

GenEd Courses offered by Dept. of Geography, Presidency University

(All the Courses are offered to both Science and Humanities Students)

| Semester | Course No. | Course Name | Maximum No. of Students (originally proposed) | Maximum No. of Students (after reallocation) | Full Marks | Credit |
|----------|------------|---|---|--|------------|--------|
| First | GEOG 0131 | Geography in Daily Life | 30 | 80 | 50 | 4 |
| Second | GEOG 0231 | The Maps | 30 | 80 | 50 | 4 |
| Third | GEOG 0331 | Natural Hazards and Disaster Management | 30 | 50 | 50 | 4 |
| Fourth | GEOG 0431 | Basic Geoinformatics | 30 | 50 | 50 | 4 |
| | | Grand Total | 120 | 260 | 200 | 16 |

| GENED Course Names | Content in Brief |
|---|--|
| Geography in Daily Life | Introduction to the subject, its sub-branches and how geographical elements affect everyday life |
| The Maps | Reading and interpreting a variety of maps |
| Natural Hazards and Disaster Management | Types of natural hazards and their management |
| Basic Geoinformatics | Introduction to GIS and Remote Sensing techniques for geographical analysis |

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**DEPARTMENT OF GEOGRAPHY
PRESIDENCY UNIVERSITY**

Detailed Syllabus for GenEd Course being offered by Department of Geography for First Semester

Paper Name: Geography in Daily Life

Course No.: GEOG 0131

Paper Type: Theory

Credit: 04

Unit I: Geography - Making Sense of It

- 1.1 Geography: The science of place and space
- 1.2 Interdisciplinary nature: Bridging social and physical sciences
- 1.3 Inequalities between places and social groups
- 1.4 Interconnectedness of the world and communities in it
- 1.5 Experiential learning of geography: Travel, field work and expedition
- 1.6 Geographic tools
- 1.7 Role of geography: Citizenship and stewardship development; decision making

Unit II: Geographic Learning - Natural Systems

- 2.1 Earth's anatomy: Internal structure; plate tectonics
- 2.2 Weathering and denudation
- 2.3 Landform orders
- 2.4 Hydrologic cycle
- 2.5 Earth's energy budget
- 2.6 Global circulation
- 2.7 Life support systems

Unit III: Geographic Understanding: Global Crises

- 3.1 Climate change
- 3.2 Biodiversity: Forests and wild life
- 3.3 Energy
- 3.4 Food production and agriculture
- 3.5 Fresh water supply and health
- 3.6 Poverty
- 3.7 Urbanization
- 3.8 Rural development

Faculty teaching this Module:

1. Dr. Mery Biswas (mery.geog@presiuniv.ac.in)
2. Dhiraj Barman(dhiraj.geog@presiuniv.ac.in)

**DEPARTMENT OF GEOGRAPHY
PRESIDENCY UNIVERSITY**

Detailed Syllabus for GenEd Course being offered by Department of Geography for Second Semester

Paper Name: The Maps

Course No.: GEOG 0231

Paper Type: Practical

Credit: 06

Unit I: Introduction to Maps

- 1.1 Elements of Maps
- 1.2 Scales – types and conversions
- 1.3 Types of Maps – Topographical Maps, Weather Maps, Thematic Maps
- 1.4 Methods of Representation – Qualitative and Quantitative

Unit II: Heritage of Mapping in India

- 2.1 Mughal Period – Contribution of Raja Todar Mal
- 2.2 Colonial Period – The Great Triangulation Survey
- 2.3 Modern Period – Satellite Systems based Mapping
- 2.4 Mapping Organisations – Survey of India, Geological Survey of India, National Atlas and Thematic Mapping Organisation

Unit III: Art and Science of Map Making

- 3.1 Projections – Concepts, Terminologies and Classification
- 3.2 Construction of Graticules - Principles
- 3.3 Planar Case – Polar Zenithal Stereographic Projection
- 3.4 Cylindrical Case – Cylindrical Equal Area
- 3.5 Conical Case – Simple Conical Projection with One Standard Parallel

Unit IV: Mapping Techniques and Technologies

- 4.1 Data Mining and Mapping : Visualisation of Themes – Bar Diagrams, Pie Diagrams, Isoleth Maps, Choropleth Maps
- 4.2 Satellite Imaging Systems
- 4.3 Digital Images and Maps
- 4.4 Using Open Source Geospatial Datasets – Google Earth and Wikimap

Faculty teaching this Module:

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**DEPARTMENT OF GEOGRAPHY
PRESIDENCY UNIVERSITY**

Detailed Syllabus for GenEd Course being offered by Department of Geography for Third Semester

Paper Name: Natural Hazards and Disaster Management

Course No.: GEOG 0331

Paper Type: Theory

Credit: 04

Unit I: Basic Concepts

- 1.1 Overview of Natural Hazards - definition, hazards & disaster linkages
- 1.2 Concept of vulnerability, mitigation, prevention, preparedness, response and recovery

Unit II: Natural Hazards

- 2.1 Meteorological Hazards - cyclones, droughts: Causes, assessment, effects and control measures
- 2.2 Geological Hazards - Earthquakes and Volcanoes: Causes, effects and control measures
- 2.3 Hydrological Hazards - Floods: Causes, assessment, effects and control measures
- 2.4 Landslides: Causes, assessment, effects and control measures

Unit III: Human induced physical hazards

- 3.1 Soil Erosion: Causes, assessment, effects and control measures
- 3.2 Desertification: Causes, assessment, effects and control measures
- 3.3 Nuclear Hazards: Causes, assessment, effects and control measures
- 3.4 Oil Slicks: Causes, assessment, effects and control measures

Unit IV: Pollution Effects

- 4.1 Air pollution: sources, types, effects on weather and climate, effects, control measures
- 4.2 Water pollution: sources, pollution of surface & sub-surface waterbodies, effects, control measures
- 4.3 Solid waste pollution: types and management of solid waste
- 4.4 Soil pollution – causes and control measures

Faculty teaching this Module:

1. Dr. Joy Sanyal (joy.geog@presiuniv.ac.in)
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**DEPARTMENT OF GEOGRAPHY
PRESIDENCY UNIVERSITY**

Detailed Syllabus for GenEd Course being offered by Department of Geography for Second Semester

Paper Name: Basic Geoinformatics

Course No.: GEOG 0431

Paper Type: Practical

Credit: 04

Unit I: Theoretical Basis of a GIS

Definitions, Historical Development, Components of a GIS

Types of Geospatial datasets: Raster, Vector, Surface - Attributes and Functionality

Unit II: Applications of GIS

Nature of GIS Applications

Studies on Land cover and Land use Change in Urban Areas

Mapping and Predicting Environmental Hazards

Detecting and Analysing Tourism Landscape Changes

Prospects in GIS

Unit III: RS and GPS

Remote Sensing - Fundamentals of EMR and Imaging Techniques, RS Platform types and Sensor Resolutions

India's Space Programme - Satellites, Data products and their Applications

GPS - Principles and Components

Faculty teaching this Module:

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