Gauhati University

Syllabus for Four-Year Undergraduate Programme

Subject: Geography

Syllabus as per NEP 2020

Course effective from academic year 2023-24

Approved as per UGCCS in Geography held on 22-03-2023

GAUHATI UNIVERSITY Guwahati-781014

Four-Year Undergraduate Programme in Geography
Gauhati University

Eligibility Criteria of the programme, if any: For B.A. programme No Precondition, For B.Sc. programme 10 + 2 with Science

Semester	Course name	Major/Minor	Course code	Credits	Credit distribution of the course			Pre-requisites of the course (if any)	Internal marks	External Marks
					L	T	P			
I	Introduction to Physical Geography	**Major 1 & Minor1 (for Minor stream) & Minor 1 (*For Major in other subjects*)**	GGY 0100104	4	4	0	0	No	40	60
II	Introduction to Human Geography	**Major 2 & Minor2 (for Minor stream & Minor 2 (*For Major in other subjects*)**	GGY 0200104	4	4	0	0	No	40	60
III	Geography as a Spatial Science	**Major 3 & Minor3 (for Minor stream)**	GGY 0300104	4	4	0	0	No	40	60
III	Geography of Disaster	**Major 4 & Minor4(For Minor stream) & Minor 3 (*for Major in other subjects*)**	GGY0300204	4	4	0	0	No	40	60
IV	Geomorphology	**Major 5**	GGY 0400104	4	3	0	1	No	30	T-45 P-25
	Geography of India	**Major6 & Minor5 (for Minor stream) & Minor 4 (*For Major in other subjects*)**	GGY 0400204	4	3	0	1	No	30	T-45 P-25
	Cartographic Techniques	**(Major7)**	GGY 0400304	4	3	0	1	No	30	T-45 P-25
	Population and Settlement Geography	**Major 8 & Minor6 (for Minor stream)**	GGY0400404	4	3	0	1	No	30	T-45 P-25

V	Climatology, Biogeography and Oceanography	**Major 9 & Minor 7 (for Minor stream) & Minor 5 (*For Major in other subjects*)**	GGY 0500104	4	3	0	1	No	30	T-45 P-25
	Quantitative methods in Geography	**Major 10**	GGY 0500204	4	3	0	1	No	30	T-45 P-25
	*Economic and Resource Geography	**Major 11 & Minor 8(for Minor stream) *(Choose any one of these two papers)**	GGY 0500304	4	3	0	1	No	30	T-45 P-25
	*Social, Cultural and Political Geography		GGY 0500404	4	3	0	1	No	30	T-45 P-25
	Internship		GGY 0500504	4				No		100
VI	Geography of Environment and Development	**Major 12 & Minor 9 (for Minor stream)**	GGY 0600104	4	3	0	1	No	30	T-45 P-25
	Introduction to Remote Sensing and GIS	**Major13**	GGY 0600204	4	3	0	1	No	30	T-45 P-25
	Urban Geography	**Major14 & Minor 10 (for Minor stream)**	GGY 0600304	4	3	0	1	No	30	T-45 P-25
	*Surveying Techniques	**Major 15 & Minor 11(for Minor stream) & Minor 6 (*For Major in other subject)* *(Choose any one of these two papers)**	GGY 0600404	4	3	0	1	No	30	T-45 P-25
	*Geography of North East India		GGY 0600504	4	3	0	1	No	30	T-45 P-25

Four Year Under-Graduate Programme

Subject: Geography
Semester: III
Course Name: **Geography as a Spatial Science**
Course Code: GGY0300104
Course Level: Intermediate
Theory (4 Credits, 60 classes of one-hour duration)
100 Marks (Theory =60 Marks, Internal assessment = 40 Marks)

Course Objective:

1. To introduce students to the fundamental concepts of geography as a spatial science.
2. To provide students with a strong foundation in spatial data analysis and visualization.
3. To enable students to understand and critically analyze the spatial dimensions of a range of geographic processes.
4. To equip students with the skills to develop and apply spatial models and technologies to solve geographic problems.

Course outcome:

1. Understand and explain the multidisciplinary nature of geography and its evolution
2. Grasp the concept of space, place, region and learn about spatial processes & patterns
3. Analyze different geographical approaches including systematic, regional, ideographic, and nomothetic approaches.
4. Apprehend spatial analysis in Geography through concepts of location and area patterns
5. Recognize various scientific approaches in Geography, including inductive, deductive methods and different modes of explanations

Unit I:

Defining the field of Geography: Study of the earth as the home of man; Place of geographyin relation to natural and social sciences; the changing definitions of geography and its multi-disciplinary nature.

Unit II:

Geography as a spatial science and spatial concepts in geography: Concept of space, place, territory,and region; Geographic space (Absolute Space and Relative Space); Spatial Processes and Patterns (only basic concept) – Spatial distribution, Spatial concentration, Spatial organization, Spatial relationship.

Unit III:

Basic Approaches in Geography: Systematic and Regional; Ideographic and Nomothetic; Pure and Applied.

Unit IV:
Spatial Analysis in Geography: Concept of location; Concept of point, line, and area patterns.

Unit V:
Scientific Approaches in Geography: Inductive and Deductive methods; Harvey's modes of explanations in Geography (only basic concept): Cognitive, Morphometric, Cause and effect, Temporal, Functional and System analysis.

Reading List

1. Abler, R.., Adams, J. and Gould, P.P., 1971: Spatial Organization: The Geographers' Viewof the World, Prentice-Hall, Englewood Cliff.
2. Ackerman, E.A., et al, 1965: The Science of Geography, Washington D.C., National Academyof Science/ National Research Council Pub. No. 1277.
3. Adhikari, Sudeepta, 2015: Fundamentals of Geographical Thought, Orient Blackswan Pvt.Ltd., New Delhi.
4. Chorley, Richard, J. and Haggett, Peter (eds), 1967: Models in Geography, Methuen, London.
5. Chorley, Richard, J., 1973: Directions in Geography, Methuen, London.
6. Dikshit, R.D., 1994: The Art and Science of Geography, Prentice Hall of India, New Delhi.
7. Haggett, P., 2001: Geography: A Global Synthesis, Pearson Education, Essex, UK.
8. Hartshorne, R.,1939: The Nature of Geography, Association of American Geographers, Lan-caster, Penn.
9. Hartshorne, R.,1959: Perspective on the Nature of Geography, Rand Mckully, Chicago.
10. Harvey, D., 1969: Explanation in Geography, St. Martin's Press, New York, 1969.
11. Johnston, R.J. et al.(eds), 1986: The Dictionary of Human Geography, Oxford, Basil Black-well.

Theory Credit : 4
Practical Credit: 0
No. of Required Classes : 60
No. of Contact Classes: 40
No. of Non-Contact Classes : 20

Particulars of Course Designer (Department of Geography, Gauhati University, geography@gauhati.ac.in)

Four Year Under-Graduate Programme

Subject: Geography
Semester: III
Course Name: **Geography of Disaste**r
Course Code: GGY0300204
Course Level: Intermediate
Theory (4 Credits, 60 classes of one-hour duration)
100 Marks (Theory =60 Marks, Internal assessment = 40 Marks)

Course Objectives:

1. To understand the concepts of disasters and their management.
2. To identify the different types of disasters.
3. To evaluate the impact of disasters on society and the environment.
4. To learn the various mitigation measures and techniques of disaster management.

Course Outcome:

1. Comprehend various definitions and classifications related to Disaster Management, along with understanding the factors affecting vulnerability.
2. Understand and apply the phases of the Disaster Management Cycle, apprehending roles within Community-Based Disaster Management.
3. Identify and assess the hazard and vulnerability profile of India, emphasizing on diverse disaster-prone areas.
4. Analyze the impact of development projects on disaster genesis and understand indigenous knowledge for disaster management.
5. Evaluate the components of disaster management policies, specifically the National Disaster Management policy and plan of India.

Unit I:

Disaster Management - Meaning and Definition; Definitions of Disaster and Hazards- Risks, Vulnerability, Resilience and their inter-relationship; Classification of Disasters –Natural and Human- induced; Geophysical, hydro-meteorological & manmade hazard and disasters, Causes and impacts of Disasters. Factors affecting Vulnerability – Economic – Political - Environmental and SocialContexts.

Unit II:

Disaster Management Cycle; Disaster Management Phases - Prevention and Preparedness – Mitigation - Response and Recovery; Community-Based Disaster Management - Roles and Responsibilitiesof Communities.

Unit III

Hazard and Vulnerability Profile of India; Disaster-prone and vulnerable areas in India with emphasis on Cyclones, Earthquakes and Floods; Structural and Non-structural measures for Disaster Risk Reduction in Earthquake and flood Prone Areas.

Unit IV:

Disasters and Development - Impact of Development Projects - Dams, Embankments, Land-use changes on disaster genesis, Understanding differential Impacts of disasters on people of various tribes, Classes, Gender, Age, Location and Disability. Indigenous Knowledge and Disaster Management and Prevention with Reference to flood problem of Brahmaputra Valley.

Unit V:

Disaster management policies: Disaster management plans – components, National Disaster management policy and plan of India.

Reading List

1. Coppola, Damon (2011), Introduction to International Disaster Management, Elsevier ISBN:978-0-12-382174-4
2. Abbott, Patrick Leon (2008), Natural Disasters, McGraw-Hill, ISBN-13: 978-0072428650
3. Carresi A L, et al (2013) Disaster Management: International Lessons in Risk Reduction,Response and Recovery, Rutledge, U.K.
4. Carresi A L, et al (2013) Disaster Management: International Lessons in Risk Reduction,Response and Recovery, Routledge U.K.
5. Kurowa, Julio, Disaster Reduction: Living in harmony with nature Quebec or World, Peru,
6. Emdad Hague C, Mitigation of natural hazards and disasters: International perspectives,Springer, 2005.
7. Shaw Rajib and Krishnamurthy R R (2009) Disaster Management: Global Challenges andLocal Solutions, Universities Press.
8. Kapoor Mukesh, (2009) Disaster Management, Universities Press.
9. Diwan Parang, (2010) A Manual on Disaster Management, Pentagon Press.

Theory Credit : 4
Practical Credit: 0
No. of Required Classes : 60
No. of Contact Classes: 40
No. of Non-Contact Classes : 20

Particulars of Course Designer (Department of Geography, Gauhati University, geography@gauhati.ac.in)