COURSE CODE:	**GIE-100**	
COURSE NAME:	**GEOGRAPHY**	
CREDIT HOURS:	Theory	= 03
	Practical	= 00
	Total	= 03
CONTACT HOURS:	Theory	= 48
	Practical	= 00
	Total	= 48
PREREQUISITE:	Nil	

MODE OF TEACHING:

Instruction:	Three hours of lecture per week	100%

COURSE DESCRIPTION:

GIS is an innovation in Geography. Historically, it has been collectively referred to as a spatial as well as cartographic science by Hartshorne and like. It is through this course that we plan to introduce students to the close connection between spatial entities on earth and GIS and Remote Sensing catering to our need of mapping them.

COURSE OBJECTIVES:

The course objective is to provide students with the basic introduction to geography as the foundation science leading to the evolution of paper-based cartography into GIS and Remote Sensing. The course therefore takes from a variety of disciplines in geography such as natural environments, digital mapping, study of physical and the human landscape. And during a semester they get to learn about various natural and environmental phenomena, the nature of human population distribution and the linkages in terms of cause and consequences between the two.

RELEVANT PROGRAM LEARNING OUTCOMES (PLOs):

The course is designed so that students will achieve the PLOs:

1. Engineering Knowledge: ☑ 7. Ethics: ☐

2.	Problem Analysis:	☐	8.	Individual and Collaborative Team Work:	☐
3.	Design/Development of Solutions:	☐	9.	Communication:	☐
4.	Investigation:	☐	10.	Project Management:	☐
5.	Tool Usage:	☐	11.	Lifelong Learning:	☐
6.	The Engineer and Society:	☐			

COURSE LEARNING OUTCOMES (CLO):

Upon successful completion of the course, the students will be able to:

No.	CLO	Domain	Taxonomy Level	PLO
1.	Describe earth and its physical and human environment	Cognitive	2	1

TOPICS COVERED:

Theory:

Week	Topic
1.	Geography, neo-geography, digital cartography and GIS
2.	Earth's rotation and insolation
3.	Global energy balance
4.	Air, temperature, and global circulation
5-6	Moisture and precipitation, Weather systems and global climate
7.	Biogeography
8.	Global warning and environmental sustainability
9.	Geography of South Asia
10.	Landscape and people of South Asia
11-12	Global economy, World population
13-14	Factors affecting population distribution
15-16	Relationship between man and his environment
17-18	**ESE**

Field visits:

No.	Field trip
1.	Trail 6: Margalla Hills (Biogeography)

2.	Population Census Organization
3.	Pakistan Museum of Natural History

TEXT AND MATERIAL:

Textbook (s):

a. Strahler, A. H., &Strahler, A. N. (2010). Physical geography. Wiley.
b. Fouberg, Erin H., and Alexander B. Murphy. Human geography: people, place, and culture. Wiley, 2009.

Reference Books:

a. Petersen, James F., Dorothy Sack, and Robert E. Gabler. Fundamentals of physical geography. Brooks/Cole Publishing Company, 2010.
b. Dahlman, Carl T., William H. Renwick, and Edward F. Bergman. Introduction to Geography: People, Places, and Environment. Prentice Hall, 2011.

ASSESMENT SYSTEM:

1. CLOs Assessment

Cognitive	**Psychomotor**	**Affective**
Spreadsheet	-	-

2. Relative Grading

Theoretical/Instruction			100%
	Assignments10%		
	Quizzes10%		
	Project 10%		
	Mid Semester Exam30%		
	End Semester Exam 40%		
Total			**100%**