to India.

UG (Semester VI)

Course Title: Soil and Biogeography

Course Outcomes:

- 1. Students will learn the factors and processes of soil formation and their physical and chemical properties.
- 2. Have an understanding on the role of man in changing the face of the earth particularly the biosphere.

Course Title: Population Geography

Course Outcomes:

- 1. Have an idea on the concepts of different aspects of population and students will be able to understand the reasons behind population problems in different regions of the country.
- 2. They will also build concepts on population policies and different contemporary issues on population geography.

Course Title: Geographic Information System Lab Course Outcomes:

- 1. Students will have practical experience on handling GIS softwares and its theoretical background.
- 2. At the UG level, students will also be able to make their own maps in GIS software and they will have hands on experience on Digital Cartography.