GGY 301: Research Methods

Course No	GGY 301
Course Title	Research Methods
Credits	3
Prerequisites	None
Core/Optional	Core for Special Degree
Objectives: This course provides students with a basic knowledge and understanding of the research methodology and techniques in geography. The course is specially designed to provide competence to undergraduates to conduct independent research.	
Time Allocation	Lectures (30), Field and laboratory work (30)

Course Description

The course consists of a preliminary survey of the nature of scientific inquiry and research, identification of research problems, field data collection methods inPhysical and Human geography, the application of statistical techniques: univariate and multivariate, and sampling and field study methods, the course is divided into the following sections: basic elements of research; field methods; data collection and processing; and data analysis and presentation.

Assessment Scheme	**Percentage Marks**
Practical Assignments /laboratory work Field Assignment	20 20
End Semester Examination	60

GGY 302: Introduction to Hydrology

Course No	GGY 302
Course Title	Introduction to Hydrology
Credits	3
Prerequisites	GGY 101
Core/Optional	Core for Special Degree and Optional for General Degree

Objectives

The student will acquire the fundamental theoretical knowledge in Hydrology and learn the basic methods of analysing hydrological data. In addition, students will learn how to analyse water samples and prepare water quality maps.

Time Allocation	Lectures |30| Lab Work| 10| Field Work |20|

Course Description

This course covers the following topics: introduction to hydrology and its applications, hydrological cycle, Precipitation, evaporation and transpiration, infiltration, interception and depression storage, surface runoff/Stream flow, introduction to hydrographs, time series analysis, surface water and ground water quality, natural and human impact of water quality and quantity; preparation of water quality maps.

Assessment Scheme	**Percentage Marks**
Quizzes Practical Assignments Field Assignment	10 20 10
End Semester Examination	60

GGY 303: Geography of Sri Lanka

Course No	GGY 303
Course Title	Geography of Sri Lanka
Credits	3
Prerequisites	None
Core/Optional	Core for Special and General Degrees
Objectives At the end of this course, the students will obtain a broad geographical knowledge of physical and socio-economic conditions in Sri Lanka	
Time Allocation	Lectures |30| Discussions|15|
Course Description **Part One:** Introduction to physical environment; Geology: structure and tectonics, relief and drainage, landforms, soils, minerals, water resources; Climate: circulation and seasonal regime, temperature, rainfall, and climate change; biological environment: natural vegetation, agro-ecology, marine environment, natural hazards and disasters: landslides, floods, droughts, cyclones, tornados, and tsunami **Part Two: Introduction** to social environment; population: growth, distribution and density**,** ethnicity and religion**,** urban and rural settlements;agriculture:types and spatial patterns and major issues; Industries: types and spatial patterns and problems; Services (spatial inequalities in education, health, welfare and consumer services; patterns of international trade; challenges and opportunities: environment management, poverty eradication, national integration and globalization.	

Assessment Scheme	**Percentage Marks**
Continuous Assessment Mid semester examination	50
End Semester Examination	50

GGY 304: Surveying and Leveling

Course No	GGY 304
Course Title	Surveying and Levelling
Credits	3
Prerequisites	Basic Mathematics
Core/Optional	Core for Special Degree
Objectives At the end of the course, the students will gain knowledge in different surveying techniques and acquire knowledge and skills in using surveying equipment and making a plan.	
Time Allocation	Lectures [20] Field and Lab[50]
Course Description Introduction to Surveying, different types of land surveys and instruments, measurements and errors, units, significant figures, types of errors, precision and accuracy, distance measurements, taping, electronic distance measurements, levelling, differential levelling, trigonometric levelling, adjustments, angles, bearings, azimuths, traversing, global navigation satellite systems, area calculations, closed polygons, irregular boundaries, circular boundaries.	

Assessment Scheme	**Percentage Marks**
Continuous Assessment Lab and Field	40
End Semester Examination	60

GGY 305: Philosophy of Geography

Course No	GGY 305
Course Title	Philosophy of Geography
Credits	3
Prerequisites	None
Core/Optional	Core for Special Degree

Objectives

At the end of the course, the students will be able to critically evaluate various approaches to discipline and answer the question of "what is geography?

Time Allocation	Lectures	30	Discussions	15	

Course Description

This course will critically discuss the question of "What is Geography" with reference to various approaches and traditions developed within the course of its historical evolution. Central geographical concepts: space, place, landscape region and definitions of geography; The evolution of geography emphasizing three different periods: classical (Greek and Roman geography), intermediate (contributions of Ritter and Humboldt), modern geography up to 1970s, environmental determinism, regional and systematic approach, Hartshorne-Schafer debate, spatial approach (systems analysis), Regional Science school, radical approach (liberal and Marxist Geography), behavioural and humanistic approach; Post 1990s developments in Geography and the status and the nature of Sri Lankan Geography: society and space debate, place debate, physical to environmental geography, issue of scale.

Assessment Scheme	**Percentage Marks**
Continuous Assessment Mid semester examination	50
End Semester Examination	50

GGY 310: Settlement Geography

Course No	GGY 310
Course Title	Settlement Geography
Credits	3
Prerequisites	None
Core/Optional	Core for Special Degree and Optional for General Degree
Objectives Student will acquire theoretical and empirical knowledge relating to settlements and necessary skills for settlement planning.	
Time Allocation	Lectures |30| Discussions |15|
Course Description This course will cover the following topics: historical evolution of the settlements: origin and growth; types of settlements: rural, urban, and other; ecological processes of rural and urban growth; settlement functions and networks; spatial patterns of the settlements: spatial hierarchies and internal morphologies; settlement and landscapes: settlements as instruments of social, economic, colonial and cultural articulation; measuring settlement patterns: nearest neighbour analysis, the rank size rule, primate city, central place theory; settlement policies and planning in Sri Lanka.	

Assessment Scheme	**Percentage Marks**
Continuous Assessment Assignments	40
End Semester Examination	60

GGY 311: Biogeography

Course No	GGY 311
Course Title	Biogeography
Credits	3
Prerequisites	GGY 101
Core/Optional	Core for Special Degree and Optional for General Degree

Objectives

At the end of the course, the students will acquire the knowledge on principles, concepts, theories and processes of Biogeography and be able to explain issues of bio-geographical significance at different geographical scales.

Time Allocation	Lectures |30| Field Work|10|Discussions| 10|

Course Description

Introduction to Biogeography: link between biology and geography; theoretical and conceptual development of the field; The concept of biosphere: origin and evolution of organisms; biological kingdoms; the theory of island biogeography; the concept of carrying capacity; geographical distribution of biota; biogeographic realms and major biomes: Wallace's biogeographical regions; The concept of biodiversity: genetic diversity, species diversity and ecosystem diversity/habitat diversity, biodiversity degradation; biological interactions. society and biological resources: the concept of conservation, challenges and conservation measures in national and international contexts(special attention will be paid to in – situ and ex – situ conservation practices in Sri Lanka); Biological survey methods (practical exercise based on a field visit); conservation Biogeography (The roots of conservation Biogeography, social values of conservation Biogeography, systematic conservation – past, present & future)

Assessment Scheme	**Percentage Marks**
Continuous Assessment	
Mid semester examination	20
Field report	30
End Semester Examination	50

GGY 312: Urban Geography

Course No	GGY 312
Course Title	Urban Geography
Credits	3
Prerequisites	None
Core/Optional	Core for Special Degree and Optional for General Degree

Objectives

The students will learn the concepts and theories of urban Geography and apply them to understand the urban space in Sri Lanka.

Time Allocation	Lectures |30| Field Work |10| Discussions| 10|

Course Description

This course will cover the following topics: the concepts and theories of Urban Geography; the process of urbanization: origin and growth of urban settlements; evolution of urban systems: form, structure and organization of cities; urban functions: commercial, residential, services etc.; urban land use planning; urban problems and prospects; cities of future; urbanization in Sri Lanka; Urban policies and planning in Sri Lanka.

Assessment Scheme	**Percentage Marks**
Continuous Assessment	
Assignment	30
Field report	10
End Semester Examination	60

GGY 313: World Regional Geography

Course No	GGY 313
Course Title	World Regional Geography
Credits	3
Prerequisites	None
Core/Optional	Core for General Degree

Objectives

The students will primarily acquire an informed awareness of and gather geographical literacy about different regions of the world. Further, they will learn to appreciate the diversities and differences of the world by comparing and contrasting the world regions with Sri Lanka and develop an interest on current world affairs.

Time Allocation	Lectures |30| Group work based discussions and |15|

Course Description

At the beginning of each region there will be a brief overview covering physical, cultural, historical and political background of the region and issues unique to that region. Introduction: basic geographic concepts, issues and regions; Europe: industrialization/urbanization, devolution and new challenges, European integration, sub-regions; Russian region: political history, economic transition and development challenges; North America: pluralistic social structure, post-industrial transformation, regionalization, sub-regions; Middle America: uncertain economic development, sub regions; South America: economic development, sub-regions; Northern Africa and Middle East: resource and the world economy, foreign intervention, sub regions; Africa South of Sahara: region in economic and political crisis, effect of colonization, development perspective, sub-regions; South Asia: European political history, development challenges, sub regions; East Asia: economic transformation and global influence; Southeast Asia: political colonial history, development challenges/transformation, sub regions; Oceania: political colonial history, challenges; unique regions of the world: polar, mountains, desert.

Assessment Scheme	**Percentage Marks**
Continuous Assessment Mid semester examination	50
End Semester Examination	50