



**Darrang College
(Autonomous),
Tezpur-784001**

Syllabus for FYUGP

Subject: GEOGRAPHY

Course Type: SEC

Approved by:

Board of Studies meeting held on 24-12-2025

&

Academic Council vide Resolution no. 2, dated- 29-12-2025

Detail syllabus of 1st semester (SEC)

Title of the course	Field Survey: Techniques and Application
Course code	GGY-SEC-01013
Total Credit (theory +practical)	3 (02-00-01)
Contact hours	60 (1 Credit=15 hours)
Distribution of Marks	(A) End semester =30 (B) Practical= 25 (C) Internal=20 (Sessional, Assignment, Class test, Seminar, Group discussion, Attendance, Project)
Course outcomes	This course will help students to proceed with a research problem and the steps he/she should adopt and tools to be used for doing quality research. The students shall get a chance to observe ground reality directly and minutely. It will help to develop understanding about designing and writing a research report.

Unit	Content	Lecture	Tutorial	Practical	Total Hours
Unit 1	Meaning of field surveying; Need and importance of field work in geographical studies: Physical and Cultural landscape.	05	NIL	NIL	05
Unit 2	Concept of case study and its identification in varying geographical contexts.	10	NIL	NIL	10
Unit 3	Tools and techniques of data collection; Questionnaire survey, Participatory Rural Appraisal Techniques, Participant Observation, Focus Group Discussions, Transect survey, Quadrat survey.	15	NIL	NIL	15
Unit 4	Preparation of a report on socio-economic condition of a nearby village and seminar presentation (Duration-10minutes per participant, which is to be monitored and evaluated by the concerned experts)	NIL	NIL	15	30
Total unit 4		30	NIL	15	60

Reading list:

1. C.R. Kothari: *Research Methodology (methods and techniques)*, New age international publishers.

2. R.L.Singh: *Elements of Practical Geography*.
3. A. Sarkar: *Practical Geography: A systematic Approach*.
4. R.L.Singh & Rana P.B. Singh: *Elements of Practical Geography*.
5. A. Sarkar: *Quantitative Geography, Techniques & presentation*.
6. Michael Brody & Alexander Bogolyubov: *Field Studies Techniques. Part 1. Geography and Landscape Sciences: Investigating Nature Together*.

Detail syllabus of II semester (Major) - SEC

Title of the course	Data Collection, Analysis and Mapping (SEC)
Course code	GGY-SEC-02013
Total Credit (theory +practical)	03 (02-00-01)
Contact hours	60 hours
Distribution of Marks	A. End semester =30 B. Practical=25 C. Internal=20 (Sessional, Assignment, Class test, Seminar, Group discussion, Attendance, Project)
Course outcomes	Understand the fundamental principles of data collection, processing and visualization Acquire practical skills in collecting spatial and non-spatial data using various methods and technologies. Develop proficiency in statistical analysis of various data Apply data representation and mapping skills to real-world phenomena.

Unit	Content	Lecture (L)	Tutorial (T)	Practical (P)	Total Hours
Unit 1	Nature and types of data and data collection: Spatial and non-spatial data; Qualitative and Quantitative data; Sampling techniques in data collection: simple random, stratified and purposive sampling.	10	-	-	10
Unit 2	Data processing and analysis: primary data processing and tabulation; Measures of	10	-	-	10

	central tendency-mean, median and mode both grouped and ungrouped data				
Unit 3	Representation of spatial and non-spatial data: Graphical representation of data (Bar, Line and Circle); Concept of map and map scale; Thematic mapping of spatial data (Choropleth and Isopleth)	10	-	-	10
Unit I	Practical				
	1. Tabulation/Grouping of spatial and non-spatial data for making frequency distribution table; Preparation of Histogram, Frequency Polygon and Frequency Curve. (3 assignment)	-	-	3	6
	2. Computation of mean, median and mode for ungrouped and grouped data; and Determination of median and mode using graphical methods. (3 assignments)			2	4
	3. Computation of standard deviation and coefficient of variation of ungrouped and grouped data relating to various phenomena (rainfall, landholding, income, production, etc.) for comparison of distribution patterns. (3 Assignments)			2	4
	4. Representation of spatial (Physical and human) data through Choropleth and Isopleth mapping and Pie cartogram. (3 Assignments)			2	4
	5. Processing and tabulation of excel data and preparation of frequency distribution table using filtering method (For attributes like age			1	2

	structure, sex composition, caste composition, education and occupation, production, etc.). (3 assignments) 6. Preparation of Bar Diagram (Simple and Composite) for representation of (State/District level) population and production of food grains in India or any state. (2 assignments) 7. Preparation of Pie Diagram for representation of Land use or Population composition in Assam/N.E. India. (1 Assignments) 8. Preparation of a Power Point presentation of the above mentioned assignments (At least 5) using MS office package. (1 Assignments)			1	2
Total		30	-	15	60

Suggested readings:

1. Aslam Mahmood - Statistical Methods in Geographical Studies. Rajesh Publications.
2. R.L. Singh – Elements of Practical Geography. Kalyani Publishers.
3. Majid Husain – Models in Geography, Rawat Publications.
4. S.P. Gupta – Statistical Methods, Sultan Chand & Sons.
5. L.R. Singh – Fundamentals of Practical Geography, Sharda Pustak Bhawan.
6. Swapan Kumar Maity – Essential Graphical Techniques in Geography, Springer.
7. Joan Lambert – Microsoft Office 2019 Step by Step, Microsoft Press.
8. R. Parameswaran – Computer Applications in Business, S. Chand Publishing.
9. Jinjer Simon – Excel Data Analysis: Your visual blueprint for analyzing data, charts and PivotTables, Wiley India.
10. A. Sarma & G. Sharma – Computer Applications in Geography, Rajesh Publications.

- **Detail syllabus of 3rd Semester (Major)- SEC**

Title of the course	Geography of Disaster management (SEC)
Course code	GGY-SEC-03013
Total Credit (theory +practical)	03 (02-00-01)
Contact hours	60 hours
Distribution of Marks	A. End semester =30 B. Practical= 25 C. Internal=20 (Sessional, Assignment, Class test, Seminar, Group discussion, Attendance, Project)
Course outcomes	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	Content	Lecture (L)	Tutorial (T)	Practical (P)	Total Hours
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	6	-	-	6

	disasters, Causes and impacts of Disasters. Vulnerability.				
II	Disaster Management Cycle; Disaster Management Phases - Prevention and Preparedness – Mitigation - Response and Recovery; Do's and Don'ts During Disaster. Community-Based Disaster Management - Roles and Responsibilities of Communities.	5		-	5
III	Hazard and Vulnerability Profile of India; Disaster-prone and vulnerable areas in India with emphasis on Cyclones, Earthquakes and Floods; Distribution and Mapping.	3		-	3
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.	10		-	10
V	Disaster management and measures policies: Disaster management plans – components, National Disaster management policy and plan of India.	6		-	6
Unit	Practical				
I	Hazard and vulnerability profile of India, disaster prone and vulnerable areas of India with emphasis on cyclones, earthquakes and flood, distribution and mapping	-	--	8	16
II	Land use zoning and damage assessment techniques in disaster management	-		7	14
Total		30	-	15	60

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 and Local Solutions, Universities Press.
8. Kapoor Mukesh, (2009) Disaster Management, Universities Press.
9. Diwan Parang, (2010) A Manual on Disaster Management, Pentagon Press.