

## 400 Level Courses: Stream 1: Human Geography

## GGY 401: Agricultural Geography

<b>Course No</b>	GGY 401
<b>Course Title</b>	Agricultural Geography
<b>Credits</b>	3
<b>Prerequisites</b>	None
<b>Core/Optional</b>	Optional
<b>Objectives</b>	
At the end of this course, students will be able to explain and analysedifferentspatialpatterns of agricultural activities and their causes.	
<b>Time Allocation</b>	Lectures  30  Discussions   10  Field Work  10
<b>Course Description</b>	
The course will include the following topics: evolution of agriculture; diffusion of agricultural innovations; classification of agricultural systems; changing role of agriculture in economic development; geographical factors affecting agricultural production; models and theories in Agricultural Geography; locational decision making in agricultural production; green revolution; Major issues in agricultural geography: food security and food crisis; agricultural geography in Sri Lanka; challenges and opportunities, agricultural policies, agri-business and green economy, case study of a selected agricultural area in Sri Lanka.	
<b>Assessment Scheme</b>	<b>Percentage Marks</b>
Assignments	
Mid semester examination	20
Term Paper	20
End Semester Examination	60

## GGY 402: Development Geography

<b>Course No</b>	GGY 402
<b>Course Title</b>	Development Geography
<b>Credits</b>	3
<b>Prerequisites</b>	None
<b>Core/Optional</b>	Optional
<b>Objectives</b> At the end of the course, the students will acquire a thorough knowledge on theories of development and will be able to analyse complex development issues from a spatial perspective.	
<b>Time Allocation</b>	Lectures  30  Discussions  15
<b>Course Description</b> This course is designed to provide a broad understanding of both theoretical and practical aspects of development from a spatial perspective. The course will provide critical knowledge covering four major areas, theories of development and underdevelopment, Measuring development, political economy of development and its uneven spatial structure (core-periphery model) and major developmental issues at global scale (environmental sustainability, gender equity, third world poverty (rural and urban), trade and aid, regionalization and globalization. The course will draw upon the development experience of selected countries from South Asia, East Asia and Latin America.	
<b>Assessment Scheme</b>	<b>Percentage Marks</b>
Continuous Assessment Two Assignments	40
End Semester Examination	60

## GGY 403: Geography of Nationalism

<b>Course No</b>	GGY 403	
<b>Course Title</b>	Geography of Nationalism	
<b>Credits</b>	3	
<b>Prerequisites</b>	None	
<b>Core/Optional</b>	Optional	
<b>Objectives</b>		
The students will develop the analytical ability to critically examine concepts on nationalism and the empirical ethno-nationalist politics in Sri Lanka and other parts of the world.		
<b>Time Allocation</b>	Lectures  30  Discussions  15	
<b>Course Description</b>		
<p>This course highlight two fundermantal points: ethnonationalism is intrinscially spatial and ethnonationali politics is a fundamental fact of modern state. The main topics covered include link between space and politics; basic concepts of tribe, community, ethnicity, race, nation,nationalism and ethnonationalism; culture and ethnonationalism; types of nationalism; theories of ethnonationalism; ethnonationalist politics around the world : United Kingdom, Canada, India, Spain etc.; Nature of the Sri Lankan nation-state; nature of Sinhalese ethnonationalism; nature of Tamil ethnonationalism; terrorism and Tamil ethnonationalism; nature of Muslim ethnic politics; federalism and ethnonationalism; globalization and nationalism; ethnonationalism and the future of the state.</p>		
<b>Assessment Scheme</b>		<b>Percentage Marks</b>
Continuous Assessment		
Assignments		20
Mid semester examination		30
End Semester Examination		50

## GGY 404: Geography of Poverty

<b>Course No</b>	GGY 404	
<b>Course Title</b>	Geography of Poverty	
<b>Credits</b>	3	
<b>Prerequisites</b>	None	
<b>Core/Optional</b>	Optional	
<b>Objectives</b>		
The students will learn to analyse poverty critically, but sensitively and assess the global and local level responses towards poverty.		
<b>Time Allocation</b>	Lectures and Discussions  30  Field Work  30	
<b>Course Description</b>		
Introduction: geography of poverty; What is poverty: conceptual background of poverty, definitions of poverty (from monetary to non-monetary approaches), poverty measurement and mapping (quantitative, qualitative), the Millennium Development Goals; Who is poor: poverty and inequality, horizontal poverty and vertical poverty; Where is poverty? : rich and poor countries, empirical understanding of poverty at different spaces/scales: poverty-urban and rural; poverty at global, national and local level (focus on Sri Lanka); poverty as a global issue: famine and hunger, poverty and health, poverty and war; age and poverty, disability and poverty, poverty and globalization; poverty alleviation policies and practices at national and international scales: Sri Lankan policies of poverty alleviation, local actions to alleviate poverty in Sri Lanka, politics of poverty.		
<b>Assessment Scheme</b>		<b>Percentage Marks</b>
Continuous Assessment Mid semester examination Assignments		(30-50)
End Semester Examination		(50-70)

## GGY 405: Geopolitics

<b>Course No</b>	GGY 405	
<b>Course Title</b>	Geopolitics	
<b>Credits</b>	3	
<b>Prerequisites</b>	None	
<b>Core/Optional</b>	Optional	
<b>Objectives</b>		
The students will be familiar with the concepts and theories associated with Geopolitics. They will be exposed to major geopolitical issues in the world and thus to critically assess the changing geopolitical status of Sri Lanka.		
<b>Time Allocation</b>	Lectures  30  Discussions  15	
<b>Course Description</b>		
Introduction: basic concepts of geopolitics including sovereignty, state, sphere of influence, hierarchy of states; theories of realism and idealism; critical geopolitics; evolution of geopolitical ideas through the contribution of major thinkers of geopolitics and their influence; cold war geopolitics; post-cold war geopolitics; culture and geopolitics : clash of civilizations; modern geopolitics and its defining features; geopolitics of environment; Indian Ocean geopolitics; changing geopolitical significance of Sri Lanka and future of Sri Lankan geopolitics.		
<b>Assessment Scheme</b>	<b>Percentage Marks</b>	
Continuous Assessment		
Assignments	20	
Project work	30	
End Semester Examination	50	

## GGY 406: Historical Geography

<b>Course No</b>	GGY 406	
<b>Course Title</b>	Historical Geography	
<b>Credits</b>	3	
<b>Prerequisites</b>	None	
<b>Core/Optional</b>	Optional	
<b>Objectives</b>		
Student will become familiar with and gain insight into the sub discipline, its concepts, theories and approaches. The students will also learn how a place or a region changes through time through endogenous and exogenous forces.		
<b>Time Allocation</b>	Lectures  30  Discussions 15	
<b>Course Description</b>		
The course will focus on two major approaches in historical geography: horizontal approach and vertical approach. After a general review of the sub discipline of Historical Geography with its specific methodologies and the concepts of history, geography and their interrelationship, this course will analyze on the historical geography of Sri Lanka through the two both these approaches. The course will focus on the geographical patterns during ancient, pre-colonial, colonial and postcolonial periods in Sri Lanka. The main topics covered include peopling of the island; Distribution pattern of population and settlements; transportation; migration patterns; agriculture; irrigation; natural resources utilization; political units and boundaries.		
<b>Assessment Scheme</b>		<b>Percentage Marks</b>
Continuous Assessment		
Assignments		20
Map based project work		30
End Semester Examination		50

## GGY 407: Industrial Geography

<b>Course No</b>	GGY 407	
<b>Course Title</b>	Industrial Geography	
<b>Credits</b>	3	
<b>Prerequisites</b>	None	
<b>Core/Optional</b>	Optional	
<b>Objectives</b>	The student will gain comprehensive knowledge about the location and distribution of manufacturing industries, which played an important role in the emergence of contemporary society.	
<b>Time Allocation</b>	Lectures  30  Discussions  15	
<b>Course Description</b>	<p>The course introduces basic principles of the location of manufacturing industries and, describes various concepts and theories that examine the location of industries from single plant/firm to large industrial corporations, with the view of spatial evolutionary patterns of industrialization, the course discusses the relationship between national economic strategies and international trends in manufacturing. Introduction to industrial geography; location factors; classical industrial location theories, neo-classical industrial location theories, co-operate growth and industrialization, trends and patterns of industrialization in the 19<sup>th</sup>, 20<sup>th</sup> and 21<sup>st</sup> centuries; the influence of liberal economic policies on the growth of industrialization in developing countries; industrialization and its impact on the environment; industrial Geography in Sri Lanka; evolution, spatial distribution, challenges and opportunities in industrialization, industrial policy and planning in Sri Lanka.</p>	
<b>Assessment Scheme</b>	<b>Percentage Marks</b>	
Continuous Assessment		
Assignments	20	
Mid semester examination	20	
End Semester Examination	60	



## GGY 408: Landscape Geography

<b>Course No</b>	GGY 408	
<b>Course Title</b>	Landscape Geography	
<b>Credits</b>	3	
<b>Prerequisites</b>	None	
<b>Core/Optional</b>	Optional	
<b>Objectives</b>	The students will acquire a comprehensive knowledge of what is landscape as it evolved within Human Geography and develop analytical skills for interpreting landscape.	
<b>Time Allocation</b>	Lectures  24  Field Work  42	
<b>Course Description</b>	<p>The course will be organized as a seminar. Each week the students will be reading an article relevant to the particular theme and be prepared for a discussion. The main topics to be covered are; general introduction to the concept of landscape; evolution of landscape tradition in Geography: <i>Landschaftkunde</i>(German tradition), Carl Sauer tradition, new cultural Geography; the relationship between landscape and culture; material recording of landscape: the morphological approach to landscape, the application of morphologic method; social construction of landscape: reading landscape as a text, landscape as theatre, rural, urban, economic, political, religio-cultural landscapes, landscapes in art and film; changing landscape of a selected city. The students will conduct field work throughout the semester either in Kandy city or University of Peradeniya.</p>	
<b>Assessment Scheme</b>	<b>Percentage Marks</b>	
Continuous Assessment		
Weekly written assignments on readings	30	
Project based on field work	30	
End Semester Examination	40	

## GGY 410: Cultural Geography

<b>Course No</b>	GGY 410	
<b>Course Title</b>	Cultural Geography	
<b>Credits</b>	3	
<b>Prerequisites</b>	None	
<b>Core/Optional</b>	Core	
<b>Objectives</b>	<p>The students will be able to explain and analyze the relationship between culture and geography focusing on relations between culture and space, cultural landscape, culture and power.</p>	
<b>Time Allocation</b>	Lectures  26  Field Work and practical 38	
<b>Course Description</b>	<p>This course focuses on the role of culture in shaping places, regions, and landscapes. Cultural geography is concerned with making sense of people and the places they occupy through analyses of cultural processes, cultural landscapes, and cultural identities. The course introduces culture from a geographical perspective, focusing on how cultures work in places and how they are embedded in everyday life. The course gives students an appreciation for not only how cultures are spatially expressed, but also how geography is a basic element in the constitution of culture. The course will be divided into three sections. Main theoretical shifts in the field of Anglophone cultural geography and how they evolved throughout the 20<sup>th</sup> century: Beginnings of Cultural Geography, Carl Sauer and morphological approach, emergence of New Cultural Geography with Duncan, Daniels and Cosgrove; Key concepts of Cultural Geography ; Assessment of case studies of cultural landscapes, places, and regions and analysis of cultural geographies of religion, ethnicity and language, cultural geography of Sri Lanka and Interpretation of cultural geography as “power politics” of place.</p>	
<b>Assessment Scheme</b>	<b>Percentage Marks</b>	
Continuous Assessment		
Tutorials	30	
Field work assignment	30	
End Semester Examination	40	

## GGY 412: Social Geography

<b>Course No</b>	GGY 412	
<b>Course Title</b>	Social Geography	
<b>Credits</b>	3	
<b>Prerequisites</b>	None	
<b>Core/Optional</b>	Core	
<b>Objectives</b>	<p>The students will be able to identify social inequalities from a geographical perspective and to locate the economic, political and cultural processes that create and sustain socio-spatial inequalities.</p>	
<b>Time Allocation</b>	Lectures  30  Discussions and tutorials 15	
<b>Course Description</b>	<p>This course will explore the relationship between social relations, identities and inequalities and geography. How social relations and identities vary over space and the role of space in constructing social inequalities is the main focus of social geography. The course will cover the following topics: Development of social geography as a subfield of human geography (both positivist and non-positivist approaches); Impact of social theories on human geography (Durkheim, Weber, Marx and Giddens, Gramsci, Foucault, Feminist theories); social structures and spatial relations: society and space debate; social/spatial inequalities and their implications relating to race, class, ethnicity, gender and sexuality, poverty, health and well being in varying spatial units such as the state, city and rural areas.</p>	
<b>Assessment Scheme</b>	<b>Percentage Marks</b>	
Continuous Assessment		
Assignments	30	
Map exercises	20	
End Semester Examination	50	

## GGY 413: Transport Geography

<b>Course No</b>	GGY 413
<b>Course Title</b>	Transport Geography
<b>Credits</b>	3
<b>Prerequisites</b>	None
<b>Core/Optional</b>	Optional
<b>Objectives</b>	
At the end of the course, the students will obtain a conceptual and theoretical knowledge in Transport Geography and learn to measure various aspects of transportation systems.	
<b>Time Allocation</b>	Lectures  30  Field Work  10  Discussions  10
<b>Course Description</b>	
The course includes following topics: Basic concepts in Transportation Geography; geographical factors affecting transport and traffic system; transport system: air, water and surface (road and rail) networks of transportation systems; models and techniques in Transport Geography: the gravity model, networks analysis, accessibility index, connectivity index; spatiality of transport pricing; transportation geography of Sri Lanka: analysis of the transportation infrastructure in Sri Lanka; transportation and development; transportation problems; transport policy and planning; environmental impacts of transportation systems.	
<b>Assessment Scheme</b>	<b>Percentage Marks</b>
Continuous Assessment	
Assignments	30
Practical work	10
End Semester Examination	60

## 400 Level Courses: Stream 2: Physical Geography

## GGY 426: Environmental Change

<b>Course No</b>	GGY 426	
<b>Course Title</b>	Environmental Change	
<b>Credits</b>	3	
<b>Prerequisites</b>	None	
<b>Core/Optional</b>	Optional	
<b>Objectives</b>	At the end of the course, the students will be able to analyse environmental dynamics a broader perspective, identify contemporary environmental changes and the relevant management strategies.	
<b>Time Allocation</b>	Lectures and Discussions 30  Field Work  30	
<b>Course Description</b>	<p>This course provides knowledge about changes in the terrestrial and aquatic environments caused by natural and human forcing mechanisms. The main topics in the course includes introduction to environmental change; environmental dynamism; different types of environmental changes: terrestrial, aquatic, atmospheric; historical records and evidence of environmental change; causes of ecosystem changes; anthropogenic pressure and human responses; criteria and indicators for measuring environmental change; policy dimesions at global, regional and national levels; environmental modelling; application of environment models. The course will consist of field work sessions involving both individual and group-based projects.</p>	
<b>Assessment Scheme</b>	<b>Percentage Marks</b>	
Continuous Assessment Assignments	40	
End Semester Examination	60	

## GGY 427: Tropical Environment

<b>Course No</b>	GGY 427	
<b>Course Title</b>	Tropical Environments	
<b>Credits</b>	3	
<b>Prerequisites</b>	None	
<b>Core/Optional</b>	Optional	
<b>Objectives</b>	At the end of the course, the students will acquire an in-depth understanding of the tropical region by analyzing its ecosystems and issues related to the management of its bio-physical and socio-economic environment.	
<b>Time Allocation</b>	Lectures  30  Discussions  15	
<b>Course Description</b>	<p>This course consists of three sections: bio-physical environment of the tropical region, contemporary problems and socio-economic challenges of the tropics: Bio-physical environment: introduction to tropical environment; tropics as a natural region; tropical regions in Africa, Latin America and Asia; tropical ecosystems; biophysical characteristics of the tropics; biogeochemical cycling and nutrient cycling in the tropical environments; development and adaptations of the vegetation; geomorphologic processes: land forms and soil of the tropics; classification of tropical climate; environmental problems: tropical deforestation; loss of biodiversity and genetic resources; pollution; desertification; land degradation; socio-economic challenges of the tropics: poverty and livelihood strategies, urban overgrowth, overpopulation; politics and economics of managing natural habitats in the tropics.</p>	
<b>Assessment Scheme</b>	<b>Percentage Marks</b>	
Continuous Assessment Assignments	40	
End Semester Examination	60	

## GGY 428: Soil Geography

<b>Course No</b>	GGY 428	
<b>Course Title</b>	Soil Geography	
<b>Credits</b>	3	
<b>Prerequisites</b>	None	
<b>Core/Optional</b>	Optional	
<b>Objectives</b>		
Students will gain conceptual, theoretical and practical knowledge on soil geography and develop skills needed for soil analysis.		
<b>Time Allocation</b>	Lectures  30  Discussions  10	Practical and lab work 10
<b>Course Description</b>		
Introduction to the field of Soil Geography; factors of soil formation; pedological processes; nature and composition of soils: texture, structure, chemical, physical and mineralogical characteristics; Soil morphology; soil hydrology; major systems of soil classification: traditional and numerical methods of soil classification; spatial distribution of soils; methods of soil survey and field mapping; laboratory analysis of soil; soil as an important natural resource; current problems of soil degradation due to human use and misuse; soil conservation; soil geography of Sri Lanka; issues, challenges and opportunities; biological properties of soil; soil sampling methods.		
<b>Assessment Scheme</b>	<b>Percentage Marks</b>	
Continuous Assessment		
Assignments	30	
Mid semester examination	30	
End Semester Examination	40	



## GGY 429: Fluvial Geomorphology

<b>Course No</b>	GGY 429	
<b>Course Title</b>	Fluvial Geomorphology	
<b>Credits</b>	3	
<b>Prerequisites</b>	None	
<b>Core/Optional</b>	Optional	
<b>Objectives</b>		
At the end of the course, students will be able to identify fluvial processes and landforms and learn the related analytical methods and techniques.		
<b>Time Allocation</b>	Lectures  20  Field Work  30 lab work  20	
<b>Course Description</b>		
The course covers the principles and techniques of fluvial processes and of landform development. The course will cover: Origin and development of drainage networks; drainage basin as a unit of landform study; drainage basin and network characteristics: physical characteristics, drainage patterns and channel flow characteristics; erosion, transport and deposition processes and related landforms; characteristics of fluvial deposits, hydraulics of erosion and sediment transport in rivers; river channel adjustment and equilibrium: long profile, cross-section and dynamic equilibrium; measurement and quantitative evaluation of drainage basin processes.		
<b>Assessment Scheme</b>		<b>Percentage Marks</b>
Continuous Assessment		
Field Assignments		20
Field Report		20
Class room assessments		10
End Semester Examination		50

## GGY 430: Tropical Climatology

<b>Course No</b>	GGY 430	
<b>Course Title</b>	Tropical Climatology	
<b>Credits</b>	03	
<b>Prerequisites</b>	None	
<b>Core/optional</b>	Optional	
<b>Objectives</b>		
The student will gain the basic knowledge in tropical climatic system and be able to explain nature, variability and its importance to the extra-tropical climatology.		
<b>Time Allocation</b>	Lectures  30  Discussion 10  Practical  10	
<b>Course Description</b>		
<p>The course provides the theoretical and practical knowledge of climate of the tropical region. The main topics covered are introduction to the tropics, solar radiation distribution, energy and mass transfers to the extra-tropical region, temperature in the tropics, the general circulation of the tropical atmosphere; the Hadley cell, the low pressure and convergent air masses-Inter-tropical Convergence Zone (ITCZ), the sub tropical highs and distribution of deserts, the trade winds, seasonal variation of tropical circulation, tropical disturbances: thunderstorms, monsoon depressions, easterly waves, tropical cyclones; water in the tropical atmosphere: evapo-transpiration, humidity, condensation, clouds; tropical precipitation: its origin, annual and seasonal variability, rainfall frequency and intensity, the tropical monsoon Asia, the applied tropical climatology: tropical climate and agriculture, tropical climate and water resources, and man`s adaptation to climatic extremes in the tropics; tropical climate types and future challenges.</p>		
<b>Assessment Scheme</b>		<b>Percentage Marks</b>
Continuous Assessment		
Mid Semester Examination		20
Assignment		20
End Semester Examination		60

## GGY 431: Advanced Hydrology

<b>Course No</b>	GGY 431	
<b>Course Title</b>	Advanced Hydrology	
<b>Credits</b>	3	
<b>Prerequisites</b>	None	
<b>Core/Optional</b>	Optional	
<b>Objectives</b>	At the end of this course, the student will gain the theoretical as well as practical knowledge on hydrology.	
<b>Time Allocation</b>	Lectures  30  Discussions  10  Practical 10	
<b>Course Description</b>	<p>The course provides the student with the knowledge of concepts, theories and techniques in surface and groundwater hydrology and water resource management. The areas covered are hydrograph analysis; flood frequency analysis; hydrometeorological data analysis; hydrological modelling; groundwater as a natural resource: major aquifers, ground water movements; major water resource issues in Sri Lanka and the rest of the world including surplus and shortage management; traditional and modern methods of water management in Sri Lanka: harnessing water resources for sustainable development.</p>	
<b>Assessment Scheme</b>	<b>Percentage Marks</b>	
Continuous Assessment		
Mid semester examination	20	
Assignments	20	
End Semester Examination	60	

## GGY 433: Coastal Geomorphology

<b>Course No</b>	GGY 433
<b>Course Title</b>	Coastal Geomorphology
<b>Credits</b>	3
<b>Prerequisites</b>	None
<b>Core/Optional</b>	Optional
<b>Objectives</b>	
The students will gain advanced knowledge on coastal landform features that are shaped by atmospheric, terrestrial and marine processes.	
<b>Time Allocation</b>	Lectures  30  Field Work  10  Discussions  10
<b>Course Description</b>	
The study of landforms, processes and sedimentary formations is known as Coastal Geomorphology which is concerned about the development of landforms in the land-sea interface area under the influence of both marine and terrestrial processes. The main topics covered in this course include, nature of the coastlines: their origin and evolution, composition, controlling and forcing mechanism; coastal landforms and their behavioral characteristics; coastal sediments and their stratigraphic characteristic; coastal erosion; marine processes: waves, tides, currents, fluctuation of sea level; dynamic coastal geomorphic systems functioning under different temporal and spatial scales; coastal landforms in Sri Lanka.	
<b>Assessment Scheme</b>	<b>Percentage Marks</b>
Continuous Assessment	
Mid semester examination	30
Assignments	30
End Semester Examination	40

## 400 Level Courses: Courses on Geographical Skills

## GGY 450: Remote Sensing

<b>Course No</b>	GGY 450	
<b>Course Title</b>	Remote Sensing	
<b>Credits</b>	3	
<b>Prerequisites</b>	None	
<b>Core/Optional</b>	Optional	
<b>Objectives</b>		
The students will acquire theoretical knowledge in Remote Sensing and hands on experience in using popular image processing software. On completion of the course, the student will be able to interpret remote sensing data and produce thematic maps.		
<b>Time Allocation</b>	Lectures  15  Practicals 60	
<b>Course Description</b>		
This course will cover the following topics: Introduction to the science and art of Remote Sensing; remote sensing systems; Radiation and Electromagnetic Spectrum; energy interactions in the atmosphere; photographic and multispectral remote sensing; satellite platforms and sensor systems; spectral and temporal resolution of imagery; passive and active remote sensing systems; methods of spectral and spatial enhancement, image rectification; digital image processing; geometric and radiometric corrections image classifications; pattern recognition; image analysis and interpretation; Remote Sensing applications. Aerial photography and elements of Photogrammetry.		
<b>Assessment Scheme</b>		<b>Percentage Marks</b>
Continuous Assessment		60
End Semester Examination		40

## GGY 451: Advanced Geographical Information System

<b>Course No</b>	GGY 451
<b>Course Title</b>	Advanced Geographic Information Science (AGIS)
<b>Credits</b>	3
<b>Prerequisites</b>	GGY 210
<b>Core/Optional</b>	Optional
<b>Objectives</b>	
This course will provide the student with skills and knowledge in Geographic Information Science at a higher level. On completion of the course, the student will be able to process geographic data and produce outputs, such as maps, reports, etc.	
<b>Time Allocation</b>	Lectures  26  Practical  30 Field work  8
<b>Course Description</b>	
The course covers the major themes of Geographic Information Science (GIS). The specific areas covered are scope and methods of GIS, space-time concepts, cartographic representation and modelling of geographic space, temporal GIS, the Geographic Information Science debate; GIS and Geography; the nature, type and quality of geographic data; data errors; geographic data sources; scale and resolution of geographic data; spatial data infrastructure: data standards; database concepts and models; spatial analysis: 3D analysis; network analysis, geo-statistical analysis; geo-visualization; methods of digital data capture: GPS survey; GIS in decision making; GIS applications.	
<b>Assessment Scheme</b>	<b>Percentage Marks</b>
Continuous Assessment	
Assignments	15
Hands on/Practical	20
Project report	15
End Semester Examination	50

## GGY 452: Locational Analysis

<b>Course No</b>	GGY 452
<b>Course Title</b>	Locational Analysis
<b>Credits</b>	3
<b>Prerequisites</b>	None
<b>Core/Optional</b>	Optional
<b>Objectives</b>	
The student will become familiar with the concepts, theories, techniques and models of locational analysis. The student will develop the quantitative skills necessary to understand the spatial distribution of human activities.	
<b>Time Allocation</b>	Lectures  30  Discussions  15
<b>Course Description</b>	
Introduction: Basic concepts of space and location; spatiality of human behaviour; spatial factors in decision making; factors affecting the location of human activities and how they have changed over time; analytical techniques in five geographical patterns: movements, networks, nodes, hierarchies and surfaces; locational models in agriculture (e.g. Von Thunen), industry (e.g. Weber), cities (e.g. Burgess), transport (e.g. density analysis) and services and settlements (e.g. Christaller); regional development and change: Perroux, Hirschman, Myrdal, electoral analysis etc.; new location factors affecting locational decisions in a globalizing world. These models will be applied to Sri Lankan context in the form of class exercises.	
<b>Assessment Scheme</b>	<b>Percentage Marks</b>
Continuous Assessment	
Practical/ In class exercises	50
End Semester Examination	50



## GGY 454: Qualitative Methods in Geography

<b>Course No</b>	GGY 454
<b>Course Title</b>	Qualitative Methods in Geography
<b>Credits</b>	3
<b>Prerequisites</b>	None
<b>Core/Optional</b>	Optional
<b>Objectives</b>	
The student will acquire theoretical and practical knowledge on qualitative methods and techniques that are relevant to Geography. The course will guide the students in preparing for qualitative research in.	
<b>Time Allocation</b>	Lectures  30  Field Work  30
<b>Course Description</b>	
The specific topics include qualitative research and its place in Geography ; subjectivity-objectivity debate; importance of qualitative research; qualitative research design; qualitative research methods; interviews; focus groups; observational research (including participatory observation); reading texts and textual analysis; qualitative data collection issues; coding and processing qualitative data; qualitative data analysis; computer application and qualitative data analysis; presenting qualitative research findings; writing qualitative geographies.	
<b>Assessment Scheme</b>	<b>Percentage Marks</b>
Continuous Assessment	
Written assignments based on a field work and an oral presentations	50
End Semester Examination	50

# 400 Level Courses in Applied Geography

## GGY 475: Environmental Impact Assessment

<b>Course No</b>	GGY 475	
<b>Course Title</b>	Environmental Impact Assessment (EIA)	
<b>Credits</b>	3	
<b>Prerequisites</b>	None	
<b>Core/Optional</b>	Optional	
<b>Objectives</b>	The students will learn the philosophical, conceptual, legal and technical basis for EIA and they will develop skills needed to carry out an EIA study.	
<b>Time Allocation</b>	Lectures  30  Field Work  30	
<b>Course Description</b>	Introduction: sustainable development concepts; multidisciplinary approaches to development; use of EIA as means of achieving sustainable development goals; Introduction to EIA process and its pros and cons; key elements in EIA : alternatives, impact area, significant impacts, mitigation and monitoring; EIA process in Sri Lanka: prescribed list, procedure, and administration; methods of EIA; identification and assessment of impacts on physical, biological and social environment; national involuntary resettlement policy and EIA; role of public participation in EIA; valuation of environmental impacts and Extended (environmental) benefit cost Analysis; organization of a EIA study and EIA report; Analysis of EIA's.	
<b>Assessment Scheme</b>	<b>Percentage Marks</b>	
Continuous Assessment Mini EIA Report	60	
End Semester Examination	40	

## GGY 476: Social Impact Assessment

<b>Course No</b>	GGY 476
<b>Course Title</b>	Social Impact Assessment (SIA)
<b>Credits</b>	3
<b>Prerequisites</b>	None
<b>Core/Optional</b>	Optional
<b>Objectives</b>	
The students will acquire the theoretical knowledge on SIA and skills necessary to carry out SIA studies and a social audit of development activities.	
<b>Time Allocation</b>	Lectures  30  Field Work  10 Discussions  10
<b>Course Description</b>	
Introduction: a comparison between natural and social systems; scope of SIA: the need for SIA, and a brief history of SIA; society and social constitution: levels of social organization; social concerns of development: impacts and social reactions; theories of society: Weber, Durkheim, Marx and Giddens; principles and steps of SIA; techniques and social scoping; PRA theory and SIA; cultural impact assessment; gender impact assessment; involuntary resettlement policy and practice; variables of SIA applicable to Sri Lanka; Social Safeguards of international agencies; methods of Social Impact Assessment: case studies analysis; SIA or Social Audit exercise.	
<b>Assessment Scheme</b>	<b>Percentage Marks</b>
Continuous Assessment SIA/Social Audit Assignments	50
End Semester Examination	50

## GGY 477: Natural Resources Management

<b>Course No</b>	GGY 477	
<b>Course Title</b>	Natural Resource Management (NRM)	
<b>Credits</b>	3	
<b>Prerequisites</b>	None	
<b>Core/Optional</b>	Optional	
<b>Objectives</b>		
Students will develop the necessary knowledge, skills, analytical abilities relating to natural resource management and cultivate ethical concerns needed for effective NRM.		
<b>Time Allocation</b>	Lectures  30  Field Work  20  Presentations  10	
<b>Course Description</b>		
Importance of NR and NRM; concepts and theories of NRM; evolution of natural resource management; instruments of NRM: policy, legal and institutional, market instruments, cultural practices; natural resources management conflicts and issues: air and industrial pollution, water resources and pollution, oceanic resources, waste management, land degradation and soil conservation, mangroves management, encroachment of critical areas; threat to endangered species: land use change, energy resources and climate change; community integrated natural resources management: case studies from Sri Lanka and selected countries.		
<b>Assessment Scheme</b>	<b>Percentage Marks</b>	
Continuous Assessment		
Class assignments	30	
Field assignments	30	
End Semester Examination	40	

## GGY 478: Gender and Development

<b>Course No</b>	GGY 478
<b>Course Title</b>	Gender and Development
<b>Credits</b>	3
<b>Prerequisites</b>	None
<b>Core/Optional</b>	Optional
<b>Objectives</b>	
At the end of the course, students will gain theoretical and empirical knowledge relating to gender and development which will be helpful in gender planning.	
<b>Time Allocation</b>	Lectures  30  Field Work  10  discussions  10
<b>Course Description</b>	
<p>The main topics of this course include: introduction to the field; key theoretical debates and discourses on gender and development from a historical perspective: concept of gender; geography and gender; feminist research in geography; theories of women, gender and development; feminist theories- liberal, radical, postmodern, post colonial and eco-feminism; evolution of gender/women in development theories and practices: women in development (WID), women and development (WAD), gender and development (GAD), women and environment and development (WED), women culture and development (WCD); gender and policy approaches to development: welfare, equity, anti-poverty, efficiency and empowerment approaches; Geographies of work and gender (women in the local and global economies): gender and agriculture, gender and industry, gender and migration, gender and poverty; women organizing for change (SEWA, Women and Labour movements); mainstreaming gender into development planning; gender planning. The course will draw empirical studies and examples from Sri Lanka and selected countries.</p>	
<b>Assessment Scheme</b>	<b>Percentage Marks</b>
Continuous Assessment	
Mid semester examination	30
Assessments	20
End Semester Examination	50

## GGY 479: Disaster Management

<b>Course No</b>	GGY 479
<b>Course Title</b>	Disaster Management
<b>Credits</b>	3
<b>Prerequisites</b>	None
<b>Core/Optional</b>	Optional
<b>Objectives</b>	
At the end of the course, the student will be acquainted with the key concepts relating to disasters, the causes and consequences, and methods of disaster risk reduction. The course will also provide practical knowledge in disaster management strategies adopted in Sri Lanka.	
<b>Time Allocation</b>	Lectures  30  Field Work  20  Practical 10
<b>Course Description</b>	
Introduction to disasters; types of disasters: natural and human induced: causes of disasters: impacts of disasters: disaster management cycle : disaster strikes, emergency response, relief, rehabilitation, mitigation, and preparedness:pre-disaster impact assessment (Pre-DIA):post-disaster impact assessment (PDIA): spatial tools in disaster management: Geographical Information Systems (GIS) and Remote Sensing (RS; community resilience and response; institutional role: Government (GOs), non-government (NGOs) and international organizations: early warning systems on disasters: country experiences: disaster management acts in Sri Lanka:disaster management in Sri Lanka:disaster management training/field work:disaster management training/field work.	
<b>Assessment Scheme</b>	<b>Percentage Marks</b>
Continuous Assessment	
Practical	30
Research paper	30
End Semester Examination	40

## GGY 480: Coastal Zone Management

<b>Course No</b>	GGY 480
<b>Course Title</b>	Coastal Zone Management
<b>Credits</b>	3
<b>Prerequisites</b>	None
<b>Core/Optional</b>	Optional
<b>Objectives</b>	
At the end of the course, the students will gain conceptual, theoretical and practical knowledge in the field of coastal zone management. The students will also enhance their observational and analytical abilities in understanding coastal problems in Sri Lanka.	
<b>Time Allocation</b>	Lectures  30  Field Work  20  Practical 10
<b>Course Description</b>	
Introduction to the Coastal Zone and Coastal Environment; physical, biological and social components of the coastal system; coastal morphology; types of coastal ecosystems; coastal processes and forces; sediment budget: erosion and accretion; coastal hazards and risks; strategies in coastal zone management; coastal management issues in Sri Lanka; coast protection measures; history of coast protection in Sri Lanka; institutional and legal framework for coastal protection in Sri Lanka; climate change impacts on the coastal zone and management options.	
<b>Assessment Scheme</b>	<b>Percentage Marks</b>
Continuous Assessment	
Practical	30
Independent study	30
End Semester Examination	40



## GGY 481: Watershed Management

<b>Course No</b>	GGY 481	
<b>Course Title</b>	Watershed Management	
<b>Credits</b>	3	
<b>Prerequisites</b>	None	
<b>Core/Optional</b>	Core	
<b>Objectives</b>	At the end of the course, the students will gain knowledge of the watershed as a natural system and learn about problems and management strategies.	
<b>Time Allocation</b>	Lectures  30  Practical  10  Field Work  20	
<b>Course Description</b>	<p>Identification of a watershed; watershed as an open system; classification of watersheds; watershed degradation and causes: land degradation, deforestation, incompatible land use practices; watershed management: definitions, approaches: mechanical, agronomic and socio-economic aspects; irrigation and water management: soil conservation and land management, eco-systems and forest management, social and institutional development, holistic aspects; management strategies and sustainability; economics of watershed management; participatory integrated watershed management; watershed management policies and implementation issues; case studies: watershed management projects.</p>	
<b>Assessment Scheme</b>	<b>Percentage Marks</b>	
Continuous Assessment		
Term paper	20	
Field report	20	
End Semester Examination	60	

## GGY 482: Tourism Geography

<b>Course No</b>	GGY 482
<b>Course Title</b>	Tourism Geography
<b>Credits</b>	3
<b>Prerequisites</b>	None
<b>Core/Optional</b>	Optional
<b>Objectives</b>	
The students will develop their knowledge in the geographical aspects of the local and global tourism industry and be able to assess and identify the potential of tourism development in a given locality.	
<b>Time Allocation</b>	Lectures  30  Discussions 10 Field work  10
<b>Course Description</b>	
Conceptual and theoretical introduction to tourism geography; The demand and supply in tourism; urban recreation and tourism; rural recreation and tourism; tourism and recreation in the pleasure periphery: wilderness and national parks; coastal and marine recreation and tourism; heritage tourism: ecotourism; the impacts of tourism on culture and environment; tourism and recreation planning and policy; Ethics and tourism planning; tourism and environmental planning; tourism Geography in Sri Lanka: issues, challenges and opportunities.	
<b>Assessment Scheme</b>	<b>Percentage Marks</b>
Continuous Assessment	
Assignments	30
Field report	10
End Semester Examination	60

## GGY 483: Land-use Planning

<b>Course No</b>	GGY 483	
<b>Course Title</b>	Land use Planning	
<b>Credits</b>	3	
<b>Prerequisites</b>	None	
<b>Core/Optional</b>	Optional	
<b>Objectives</b>		
The students will gain a comprehensive understanding of the process of land use planning from a geographical perspective.		
<b>Time Allocation</b>	Lectures  30  Discussion  5  Field Work  20	
<b>Course Description</b>		
The course covers both theoretical and empirical knowledge derived from both international and national contexts. The course will cover the following topics: Introduction: What is land use planning?; fundamentals of spatial planning; environmental context of planning; social context of planning (economic, political, cultural); theoretical perspectives on land use: agricultural, industrial, urban, rural and regional; Understanding the planning environment: legislations and policy; politics of land use planning and national planning; methods and techniques of land use planning: inventory and analysis of existing land use, identifying and evaluating the potential needs and the constraints, mitigation, GIS as an effective tool of land use planning; case studies: analysis of selected land use plans (urban, agricultural, regional, watershed); land use planning for a sustainable society. During the course, the students will develop a land use plan for a selected area as a practical exercise.		
<b>Assessment Scheme</b>	<b>Percentage Marks</b>	
Continuous Assessment		
Presentation based on landuse plan	30	
Mid Semester Examination	20	
End Semester Examination	50	

## GGY 485: Children and Geography

<b>Course No</b>	GGY 485
<b>Course Title</b>	Children and Geography
<b>Credits</b>	3
<b>Prerequisites</b>	None
<b>Core/Optional</b>	Optional
<b>Objectives</b>	
The students will develop knowledge on how children's lives, experiences, attitudes and opportunities are socially and spatially structured and how children respond to various challenges in different contexts.	
<b>Time Allocation</b>	Lectures  30  Field Work  10  discussions 10
<b>Course Description</b>	
<p>While this course emphasizes the importance of place, space and spatiality in understanding the geographical worlds of children, it inevitably cuts across inter- and intra-disciplinary boundaries. Specific topics covered include, Theoretical perspective: children and geography; Childhood as socially constructed; Issues both of a structural nature, which has an implication for children's everyday lives and childhood, as well as children's agency in defining and giving meaning to their lives and activities; methodological approaches towards children as informants in the research process: various forms of interviews; observations, visual methods and fieldwork; Methodological issues; research ethics; quantitative approaches; Empirical issues (emphasis will be given to Sri Lankan context): children in difficult circumstances: Street children; children and armed conflicts, child labour ; children, migration and social change; children and education; childhood poverty; Children and health; Commercialization of children; Globalization and children; International actions for children.</p>	
<b>Assessment Scheme</b>	<b>Percentage Marks</b>
Continuous Assessment	
Mid semester examination	20
Approved working paper and Oral Presentation	30
End Semester Examination	50

## GGY 486: Forest Resource Management

<b>Course No</b>	GGY 486	
<b>Course Title</b>	Forest Resource Management	
<b>Credits</b>	3	
<b>Prerequisites</b>	None	
<b>Core/Optional</b>	Optional	
<b>Objectives</b>	Students will acquire the knowledge on the socio-economic, cultural and ecological relationship between forests and people.	
<b>Time Allocation</b>	Lectures (30)  Field Work (10) Discussions (10)	
<b>Course Description</b>	<p>Introduction to forest resource management; interactions between forests and people; importance of forests in traditional farming systems; livestock economy and forests; Industrial economy and forests; Social and cultural factors of forest management; deforestation, reforestation and afforestation; forest conflicts; wildlife and human conflicts; peoples movement in forest conservation; gender dimension of forest management; tribes and forests; pastoralists and their dependence on forests; forest rights; customary rights of people; community participation in forest management; management of common property resources and open access resources; forest management and sustainable livelihood strategies; forests and food security; eco-tourism and local development; land use change and forestry; role of non-governmental organizations and community based organizations in forest management; forest management tools and strategies: traditions and customs, policies and laws, certification, market; forest resource management in Sri Lanka: issues, challenges and opportunities. (Field trip to the Forest Department).</p>	
<b>Assessment Scheme</b>	<b>Percentage Marks</b>	
Continuous Assessment		
Assignments	20	
Field Exercises	20	
End Semester Examination	60	

## GGY 488: Sustainable Development

<b>Course No</b>	GGY 488	
<b>Course Title</b>	Sustainable Development	
<b>Credits</b>	3	
<b>Prerequisites</b>	None	
<b>Core/Optional</b>	Optional	
<b>Objectives</b>	The students will acquire a comprehensive understanding of the human-environmental relationship from the point of view of sustainable development.	
<b>Time Allocation</b>	Lectures  30  Discussions  15	
<b>Course Description</b>	<p>The course will focus on three sections. Theoretical background to sustainable development: theories of human-environmental relationship; theories of development; discourse on sustainable development; Geography and sustainable development symbiotic relationship between physical and human environment: environmental problems and causes, natural resource management: water, energy, land, forest, mineral, coastal and biological diversity, and socio-spatial sustainability; Sustainable development practices: environmental management, impact assessments (environmental, social, gender, cultural etc), environmental quality and poverty; Measuring sustainable development: traditional indicators and new indicators; Global and national strategies for achieving sustainable development.</p>	
<b>Assessment Scheme</b>	<b>Percentage Marks</b>	
Continuous Assessment		
Mid semester examination	30	
Assignments	20	
End of Semester Examination	50	

## GGY 489: Regional Planning and Development

<b>Course No</b>	GGY 489	
<b>Course Title</b>	Regional Planning and Development	
<b>Credits</b>	3	
<b>Prerequisites</b>	None	
<b>Core/Optional</b>	Optional	
<b>Objectives</b>	The student will be able to analyse the spatial inequalities of development from the regional development planning perspectives and acquire the basic skills of designing a regional development plan.	
<b>Time Allocation</b>	Lectures  30  Discussions 15	
<b>Course Description</b>	<p>The course focuses on methods, techniques and strategies of regional development planning, reviewing the concepts and theories, various types of regional development programmes in both developed and developing countries. The main topics covered in the course: regional /spatial inequalities; fundamental of regional planning; analysis of the regional structures on natural resource base: growth potentials; settlement patterns; river basin development approach: agropolitan development approach; theories of regional development and their application; preparation of regional development plans and implementation; experiences of regional development programmes in developed and developing countries; regional planning and development in Sri Lanka; Issues, challenges and opportunities in regional planning.</p>	
<b>Assessment Scheme</b>	<b>Percentage Marks</b>	
Continuous Assessment		
Assignments	20	
Mid semester examination	20	
End Semester Examination	60	