



# Detailed Course Outline 2022

**Bachelor of Social Sciences (General) External Degree in Environmental and Development Studies** 

Department of Geography

Faculty of Humanities and Social Sciences

University of Sri Jayewardenepura

#### **Content**

# Topic

Curriculum of the degree Programme

# Degree Year I

GEDS 1001	Physical Environment
GEDS 1002	Human landscape
GEDS 1003	Spatial Organization of Economic activities
GEDS 1004	Human Resource Planning
GEDS 1005	Development Concepts
GEDS1006	Regional Development
ENGE 1005	Compulsory English
SOSE 1006	Information Technology

## **Degree Year II**

GEDS 2001	Cartography for Development Planning
GEDS 2002	Natural Resource Management
GEDS 2003	Rural Development and Planning
GEDS 2004	Statistics for Development Studies
GEDS 2005	Contemporary Development Issues
GEDS 2006	Development Communication
SOFT 2001	Sri Lankan Society
SOFT 2002	Leadership and Personality Development

## **Degree Year III**

GEDS 3001	Disaster Management
GEDS 3002	Environmental Policies & Legislations
GEDS 3003	Regional Planning & Inter-Sectoral Coordination
GEDS 3004	Urban Planning & Development
GEDS 3005	Geographic Information Systems for Planning
GEDS 3006	Social Welfare and Community Development

#### UNIVERSITY OF SRI JAYEWARDENEPURA

# Department of Geography

# Bachelor of Social Sciences (General) External Degree in Environmental and Development Studies Course Structure

Course Code	Course Title	Credit Value
	FIRST YEAR	
GEDS 1001	Physical Environment	05
GEDS 1002	Human landscape	05
GEDS 1003	Spatial Organization of Economic Activities	05
GEDS 1004	Human Resource Planning	05
GEDS 1005	Development Concepts	05
GEDS1006	Regional Development	05
ENGE 1005	English	02
SOSE 1006	Information Technology	02
	SECOND YEAR	
GEDS 2001	Cartography for Development Planning	05
GEDS 2002	Natural Resource Management	05
GEDS 2003	Rural Development and Planning	05
GEDS 2004	Statistics for Development Studies	05
GEDS 2005	Contemporary Development Issues	05
GEDS 2006	Development Communication	05
SOFT2001	Sri Lankan Society	02
SOFT 2002	Leadership and Personality Development	02
	THIRD YEAR	
GEDS 3001	Disaster Management	05
GEDS 3002	Environmental Policies & Legislations	05
GEDS 3003	Regional Planning & Inter-sectoral Coordination	05
GEDS 3004	Urban Planning & Development	05
GEDS 3005	Geographic Information Systems for Planning	05
GEDS 3006	Social Welfare and community Development	05
<b>Total Credits</b>		98

#### First Year

#### 1. Physical Environment

1	Course Code	GEDS 1001
2	Course Title	Physical Environment
3	Number of Credits	05
4	Year	First Year

#### 5 | Rationale (Introductory Notes)

This course is an introduction to the world's physical environment including weather, climate, landforms, natural vegetation, mineral and water resources. Physical geography is the study of relationships between the various Earth systems of the natural landscape. The inter-disciplinary science of geography examines the world from the perspective of location; that is, why the Earth's features are located where they are and how does this locational aspects influence the Earth.

The course unit aims to give a basic knowledge on major physical systems and processes, and to study the interactions of physical processes both at global and regional levels. As there are many models and theories available in each of these topics, only very prominent key models and theories will be chosen for study. Other than the above criteria adopted to confine the contents of lectures, high priorities have been given the examples from tropical environment to elaborate the theories because such environment is familiar to us and there are memories left over in our own life history connected to this environment.

#### 6 Pre-requisites None

#### 7 | Course Objectives (Instructional)

The principle objective of this course unit is to furnish student's both theoretical knowledge on basic physical geography and secondly to encourage students, through this theoretical knowledge, to comprehend the environment that they live in.

Specific Objectives are

- To acquaint students with the geographer's approach to studying physical landscapes, especially principles governing their locations
- To make students aware of global environmental regions and the inter-relationships between weather, climate, soil, natural vegetation and landforms
- To better understand the relationships between humans and their natural environments

- Students will be able to gain a theoretical knowledge about physical geography and will be able to interpret and identify specific features pertaining to the physical geography
- It is expected to provide instructional opportunities designed to help students read, view, reasons and synthesize information from varied sources; to develop methods of inquiry through problem-solving as distinguished from the storing of facts
- Students will be able to solve problems and challenges through real world examples.
- Students will be able to use this knowledge to their daily life through inquiry, reading, media and travel
- Students will be able to generate data out of analytical interpretation of scientific literature of physical geography

Content		
ain theme	Sub-theme	No. of hours
1. Introduction to Physical geography	i. What is physical geography? ii. its content and scope iii .Approaches	03
2. Earth interior	<ul> <li>i. Different layers</li> <li>ii. Events and consequences. Earth quakes.</li> <li>Plate tectonics</li> <li>movements and results</li> <li>vertical and horizontal movements and related landforms</li> </ul>	06
3. Earth surface. Landforms	i. Different landforms and their forming factors ii. Weathering and deposition process iii. Landscape of Sri Lanka	06
4. Rock and minerals	i.Different rock types and their formation ii.Composition of minerals iii.Structure and properties iv.Rock and mineral in Sri Lanka	04
5. Biological environment	i.Soil ii.Physical properties iii.Different types	03
	iv.Vegetation. plant succession v.Biomes their distribution. Ecosystems	05
6. Climate and water	i. Weather and Climate ii. Climatic elements iii Climatic factors iv.Climatic phenomena	04
	v. Climatic types vi.Climatic variations in the Sri Lankan context	03
	vii.Water. Surface water, soil water and ground water in Sri Lanka	03
7. Natural hazards. Sri	i.Flood and drought	01
Lankan context	ii.Landslides	01
	iii.Soil ,vegetation and land degradation	01
8. Combined field study.	i.Landscape and land use study in selected area in Sri Lanka	20

10	Mode of delivery	Lectures, Discussions
11	<b>Evaluation and Assessme</b>	ent
	In Course Evaluation (To	eam Work, Presentation, Conference Type Presentation,
	Projects)	
	Mode of Evaluation	Assignment – 20%
	<b>End of Course Evaluatio</b>	n (Year-end evaluation – 80 Marks)
	Mode of Evaluation	Written Examination – 80%
12	<b>Recommended Reading</b>	
	Bradshaw, M. & Weave	r, R. (1993). Physical Geography: An Introduction to Earth
	Environments, Mossby, Lo	ondon.
	Christopherson, R. W. (	2000). Geosystems: An Introduction to Physical Geography,
	Prentice Hall, New York.	
	. ,	Physical Geography: A Landscape Appreciation. Prentice Hall,
	New York.	
		A.N. (2000). Introducing Physical Geography, John Wiley & Son,
	New York.	
		Introduction to Geology of Sri Lanka. National Museums of Sri
	Lanka Publication.	
	* ' '	Text Book of Physical Geology, CBS Publishers & Distributors
	Pvt.Ltd.	
		2). Physical Geology, Study Guide. W.M.C. Brown Company
	ublishers.	006) P. 1. 116; 1. III. P. C 1. G
	`	005). Rock and Minerals – The Definitive visual Guide.
		n Introduction to Geological Maps: Thomas Murby& Company,
	London.	sical Carloss Addison Wester Patrictics Communication
	1 ' ' '	sical Geology, Addison- Wesley Publishing Company.
	_	A.C. (1972). Elements of Physical Geology. John Wiley & Sons,
	Inc.	

# 2. Human Landscape

1	Course Code	GEDS 1002	
2	Course Code Course Title		
3	Number of Credits	Human Landscape 05	
4		First Year	
	Year		
5 6 7	as an academic disciple the field's central preprovides a critical interpretation between, and the similar By examining the cultipatterns and spatial refoundation for subsequents.	his course is to introduce students to the nature of human ne and as a body of useful knowledge through a survey oblems, concepts, methods and applications. Human pretation of the human inhabitation of the earth and the carities amongst, people and the places and landscapes the ral, economic, historical and social processes that create ationships that modify the natural and built environment human geography courses will be laid, and an ability ent's own place in the world.  NO  structional)	of some of landscape lifferences ney create. the spatial nts, both a
8	<ul><li>human and cultur</li><li>Encourage studen</li></ul>	ents both the theoretical and practical knowledge on varial processes and systems with holistic discipline ts to understand human landscape that they live in.  ing Outcomes (By Students)	ous
	<ul> <li>On successful co</li> <li>Appraise the imp</li> <li>Identify several laperspective.</li> <li>Apply gained knaforementioned astudents themsel</li> </ul>	mpletion of this course unit, students will be able to; ortance of theoretical perspectives in human landscape numan, cultural, social and economic issues due to its holowledge for development processes namely policy making reas, administrative work and also for general awareness	g in of
9	Content		
,	Main Themes	Sub Themes	No. of Hours
1.	Introduction to human landscape	i. Definitions	02
2.	World population	<ul> <li>i. Temporal and Spatial distribution of world population</li> <li>ii. Population density and Factors influencing</li> <li>iii. Population structure/Pyramids</li> </ul>	04

2 A	i.	Major determinants of aging population	04
3. Aging population	ii.	Spatial patterns of aging population	
	iii.	Problem of aging population	
4. Landscape of	i.	Classifications	03
primary activities -	ii.	Impacts of Agricultural Technologies	
Agriculture	iii.	Green Revolution	
	iv.	Gene Technology	
	V.	Post harvest technology	
5. Settlements	i.	What is a settlement	02
	ii.	Classification of settlements	
	iii.	Differences among various patterns of	
		settlement and their dynamics	
6. Urbanization	i.	Urbanization and urbanism	03
	ii.	Criteria used to identify urbanization	
	iii.	Emerging socio- economic and environmental	
		problems of urbanization	
	iv.	Models in urban area analysis	
7. Landscape of	i.	Major industrial zones in the world	02
secondary activities-	ii.	Modern industrialization	
Industries	•	Types of industry	
	•	Locational factors	
	•	High technology used in industries	
8. Globalization	i.	Definitions	04
	ii.	Characteristics & driving forces of	
		globalization	
	iii.	Impacts of globalization	
9. Eco-tourism	i.	Definitions	04
	ii.	Types of tourism	
	iii.	Dimensions and Impacts of eco-tourism	
	iv.	Eco-tourism and regional development	
10. Eco-strategies	i.	What are eco strategies?	04
10. Eco-su alegies	11.	Active and passive adaptation	
	111.	Knowledge and methods used in	
		Agriculture, irrigation, food Security and	
		Resource Management	

	. Livelihood Assets and Life Path Changes	<ul> <li>i. Livelihood Framework of Assets</li> <li>i. Five capital Assets and strategies</li> <li>ii. Concept of life path changes</li> <li>iii. Factors influencing for life path changes</li> <li>i. Definitions</li> <li>ii. Types of social networks</li> </ul>	04 nges 04
		<ul><li>iii. Importance of social networks in var development activities</li><li>iv. Social networks and post disasters</li></ul>	rious
13	. Assignment	Assignment Discussion/Data collection for fassignment/Data analysis/preparation of assignment	
10	Mode of delivery	Lectures Group Discussions	Group work
11	Evaluation and Asses In Course Evaluation	sment (Team Work, Poster Presentation, Field b	pased Report writing
	Mode of Evaluation	Assignment (20%)	used Itepole Wilding
		ation (Year-end evaluation– 80 Marks)	
	Mode of Evaluation	Written Examination (80%)	
12	Mcgrow-hill higher ed Hammond, C.W. (1979) Huntington, E. (1956). USA.  Jhonston, R.J., Gregor Oxford Blackwell.  Keinth, C. (1979). At Halsted.  Smith, D.M. (1977). H White, C.L. and Renne Appleton, New York.	Fellman, J.D. (2008). Introduction to Geogra	len &Anwin Ltd.  . John Wiley Sons Inc.  of human geography.  , pattern and process.  rd Arnold.  gical study of society.

#### 3. Spatial Organization of Economic Activities

1	Course Code	GEDS 1003
2	Course Title	Spatial Organization of
		Economic Activities
3	Number of Credits	05
4	Year	First Year

#### 5 Rationale (Introductory Notes)

Spatial organization of economic activities is the study of spatial behavior of the activities related to production, distribution and consumption of goods and services. This subject, also known as Economic Geography, mainly analyses spatial organization of different economic activities by questioning how and why different economic activities organize in various spaces in different manner. Particularly, since 1960s this subject has significantly developed with the quantitative revolution by developing theories and models.

Contemporary this course examines the nature and causes of development and underdevelopment and it considers the link between economic systems and geography. It particularly attempts to interpret the spatial impact of capitalism and its role in the development of world economy. In addition, it analyses the nature of predominant economic views by emphasizing the dimensions of class and inequalities, race, gender and welfare in different economic systems. It also studies the impact of technological change and the construction of new economic spaces.

#### 6 Pre-requisites None

#### 7 | Course Objectives (Instructional)

- To provide knowledge to the students to understand spatial arrangement of economic activities in a geographic perspective.
- To provide some background knowledge about theories and models in economic geography.
- To train them to see and understand spatial difference of economic activities and to emphasize such spatial difference is a product of different geographic factors combined with time, space and processes.
- To train the students to think about the importance of geographic aspects in spatial economic planning.

- Students will understand what economic geography is and be able to explain the spatial division of economic activities.
- They will understand how its subject matters have been constructed theoretically and practically.
- They will be able to analyze spatial arrangement of economic activities in an economic geographic perspective.
- They will also understand the importance and the role of economic geographer in spatial economic planning.
- Expect that they will apply such knowledge in their future research and studies.

Main	Themes	Sub '	Themes	No. of Hours
1.	What is Spatial	i.	Introduction to SOEA	02
	Organization of	ii.	Its scope	
	Economic Activities (SOEA)?	iii.	Content	
2.	Understanding SOEA through	i. ii.	What is economic geography? Definitions of economic	03
	economic geography	111.	geography	
		iii.	SOEA and economic geography	
3.	Economic decision	i.	What is economic decision making?	03
	making and SOEA	ii.	Allocation, Production and Distribution decisions	
		iii.	The importance of decision making for SOEA	
4.	Price, demand and	i.	Introduction to price, demand	
	supply in a spatial perspective	i.	and supply Analysis of price, demand and	03
		ii.	supply Understanding the concepts of market range and threshold	
		iii.	Introduction to economies of scale	
5.	Economies of scale	i.	Introduction to internal	03
	200202	ii.	economies of scale Analysis of external economies of scale	
		iii.	The importance of economies of scale for SOEA	
		i. ii.	What is an economic system?	
6.	<b>Economic Systems</b>	111.	Identification of economic systems	
		iii.	Economic systems and spatial economic organization	03
7.	Manufacturing	i.	Major manufacturing regions	
. •	Regions	ii.	Causes for their spatial organization	
		iii.	Future trends of their spatial organization	02

8. Labour market	i. ii. iii.	Introduction to labour market Spatial division of labour The importance of labour for SOEA	02
9. Spatial behaviour of world food and agriculture	i. ii. iii.	Distribution of world food and agriculture Causes for such distribution Future trends in world food and agriculture	03
10. Multinational Companies	i. ii. iii.	Introduction to multinational companies Spatial behavior of multinational companies Their advantages and disadvantages for SOEA	02
11. Global Trade	i. ii. iii.	Global trade patterns Dynamics of world trade Problems and issues in world trade	03
12. World Monetary Structure	i. ii. iii.	World monetary structure Trends in world financial market World and regional financial crisis	03
13. E-commerce and its issues	i. ii. iii.	Introduction to E-commerce Advantages and disadvantages of e-commerce Problems and issues faced by developing countries in e- commerce	03
14. Technology and its global impact	i. ii. iii.	History of world technology Technological change Its impact on food, agriculture and industry	02
15. Economic policies at global level	i. ii. iii.	Introduction to economic policy Different economic policies at global level Their impact on SOEA	03

10	Mode of delivery		
11	<b>Evaluation and Assessment</b>		
	In Course Evaluation(Project through T	eam Work, and Presentation	n)
	Mode of Evaluation		
	<b>End of Course Evaluation (End Semester</b>	r evaluation 80 Marks)	
	Mode of Evaluation:	Team work project – 20 M	arks
	<b>End semester</b> exam – 80 Marks		

#### 12 Recommended Readings:

Aoyama, Y., Murphy, J., and Hanson, S. (2010) *Key Concepts in Economic Geography*. London: Sage

Barnes, T., Peck, J., Sheppard, E. and Tickell, A. (Eds) (2003) *Reading Economic Geography*. London: Wiley-Blackwell

Berry B.J.L., Conkling E.C. and Ray D.M. (1993) *The Global Economy: Resource Use, Locational Choice and International Trade*. New Jersey: A Simon & Schuster Company

Christopherson, S. and Clark, J. (2009) Remarking the Regional Economies: Power, Labour and Firm Strategies in the Knowledge Economy.

Clark, G., Gertler, M. and Feldman, M.(eds) (2003) *The Oxford Handbook of Economic Geography*. Oxford: Oxford University Press

Coe, N. and Jones, A., (eds) (2010) The Economic Geography of the UK. London: Sage

Coe, N., Kelly, P., and Yeung, H. (2007) *Economic Geography: A Contemporary Introduction*. London: John Wiley & Sons

Hodder B.W. & Lee R. (1974) Economic Geography. London: Methuen & Co. Ltd

Hudson, R., (2005) Economic Geographies: Circuits, Flows and Spaces. London: Sage

Mackinnon, D. and Cumbers, A. (2008) *An Introduction to Economic Geography: Globalization, Uneven Development and Place*. London: John Wiley & Sons

Leyshon, A., Lee, R., McDowell, L and Sunley, P. (eds) (2011) *The Sage Handbook of Economic Geography*. London: Sage

Polenske, K. (ed) (2007) *The Economic Geography of Innovation*. Cambridge University Press: Cambridge

#### 4. Human Resource Planning

1	Course Code	GEDS 1004
2	Course Title	Human Resource Planning
3	<b>Number of Credits</b>	05
4	Year	First Year

#### 5 Rationale (Introductory Notes)

Human resource planning (HRP) is the process of reviewing human resource requirements to ensure that any country has the necessary human resources to meet both its operational and strategic goals. HRP is forward looking discipline and it involves planning of future human resource requirements and developing strategies to meet necessary requirements according to country needs. Thus, in this course you will mainly learn about the HRP process. In addition, you will also analyze alternative human resource strategies and critically assess their relationship to operational and strategic plans of the country.

#### 6 Pre-requisites None

#### 7 Course Objectives (Instructional)

- To provide an understanding of the essential elements of Human Resource Planning.
- To emphasize the central position that man holds in the quest for development.
- To emphasize the importance of HRP in the process of development.
- To guide them how to plan human resources for the development in Sri Lanka.

- Students will understand essential elements that should be taken into consideration in HRP.
- They will understand the importance of HRP for development.
- They will acquire the knowledge for the analysis, assessment and planning of human resource requirements for the development in Sri Lanka.

Content Main Theme	Sub Themes	No. of Hours
1. Introduction to HRP	i. Defining HRP ii. History of HRP iii. HRP beyond HRM iv. The need of HRP v. Relationship between HRP & Development	03
2. Spiritual aspects of HRP	<ul> <li>i. Basic nature of human being</li> <li>ii. Meaning and the importance of spiritualism</li> <li>iii. Nature of human being in leading and management</li> </ul>	03
3. Models in HRP	<ul> <li>i. Introduction to HRP model</li> <li>ii. Importance of HRP model</li> <li>iii. Outline and the application of HRP model</li> </ul>	03
4. Bargaining power of labour	<ul><li>i. What is bargaining power?</li><li>ii. The need of bargaining power</li><li>iii. How to achieve bargaining power</li></ul>	03
5. Leadership development	<ul> <li>i. Introduction to leadership</li> <li>ii. The concept of leadership development</li> <li>iii. Theories of leadership and leadership development</li> </ul>	03
6. HRP and Gender	<ul> <li>i. Introduction to gender</li> <li>ii. Changing role of gender</li> <li>iii. Consequences of changing roles</li> <li>iv. The need of HR planning for gender</li> </ul>	04
7. Empowering people	<ul><li>i. What is empowerment?</li><li>ii. Why need empowerment?</li><li>iii. How to empower for HR planning</li></ul>	04

8. Talent and Career Development	<ul> <li>i. Defining talent and career development</li> <li>ii. Importance of talent and career development</li> <li>iii. How to develop talent and career</li> <li>iv. Challenges and opportunities in talent and career development</li> </ul>	03
9. Human Development Index (HDI)	<ul> <li>i. Defining development and human development</li> <li>ii. Defining HDI</li> <li>iii. Theories behind human poverty and development</li> </ul>	03
10. Human Resource Information System (HRIS)	<ul><li>i. Introduction to HRIS</li><li>ii. The need of HRIS</li><li>iii. Models of HRIS</li></ul>	03
11. HR planning at national level	<ul> <li>i. The role of government in HR planning</li> <li>ii. The importance of education and skill development</li> <li>iii. Country HR planning as a development strategy</li> </ul>	04
12. Globalization and Human Development Issues	<ul> <li>i. What is globalization</li> <li>ii. Human development issues in globalization</li> <li>iii. Challenges faced by Sri Lanka in HR planning</li> </ul>	04
Combined field study and assignment		20

10	Mode of delivery		
11	<b>Evaluation and Assessment</b>		
	In Course Evaluation(Project on HR Pl	anning through Team Work,	and Presentation)
	<b>Mode of Evaluation</b>		
	<b>End of Course Evaluation (End Semest</b>	er evaluation 60 – 80 Marks)	
	Mode of Evaluation:	<b>Team work project</b> – 20 M	arks
	<b>End semester exam</b> – 80 Marks		
4.0	D 1 1 D 11		

#### 12 | Recommended Readings:

Belcourt, M. and McBey, K. (2013) *Strategic Human Resource Planning*. Toronto: ThompsonNelson

Boudreau, J. W. (2007) Beyond HR: The New Science of Human Capital. Harvard Business School Press

Cascio, W. F. (1995) Managing Human Resources. New York: McGraw Hill

Dychtwald, K., Erickson, T. J. and Morison, R. (2006) Workforce Crisis: How to Beat the Coming Shortage of Skills and Talents. USA: Harvard Business School Press

Nadler, L. and Nadler, Z. (1990) *The Handbook of Human resource Development*. NY: John Wiley and Sons

Nankervis, A. R. and Compton, R.I. (1997) *Readings in Strategic Human Resources*. Melbourne: Nelson

Sparrow, P., Brewster, C. and Harris, H. (2004) *Globalizing Human Resource Management*. London: Rutledge

Stone, J. R. (1998) *Human Resource Management*. Australia: John Wiley and Sons

Storey, J. (1992) Developments in the Management of Human Resources. Oxford: Blackwell

Thong, G. (1990) Human Resource Issues in Singapore. Singapore: Addison Wesley

Ulrich, D. (2008) *HR Competencies: Mastery at the Intersection of People and Business*. Society for Human Resource Management

#### 5. Development Concepts

1	Course Code	GEDS 1005
2	Course Title	Development Concepts
3	Number of Credits	05
4	Year	First Year

#### 5 Rationale (Introductory Notes)

This course builds knowledge on development theories, concepts, policies, indicators, indexes, norms and planning approaches as a guide to achieve economically feasible, socially acceptable and environmentally caring sustainable development. Through readings, lectures, seminar discussions, and assignments, students will further develop an understanding on development strategies, approaches and programmes implemented by various countries including Sri Lanka, and the lessons that can be learnt of their past experiences from the regional and national development perspectives.

#### 6 Pre-requisites None

#### 7 | Course Objectives (Instructional)

- To offer a wider theoretical and conceptual construct on Regional and National Development with adequate exposure to relevant definitions, indexes and models of Development.
- To expose the students to study and understand development strategies and approaches adopted by different countries in the past.
- To examine some of the pressing development challenges faced by the international and national (Sri Lankan) communities in the context of Globalization and Market Economy in this century.
- To widen the horizons of critical understanding on issues of Development disparities in Global, International and National contexts.

- Analyzes and interprets primary and secondary source materials to increase understanding of the Development Theories, Concepts, Policies, Strategies and Planning and Implementation Approaches.
- Enable to measure and analyze developments levels and disparities using development indicators, indexes and norms in Global, International and National contexts.
- Distinguishes between relevant and irrelevant information.
- Evaluates information for accuracy, separating facts from opinions.
- Selects and defends positions in writing, discussion, and debate.
- Participates in interviews, debates and interact with agencies and community personnel including field exposures.
- Accesses and uses electronic databases and communication network of all types.
- Plans, designs, and develops projects relative to the ongoing discourse of the Development Concepts.
- Student understanding of Development as an economic and social process with an environmentally friendly approach shall be increased and the degree to which the factors discussed in class will be interrelated while learning use variety of measurement tools and methods.

9. CONTENT		
Main Themes	Sub Themes	No. of Hours
1. Introduction and Overview of Development Theories	<ul><li>i. Development Definitions</li><li>ii. Economic Development Theories</li><li>iii. Social Development Theories</li></ul>	03
2. Introduction and Overview of Development Concepts	<ul><li>i. Economic Development Concepts</li><li>ii. Social Development Concepts</li></ul>	03
3. Regional Development Concepts	<ul><li>i. Introduction to Regional Development</li><li>ii. Concepts and Approaches</li></ul>	03
4. Development Approaches	<ul><li>i. National Development Approaches</li><li>ii. Regional Development Approaches</li></ul>	02
5. Development Strategies	<ul><li>i. National Development</li><li>ii. Rural Development</li><li>iii. Integrated Rural Development</li></ul>	02
6. Global Development Strategies	<ul> <li>i. Introduction to Globalization</li> <li>ii. Impact of Globalization on the Developing Countries</li> <li>iii. Implications of Globalization Policies on Food Security and poverty.</li> </ul>	03
7. Global Development Strategies	i. Introduction to Market Economy     ii. Impacts of Globalization on Free Trade     and Agriculture	03
8. Global Development Strategies	<ul><li>i. Sustainable Development Strategy</li><li>ii. Millennium Development Agenda</li></ul>	03
9. Development Measuring Tools and Indicators	<ul><li>i. Introduction</li><li>ii. Economic Development Indicators</li></ul>	03
10. Development Measuring Tools and Indicators	<ul><li>i. Social Development Indicators</li><li>ii. Poverty Measurement Indexes</li><li>iii. Environmental Indicators</li></ul>	02
11. Development Imbalances	<ul><li>i. Global Imbalances</li><li>ii. Regional Imbalances</li><li>iii. National Imbalances (Sri Lanka)</li></ul>	02
12. 21 Century Development Challenges of Sri Lanka	i. Poverty ii. Rural Development	03
13. Sri Lanka's Post Conflict Development Strategy	i. Rebuilding Sri Programme: Challenges and Constraints	03
14. Sri Lanka's Post war Development Strategy	i. Regional Development Strategies: Gama Neguma, Divinaguma, MagaNeguma etc.	03

Mode of delivery	Lectures, Online Communication, Seminars	
Evaluation and Assessment: End Semester Examination		
Recommended Readin	g	
Ake, Claude. 1995. "The Georg Eds., Whose W Westview. ESCAP (2007), Statistic Hunger in a Global Economic Muricken A. (1997), Control Kendra, Mumbai. IFAD-International Fundamental Fundamental Fundamental Fundamental Fundamental Fundamental Fundamental (2007),	ne New World Order: A view from Africa". In Holm-Henrik and Aorensem, orld Order: Uneven Globalization and the End of the Cald War, Boulder: cal Yearbook for Asia and the Pacific, UN Publication, Thailand. onomy (1998), Bread for the World Institute, USA. Globalization and SAP: Trends & Impact – An Overview, VikasAdhyayan and for Agricultural Development (1992), The state of World rural poverty: see and Consequences, IFAD, London.  The World in 2030, Printed by Itxaropena SA, 20800 Zarautz (Spain).	
	Evaluation and Assess Recommended Readin  Ake, Claude. 1995. "The Georg Eds., Whose Westview.  ESCAP (2007), Statistic Hunger in a Global Economic Muricken A. (1997), Constant Muricken A. (1	

#### 6. Regional Development

1	Course Code	GEDS 1006
2	Course Title	Regional Development
3	Number of Credits	05
4	Year	First Year

#### 5 Rationale (Introductory Notes)

The study of regional development emerged in the 1950s with a strong economics basis and a focus on what firms did in regions and how their performance influenced a range of economic indicators such as employment, profit, GDP and growth. Towards the end of the 20th century, regional development became far more multi-disciplinary in its approach. Political science, public policy and sociology became critical disciplines, alongside economics, focusing more on the notion of what a region might be and how a range of factors shaped the idea of a region. In the 21st Century, economic geography has joined the discipline, and the focus of regional development is more on the spatial dynamics of regions. New theories of regional development focus on human and social capital, innovation and spatial dynamics as key components in understanding how often small peripheral economies are challenged to respond to the pressures from a global economy. In the light of this background this course unit focuses the theoretical and applied knowledge of the field of regional development.

#### 6 Pre-requisites None

#### 7 Course Objectives (Instructional)

- To enhance the knowledge on Regions and their development process through different aspects
- To build a wide array of theoretical and applied knowledge on Regional growth and development at Global, National and Local levels
- To Train students to identify regional development issues and challenges and to design regional development policies and planning

#### **8** Expected Main Teaching Outcomes (By Students)

By the completion of this course unit students will be able to

- Understanding of the role of regional development in economic and community development.
- Understanding of regions and how regions are defined.
- Students will deepen their understanding for regional development theories, policies, and practice through in-depth study and analysis of several regional development case studies

9	Content		
	Main Themes	Sub Themes	No. of Hours
	1. Introduction to	i. Definitions	04
	Regional Developmen		
		a. Definitions	
		b. Regional and Economic Development	
		c. Sustainable Development	
		iii. Significance of Regional Development	
	2. Basic characteristics	i. The concept of region	04
	of a region	a. Definitions of Region	
		b. Characteristics of a region	
		c. Hierarchy of regions	
		d. Regional identity and diversity	
		ii. Principles of Regional Division	
		iii. Types of Regions	
	3. Theoretical	i. Regional Location	04
	Framework for	a. Theories and Models	
	Regional Developmen	t ii. Regional Growth	
		a. What is regional growth	
		b. Theories and models	
		c. Limitations	
		iii. Regional Development	
		a. Theories and practices	
		iv. Revisiting models	
	4. Disparities of	i. Introduction	04
	Regional Developmen	t ii. Measuring disparities	
		iii. Global and Local perspectives	
	5. Regional Developmen	· ·	04
	Policies	ii. Regional development policy design	
		iii. Urban and Rural development policies	
	( D : IDI :	. F. 1 1 . CD 1 . DI	0.4
	6. Regional Planning	i. Fundamentals of Regional Planning	04
		ii. Decentralization, periphery development, poverty	
		alleviation	
		iii. Regional Planning in different fields; irrigation,	
		natural resources etc	
		iv. Land use planning for Urban and rural development	
	7. Regional Developmen	t i. Local regional development strategies	04
	Strategies	ii. Regional attraction strategies	
	Suaugus	iii. Rural-urban linkages	
		iv. International cooperation	
		11. International cooperation	
-			_

	8.	<b>Regional Development</b>	i.	Introduction	04
		<b>Issues in South Asia</b>	ii.	Uneven Development	
			iii.	Economic and social marginalization	
			iv.	Impact of Globalization on regional development	
			v.	Centralization of Technology and Education	
				Demographic challenges	
	9.	Regional Development	i.	History of Regional Development	04
		in Sri Lanka	ii.	Contemporary regional disparities	
			iii.	Government policies and Programmes	
	10	. Issues and Challenges	i.	Uneven distribution	04
		of Regional	ii.	Socio cultural challenges	
		Development in Sri	iii.	External forces	
		Lanka	iv.	Future prospectus	
		In Course Evaluation		Discussion, report writing and Presentation	20
		Total student contact hou	ırs		60
10	Mode	of delivery		Lectures, Online Communication, Seminars	•
11	Evalu	ation and Assessment			
	In Course Evaluation (Team Work, Presentation, Conference Type Presentation, Project			jects)	
	Mode of Evaluation Assignment – 20 Marks				
	End of Course Evaluation (End Semester evaluation 80 Marks)				
	Mode	of Evaluation		Written Examination – 80 marks	
12	Doggr	nmandad Daading			

#### 12 Recommended Reading

Andrew Herod, (2009), Geographies of Globalization, Wiley-Blackwell.

Andrew Wood and Susan Roberts, (2011), Economic Geography: Places, Networks and Flows, Routledge

Brakman, Steven, Harry Garretsen, and Charles van Marrewijk. (2009), *The New Introduction to Geographical Economics* (Cambridge, UK, Cambridge University Press). Chapter 2: Geography and economic theory,32-78

Friedmann, John. (2001), Regional development and planning: The story of collaboration. *International Regional Science Review* 24: 386-95.

Fujita, M. and J.-F. Thisse. (2002). *Economics of Agglomeration: Cities, Industrial Location, and Regional Growth*. Cambridge, UK: Cambridge University Press.

Hansen, Niles M. (1965), Unbalanced growth and regional development. *Western Economic Journal* 4: 3-14.

Malizia, Emil E, and Edward J Feser. (1999), *Understanding Local Economic Development* (New Brunswick,NJ, CUPR Press). Chapter 6: Regional growth theory, 123-149.

Morgan, Kevin. (1997), The learning region: Institutions, innovation and regional renewal.

Regional Studies 31: 491-503.

North, Douglass C. (1955), Location theory and regional economic growth. *Journal of Political Economy* 63: 243-258.

Parr, John B. (1999), Regional economic development: An export stages framework. *Land Economics* 75: 94-114.

Parr, John B. (1999). Growth-pole strategies in regional economic planning, a retrospective view, Part 2.

Rey, S. J., and M. V. Janikas. (2005), Regional convergence, inequality, and space. *Journal of EconomicGeography* 5 (2): 155-176.

Solow, Robert M. (1994), Perspectives on growth theory. *Journal of Economic Perspectives* 8: 45-54.

## **Second Year**

# 1. Cartography for Development Planning 1. Course Code GEDS 2001

1	Course Code	GEDS 2001			
2	Course Title	Cartography for Development Planning			
3	Number of Credits	05			
4	Year	Second Year			
5	Rationale (Introductory Notes)				
	This course is initially a "cartography oriented" and demonstrating the relevance and				
	applicability of cartographic theories and t	echniques in environmental and development studies.			
	The course examines the processing, con	mpilation and symbolization of spatial data and the			
	application of related statistical techniq	ues. The course content covers basic principles of			
	cartography, interpretation and application	n of creating and interpreting both manual and digital			
	maps as well as application of cartograph	ic techniques into the real world. Emphasis is placed			
	on the technology of mapping, particularly	the digital mapping, geographic information systems,			
	remote sensing and Global positioning sy	stem. The course prepares students for further course			
	work in geographic information science as	nd technology.			
6	Pre-requisites	None			
7	Course Objectives (Instructional)	TVOIC			
'		ractical knowledge and skill in manning			
	To offer a wider theoretical and practical knowledge and skill in mapping  To halve students become larger larger larger and existing larger affine and existing larger affine and existing larger.				
	To help students become knowledgeable and critical users of maps, able to examine the  advantages and considerable limitations of geographical data and map products.				
	advantages and considerable limitations of geospatial data and map products				
	To improve the cartographic thinking and cartographic communication in addressing				
	environmental and development issues holistically.				
8	Expected Main Teaching Outcomes (By	(Students)			
		owledge of cartography and geo-visualization			
	• Students will develop an understanding of how maps are created and how geospatial information is represented and conveyed through the use of maps.				
		understanding of modern geospatial technologies			
		e data, maps and spatial forms of representation.			
		analyze and predict the development pattern and			
		reate, store, manipulate and visualize geo-reference			
	data.				

1.				
1.				Hours
	Introduction to	i.	Introduction to Cartography	04
	Mapping	ii.	The map as a graphical representation of	
			the earth surface	
		iii.	Evolution of Cartography	
		iv.	Modern Cartography and its application	
2.	Fundamentals of	i.	Elements of a map	04
	Cartography	ii.	Scaling	
		iii.	Symbolizing	
		iv.	Spatial reference systems	
		v.	Map Projections	
3.	Layout Designing	i.	Organizing map elements	02
		ii.	Cartographic traditions for layout	
			designing	
4.	Reading and	i.	Types of Maps	0
	Interpreting	ii.	Sri Lanka Topographic Maps	
	Topographic Maps	iii.	Contour interpretation, Slopes and profiles	
5.	Measuring,	i.	Measuring an area, line and polygon	0.
	Ranking and	ii.	Demarcation of features: Catchment area	
	Zonation	iii.	Ordering and ranking features: Streams	
			and service centres	
6.	Practicing	i.	Creating profiles	04
	Cartographic	ii.	Slope gradient	
	Techniques	iii.	Zonation	
7.	Reading and	i.	Types of Chart	0:
	Interpreting Charts	ii.	Interpreting information depicted on charts	
8.	Analyzing Map	i.	Analyzing landuse changes through maps	04

	9. Aerial Photo	i. Inti	roduction	06	
	Interpretation	ii. Pro	cess of Aerial Photographing		
		iii. Pra	cticing stereoscopic view of Aerial		
		Pho	otograph		
		iv. Pre	paring landuse maps based on Air		
		Pho	otos		
	10. Weather Maps and	i. Inti	roduction to weather mapping	04	
	Synoptic Charts	ii. Ide	ntifying symbols for weather maps		
		iii. Pre	paring synoptic charts		
	Continuous Assessment	Pra	ctical exercises	20	
	Total student contact	hours		60	
10	10 Mode of delivery The course is made		ourse is made of two components: lecture	s and	
		practi	cal in cartography and computer labs. In t	he lectures,	
	the conceptual elements of the above topics will			l be	
		explained. The labs are designed in such a way that students will gain first-hand experience in data input, d			
		manag			
11	<b>Evaluation and Assessment</b>	t			
	In Course Evaluation (Tea	m Work, Pi	esentation, Conference Type Presentat	tion,	
	Projects)				
	Mode of Evaluation		Continuous Assessment – 20 Marks		
	End of Course Evaluation (End Semester evaluation 80 Marks)				
	Mode of Evaluation		Written Examination – 80 marks		
12	Recommended Reading				
	Recommended Reading				
		සිතියම් පුනෙ	ෂ්පණය, ලංකාවේ සීමාසහිත එක්සත් පුවෘත්	ති පතු	
		•	ෂ්පණය, ලංකාවේ සීමාසහිත එක්සත් පුවෘත්	ති පතු	
	චන්දුසේකරඑම්. ජී. (1963), සමාගම, ලේක්හවුස්, කොළ	<b>ළඹ.</b>	ෂ්පණය, ලංකාවේ සීමාසහිත එක්සත් පුවෘත් ව, සරසවි පුකාශකයෝ, නුගේගොඩ.	ති පතු	
	චන්දුසේකරඑම්. ජී. (1963), සමාගම, ලේක්හවුස්, කොළ විතාරණ, කේ.එම්. (2007),	ළඹ. සිතියම් විදාග		ති පතු	
	චන්දුසේකරඑම්. ජී. (1963), සමාගම, ලේක්හවුස්, කොළ විතාරණ, කේ.එම්. (2007),	ළඹ. සිතියම් විදාහ පුායෝගික භු	ව, සරසවි පුකාශකයෝ, නුගේගොඩ. ගෝල විදහාව, කර්තෘපුකාශන.	ති පතු	
	චන්දසේකරඑම්. ජී. (1963), සමාගම, ලේක්හවුස්, කොළ විතාරණ, කේ.එම්. (2007), උපාලි වීරක්කොඩි (1996), උපාලිවීරක්කොඩි (2004), දු	ළඹ. සිතියම් විදාග පුායෝගික භු දුරස්ථ සංවේ	ව, සරසවි පුකාශකයෝ, නුගේගොඩ. ගෝල විදහාව, කර්තෘපුකාශන.		
	චන්දසේකරඑම්. ජී. (1963), සමාගම, ලේක්හවුස්, කොළ විතාරණ, කේ.එම්. (2007), උපාලි වීරක්කොඩි (1996), උපාලිවීරක්කොඩි (2004), දු	ළඹ. සිතියම් විදාග පුායෝගික භු අරස්ථ සංවේශ විල්කින්සන් භ	ව, සරසවි පුකාශකයෝ, නුගේගොඩ. ගෝල විදපාව, කර්තෘපුකාශන. දය, කර්තෘපුකාශන.		

Aronoff, Stan, 1989. Geographic Information Systems: A Management Perspective, WDL

Back house, D.G (1974), Fundamentals of Aerial Photography MSc, AITP.

Brown, Lloyd A. (1977), The Story of Maps, Dover Publications, New York.

Campbell, J.(1998), Map Use and Analysis, 3rd ed. Dubuque. JowaWCB/ McGraw-Hill

Chang, K.T., 2008. Introduction to Geographic Information Systems. McGraw Hill, New York.

Dent BD, TorgusonJS, and Hodler TW (2009) Cartography: Thematic Map Design, 6th Edition, McGraw-Hill.

Lillesand, T.M. and Kiefer, R.W. (1994), Remote sensing and Image Interpretation, John Wiley & Sons, Inc,

Lo,C.P. and Yeung, A.K.W. (2005), Concepts and Techniques of Geog<sup>3</sup>/<sub>4</sub>phic Information Systems Prentice-Hall< New Delhi.

Longley P.A., M.F. Goodchild, D.J. Maguire, D.W. Rhind, 2011. Geographic Information Systems and Science. John Wiley and Sons, New Jersey.

Monmonier M (1998) How to Lie with Maps, 2nd edition. University of Chicago Press.

Peterson, G.N.(2009), GIS Cartography: A guide to Effective Map Design, Taylor and Francis Group, New York. Publications, Ottawa.

Robinson, A. (1960), Elements of Cartography, John Willey & Sons, New York.

Slocum TA, McMaster RB, Kessler FC & Howard HH (2009) Thematic Cartography and

#### 2 Natural Resources Management

1	Course Code	GEDS 2002
2	Course Title	Natural Resources Management
3	Number of Credits	05
4	Year	Second Year

#### 5 Rationale (Introductory Notes)

Natural resources are the entities made naturally or the things freely available in the world. When these things are used by man or if there is a potential to use, they called Resources. Some natural things will be depleted due to continues utilization but some are constantly available. The use of resources depends on the requirement or demand of the human society and their culture and the technical ability. However in the present world, due to growing population and the development of technical knowledge, the uses of natural resources are being rapidly increased. Thus most resources are being subject to depletion, decrease, and quality changes and some natural resources are adversely affecting the man causing hazards. Thus the proper management of resources is being focused urgent attention of the present world. Sri Lanka already uses and still has a great potential of using a wide range of natural resources but there is a lack of basic understanding of what is a proper management and how can it do?. This course will be a useful attempt to fill that gap giving basic understanding and knowledge to the graduate level

6	Pre-requisites	None
---	----------------	------

#### 7 Course Objectives (Instructional)

- To scientifically understand the physical resources of the world from a geographical perspective
- To give better understanding of the relationship between man and natural resources
- To give knowledge on various management systems of natural resources in the world
- To give awareness on natural resource utilization problems of Sri Lanka concerned with weakness and constrains based on field work

- Students will be able to get an clear understanding of natural resources distribution of the world
- It will be possible to gain a good knowledge on man-resources relationship

- Student will have awareness on concept of management and its different applications in the world.
- They can gain a broad knowledge on what are the natural resources that are actually used in Sri Lanka with and without a proper management
- Students are finally have knowledge of how natural resources in Sri Lanka are used with a proper management for the future development of our country

	with a proper management for the future development of our country					
9	Content					
	Main Themes	<b>Sub Themes</b>	No. of Hours			
	1. Physical resources of the world	<ul><li>i. Geographical distribution of natural resources in the world.</li><li>ii. Their origin</li></ul>	08			
	2. Relationship of man and resources	<ul> <li>i. Differences in the past and present</li> <li>ii. Primitive relationship from a historical perspective.</li> <li>iii. Modern relationship</li> </ul>	06			
	3. What is natural resources management?	i. Concepts ii. Applications	05			
	4. Natural resources in Sri Lanka	i. Land, soil, water, rocks & mineral, flora & fauna, climate, coastal region, landscape etc.	08			
	5. Resource management of Sri Lanka	<ul> <li>i. Contemporary conceptual situation</li> <li>ii. Weakness, constrains, problems of natural resource management.</li> </ul>	10			
	6. Proper management of Natural Resources	i. Concepts, planning and implementation	05			
	7. Field study	i. Observation of two sites where resources are traditionally used and where modern methods are used	20			
			60			
10	Mode of delivery	Lectures and field study				
11	In Course Evaluation(Tea Projects)	valuation and Assessment n Course Evaluation(Team Work, Presentation, Conference Type Presentation,				
	Written examination and two Mode of Evaluation.	wo assignments  field based assignment $-30 + \text{literature based assignment} - 10$ $= 40$				
	<b>End of Course Evaluation</b>	tion (End Semester evaluation 60 – 80 Marks)				
	Mode of Evaluation	Written paper = 60				

#### 12 Recommended Reading

AluthwatthaR.G.S.T. (2009). Non nectar feeding behavior of Sri Lankan butterflies: An essential study for habitat conservation and restoration, First National Symposium on Natural Resources Management

GaminiRanasinghe, Wu ChunmingProceedings of International Conference on Business Management http://journals.sjp.ac.lk/index.php/icbm/article/view/307

Wijedasa. K H.J.(1994). Towards sustainable Growth .The Sri Lankan experiences. Central Environmental Authority Colombo

Michael, L., M.Mckinney, Robert M Schoch, (2003). Natural Resources and Environmental Science. Jones and Bartlett Publishers. London

http://www.tradingeconomics.com/sri-lanka/total-natural-resources-rents-percent-of-gdp-wb-data.html

http://www.srilankalaw.lk/revised-statutes/volume-vi/840-naval-and-victualling-stores-ordinance.html

Journal of Tropical Forestry and Environment Department of Forestry and Environmental Science, University of Sri Jayewardenepura, Nugegoda, Sri Lanka

# 3. Rural Development and Planning

1	Course Code		GEDS 2003		
2	Course Title		Rural Development and Pla	nning	
3	Number of Credits		05	8	
4	Year		Second Year		
5	Rationale (Introductory Notes)				
	The course is focused on three major components of land use planning, rural development				
	planning and agricultural planning which are vital in development and planning process. It				
	provides the theoretical, field	_		-	
	management issues with relev			C	
6	Pre-requisites		None		
7	Course Objectives (Instruct	ional)			
	a) To give an understand	ing on planning in lar	nd use management with spec	cial emphasis	
	, ,		and use interaction which wi	•	
	development process				
		both the theoretical	and practical knowledge on	develonment	
	rural development	oom the theoretical	and practical knowledge on	de velopinent	
	*	understand snatial i	patterns of rural developmen	nt iccues with	
	_		ts and evaluate the effective		
	policies, planning and			chess of fural	
		=		a process for	
	d) To build up ability to apply theoretical and practical aspects of planning process for				
8	agriculture development				
O	Expected Main Teaching Outcomes (By Students)				
	a) Students will be able to understand the significance of land use analysis, land use				
	planning and apply their practical skills acquired for the development activities in				
	contemporary environment.				
	b) Evaluate the impacts of changes on different groups of people in rural space.				
	c) Employ skills in researching, analyzing and presenting on aspects of development				
	and planning.		1 0 1 1		
	· ·		mplementation of agriculture	;	
	development strategies	5		Γ	
9	Content				
	Main Themes	<b>Sub Themes</b>		No. of	
				Hours	
	1. Rural development	i. Definitions of	of Rural Development	04	
	within the context of	ii. Objectives	1		
	development	iii. Why rural de	evelonment?		
	development	•	ctions in Rural		
		Developmen			
		_	less achievements of RD		
		v. Reasons loi	icss acmevements of KD		

2. Rural development	i. Rural development approaches	03
approaches and	ii. Rural development strategies	
strategies in Sri		
Lanka		
3. Rural Development	Preparation of Village Development plans	04
planning	(Institutional training at RDTRI)	
4. Rural development	Economic, social and environmental issues	04
issues and challenges		
5. Introduction to Land	i. What is Land Use Dynamics?	03
Use Planning and	ii. What is Land Use Planning?	
Analysis	iii. What is Land Use Analysis?	
6. Institutional and	i. Institutional Mechanism in relation	to 03
Legal Environment of	Land Use Planning	
land Use Planning	ii. Land Use Policies In Sri Lanka	
7. Application of Land	Environmental Management, Natural Disas	ters, 04
Use Analysis and	Infrastructure Development,	
Planning	Regional Development and Urban	
	Development	
8. Exposure on Real	i. Exposure to the Land Use Policy	02
World Best Practices	Planning Division	
in Land Use Policy	ii. Exposure to the National Physical	
Planning and Natural	Planning Department	
Physical Planning		
9. Introduction to	i. What is Planning and Development	? 02
Agriculture Planning	ii. Types of agriculture plans	
and development		
10. An overview	i. Importance and benefits of Agricult	ure 02
agricultural planning	Planning	
and development	ii. Agricultural planning in developing	
	countries	
11. Agriculture	i. Information gathering	03
Planning Process	ii. Goal setting and prioritization	
	iii. Identification of strategies	

			iv.	Plan implementation	
			v.	Challenges in plan implementation	
	12. Strategies and		i.	General Strategies of agriculture	03
	policies for			planning	
	agriculture pla	nning	ii.	Policies in agriculture planning	
	and developme	ent	iii.	Agriculture planning in Sri Lanka	
	13. Planning for		i.	What is sustainable agriculture	02
	sustainable		ii.	Benefits of sustainable agriculture	
	agriculture		iii.	Methods and tools for sustainable	
				agriculture planning	
	14. Assignment		Assig	gnment Discussion/Data collection for	20
			field	based assignment/Data	
			analy	sis/preparation of assignment report	
11	Mode of delivery	Lectures	, discu	ssions, Tutorials, Field visit	
12	Evaluation and Assessment				
	In Course Evaluation(Team Work, Presentation, Conference Type Presentation,				
	Projects)				
	Mode of	Mode of Assignment – 20%			
	Evaluation				
	End of Course Evaluation (End Semester evaluation - 80 Marks)				
	Mode of	Written	Exami	nation – 80%	
	Evaluation				
13	Recommended Reading				
	a. Albrecht, D.	and Eller	, E., 19	996, 'Experiences of Land Use Planning in	Asian
	Projects', The Asian Working Group on Land Use Planning for the Asian - Pacific				
	Region - Selected Insights, Deutsche GesellschaftfürTechnischeZusammenarbeit				
	(GTZ) GmbI	Н.			
	b. Gautam, A.P	., and et a	ıl., (200	02). "Land Use Dynamics and Landscape (	Change Pattern
	in a Mountain Watershed in Nepal". GISdevelopment.net, Environment.			t.	
	c. Simonsson, I	L., (2003)	. "Land	dscape as an Arena for Applied Environme	ntal Studies".
	Norwegian J	ournal of	Geogra	aphy. 57: 40 – 48.	

- d. Simonsson, L., (2004). "Environmental Assessments of Landscape Changes".
   Interdisciplinary Studies in Rural Tanzania. 11 52 p
- e. Dixon, C. J. (1990). Rural Development in South Asia. Routledge, London.
- f. Karunanayake, M.M. (2001) People, Space and Resources: Perspectives on Development Issues in Rural Sri Lanka. Sida/SAREC Research Co-operation Project. Department of Geography, University of Sri Jayewardenepura.
- g. Molinga, P.P. (2000). Water for Food and Rural Development: Approaches and initiatives in South Asia. Sage Publications, New Delhi.
- h. Ellis, Frank. (1992) *Agricultural Policies in Developing Countries*. Cambridge: Cambridge University Press.
- i. FAO (1984) Planning Agriculture. Policy Analysis Division. Rome.
- j. FAO (1985) Toward Improved Multilevel Planning for Agricultural and Rural
   Development in Asia and the Pacific. Economic and Social Development Paper #52.

   Rome.
- k. FAO (1986) Guide for Training in the Formulation of Agricultural and Rural
   Investment Projects. 5 volumes. Development Policy Studies and Training Service,
   Policy Analysis Division. Rome.

# 4. Statistics for Development Studies

1	Course Code	GEDS 2004
2	Course Title	Statistics for Development Studies
3	Number of Credits	05
4	Year	Second Year

#### 5 Rationale (Introductory Notes)

It is evident that various types of quantitative techniques have developed in the field of development studies with the quantitative revolution and model building movement which particularly initiated in early 1960s. These quantitative techniques assist to measure and analyze various types of data and information of development in more scientific and logical manner. These techniques are particular to development studies and essential for the analysis of development indicators and to understand different relationships among development related variables. A course unit based on these quantitative techniques is essential as the statistical techniques can play a vital in measuring, analyzing and understanding the nature of development of any country or region.

6 Pre-requisites None

#### 7 Course Objectives (Instructional)

- To provide sufficient knowledge to the students about the quantitative techniques applied in development studies.
- To guide them to apply these techniques in their independent assignment and research.
- To train them to think analytical and logical manner by following the positivist's approach.

#### 8 Expected Main Teaching Outcomes (By Students)

- Expect that the student will get the knowledge about different statistical techniques and will understand the nature of development by measuring and analyzing quantitatively.
- Expect that they will apply statistical techniques in their assignment and research.
- They will get knowledge on how to construct a quantitative research model.
- They will see the objective reality of the world by measuring different relationships among variables relating to development.

9	Content		
	Main Theme	Sub Themes	No. of Hours
	1. Introduction to Statistics and Development Studies	<ul><li>i. What is statistics?</li><li>ii. Functions of statistics</li><li>iii. The need of statistics for development studies</li></ul>	02
	2. Analysis of ungrouped and grouped data	<ul> <li>i. Introduction to ungrouped and group data</li> <li>ii. Frequency Distribution</li> <li>iii. Basic analysis of frequency distribution</li> <li>iv. Different forms of frequency distribution</li> </ul>	03
	3. Measures of Central Tendency	<ul> <li>i. Introduction to measures of central tendency</li> <li>ii. Measuring central tendency for grouped and ungrouped data</li> <li>iii. Application of central tendency for development studies</li> </ul>	03
	4. Measures of Dispersion	<ul> <li>i. Introduction to dispersion</li> <li>ii. Different measures of dispersion</li> <li>iii. Application of dispersion in development studies</li> </ul>	03
	5. Measures of Skewness and Kurtosis	<ul> <li>i. Introduction to skewness and kurtosis</li> <li>ii. Measures of skewness and kurtosis</li> <li>iii. Their applications in development studies</li> </ul>	02
	6. Levels of Measurement	<ul> <li>i. Introduction to levels of measurement</li> <li>ii. Different levels of measurement</li> </ul>	02

7 Industry State 1	iii. The importance of levels of measurement in statistics and development studies  i. Introduction to inductive	
7. Inductive Statistics and Probability	statistics and probability  ii. The importance of probability  iii. Probability applications in development studies	02
8. Probability Distributions	<ul> <li>i. Introduction to probability distributions</li> <li>ii. Different types of probability distributions</li> <li>iii. The use of probability distributions in development</li> </ul>	02
9. Normal Distribution	<ul> <li>i. Introduction to normal distribution</li> <li>ii. The importance and the analysis of normal distribution</li> <li>iii. Its applications in development studies</li> </ul>	03
10. Testing of Hypothesis	<ul><li>i. Introduction to hypothesis</li><li>ii. Testing of hypothesis relating to development studies</li></ul>	03
11. Regression and Correlation	<ul> <li>i. Introduction to regression and correlation</li> <li>ii. Regression and correlation analysis of development related variables</li> </ul>	03
12. Quantification of Qualitative Information	<ul> <li>i. The way of quantifying qualitative data</li> <li>ii. Techniques to analyze qualitative variables of development</li> </ul>	03

	13. Analysis of Variance	<ul><li>i. Introduction to Analysis of Variance</li><li>ii. Its applications in development studies</li></ul>	03		
	14. Time Series Analysis	<ul><li>i. Introduction to time series analysis</li><li>ii. Trend and seasonal analysis of development related variables</li></ul>	03		
	15. Time Management in Development Research Projects	<ul> <li>i. Introduction to network analysis</li> <li>ii. Budgeting and managing time with network analysis</li> </ul>	03		
	Combined Field Study		20		
	and Assignment				
10	Mode of delivery				
11	<b>Evaluation and Assessme</b>				
	In Course Evaluation(Ind	ividual Project)			
		(End Semester evaluation 80 Marks)			
	Mode of Evaluation:	Individual project – 20 Mar	·ks		
		Marks			
12	Recommended Readings:				
	Berry, G.C. (2007) <i>Business Statistics</i> . New Delhi: Tata McGraw-Hill Publishing Comapany Cliff, A.D. and Ord, J.K. (1973) <i>Spatial Autocorrelation</i> . London				
	Cole, J.P. and King, C.A.M. (1968) Quantitative Geography. London				
	Ebdon, E. (1987) Statistics in Geography. UK: Basil Blackwell Ltd.				
	Hubert M., Blalock, Jr. (19	72) Social Statistics. New York: McGraw	Hill Book Company		
	Hammond, R. and McCu <i>Introduction</i> . Oxford Unive	lagh, P.S. (1978) Quantitative Techniques	ues in Geography: An		

Karunaratna, K. R. M. T. (2009) *Quantitative Methods for Management*. Maharagama: Tharanjee Prints

King, L.J. (1969) Statistical Analysis in Geography. Englewood Cliffs

Neft, D.S. (1966) 'Statistical Analysis for Spatial Distributions'. *Philadelphia Regional Science Research Institute Monograph Series*, No.2

Panneerselvam, R. (2009) Research Methodology. New Delhi: PHI Learning Private Limited

Taylor, P.J. (1971) 'Distances within Shapes: An Introduction to a Family of Finite Frequency Distributions'. *Geographiska Annaler*, B, 53, pp. 40 – 53

## 5. Contemporary Development Issues

1	Course Code	GEDS 2005
2	Course Title	Contemporary Development Issues
3	Number of Credits	05
4	Year	Second Year

### 5 Rationale (Introductory Notes)

This course is essentially to provide the student with an initial overview of contemporary development issues. This will enable students to update with the latest issues of environment and development that have already completed in other course units, while not imposing opinions on them. It will look at opposing points of view on the same issues and assess their relative merits. Accordingly this course will provide the analytical tools needed to study the issues in more depth on their own by the students. This course will focus to study of issues relating to environmental, economic, political, social, legal and development matters at the local, national, and international levels. Students study current problems and use method of investigation, research, and discussion which is an integral part of modern teaching and learning of environment and development studies.

# 6 Pre-requisites None

## 7 Course Objectives (Instructional)

- To offer a wider theoretical and conceptual construct in with adequate exposure to the students in addressing contemporary development Issues.
- To examine some of the pressing development problems faced by the global and Sri Lankan communities as they are preparing for the next several decades including challenges and prospects in good governance, peace and reconciliation, sustainable development, international trade and political relations etc. in an increasing globalizing world where governments, international organizations, and individuals to address those problems through cooperation, competition, or conflict.
- To widen the horizons of critical understanding on issues of international and regional interests.

## **8** Expected Main Teaching Outcomes (By Students)

- Analyzes and interprets primary and secondary source materials to increase understanding of the structure of society, its groups, institutional and culture.
- Distinguishes between relevant and irrelevant information.
- Evaluates information for accuracy, separating facts from opinions.
- Selects and defends positions in writing, discussion, and debate.
- Plans, designs, and develop
- ps projects relative to the study of ongoing contemporary development Issues.
- Participates in interviews, debates and interact with agencies and community personnel including field exposures.
- Student understanding of Contemporary Development Issues shall be increased and the degree to which the factors discussed in class will be interrelated while learning use variety of measurement tools and methods.

Main Themes	Sub T	Themes	No. of Hours
1. Introduction to	i.	Introduction and Overview	04
contemporary	ii.	Key Global Issues in the 21 Century	
development Issues.			
2. Global Climatic	i.	What is Climate Change	04
Change.	ii.	Impacts of Climate Change (Global)	
	iii.	Regional and Local Impacts of Climate	
		Change.	
3. Global Political Issues	i.	Introduction to political issues	02
	ii.	Conflicts and development	
	iii.	Impact of global terrorism	
4. Global economic issues	i.	Introduction to global economic issues.	05
	ii.	In-depth analysis of selected economic	
		issues at local and global level	
5. Global Poverty Issues	i.	Defining poverty	04
	ii.	Dimensions of Poverty	
	iii.	An Overview of global poverty	
	iv.	Strategies for Poverty Alleviation	
6. Natural Disasters	i.	Definitions and Introduction	03
	ii.	Types and causes of natural hazards	
	iii.	Disaster Management for development	
7. Food insecurity and	i.	Conceptual framework on Food Security	04
Hunger	ii.	Dimensions of food insecurity and Hunger	
	iii.	Causes for food insecurity	
	iv.	Impact of food insecurity on	
		socioeconomic development at global and	
		local level	
8. Forced migration	i.	Defining forced migration	06
issues	ii.	Global refugee crisis	
	iii.	Issues of internal displacement	
	iv.	Impact of forced migration on	
		development	
9. Urban – Rural	i.	Introduction to Settlement Development	04
<b>Settlement Issues</b>		Perspectives	
	ii.	Issues of Urban and Rural Settlements	
	iii.	Settlement development Policies and	
		constraints	
10. Development policy	i.	Introduction to development policies	04
issues	ii.	Contemporary development policy issues	
In Course Evaluation	Discu	assion, Report writing and Presentation	20
Total student contact		and a respect to the state of t	60

10	Mode of delivery	Lectures, Online Communication, Seminars		
11	Evaluation and Assessment			
	In Course Evaluation (Team Work, Presentation, Conference Type Presentation,			
	Projects)			
	Mode of Evaluation	Assignment – 20 Marks		
	End of Course Evaluation (End Semester evaluation 80 Marks)			
	Mode of Evaluation	Written Examination – 80 marks		
12	Recommended Reading			
	(2012) 11 12 (1 2011 1 21 1 21 1 21 1			

(2012), Hazard Profiles of Sri Lanka, Disaster management Centre, Colombo.

(2011 November), Report of the Commission of Inquiry on Lessons Learnt and Reconciliation, Government of Sri Lanka.

Alexander, D. (1999), Natural Disasters, Kluwer Acedemic Publishers, London. displacement and resettlement, www.zedbooks.co.uk.

Food and Agricultural Organization (2010). Annual Report.

Marie Hoadley (2003), development-induced displacement and Resettlement– impoverishment or sustainable Development? ACMER.

Michel T, Sinarr and D. Neil Snarr (2002), Introducing Global Issues, Lynne Rienner Publishers, Inc., Colarado, USA.

Millennium Development Goals - MDG (2010)

Ray Hammond (2007), The World in 2030, Printed by Itxaropena SA, 20800 Zarautz (Spain) itxaropena@itxaropena.net

Robert Muggah (2008), Relocation failures in Sri Lanka: a short history of internal State of Food Insecurity –SOFI (2010)

Rev. Sangasumana, P. (2010), Conflict and Displacement: A leading Social Problem of Sri Lanka, In: Huhua Cao (ed), Ethnic Minorities and Regional Development in Asia, Amsterdam University Press, Netherlands.

Rev. Sangasumana, P. (2014), The Children Left Behind by International Migrants from Sri Lanka: Victims or Beneficiaries of Globalization?, In; Veale, A. and Dona, G. (eds), Child and Youth Migration, Palagrave Macmillan, 162-185 pp.

Robbert, B., Tony Binns, Jennifer, A., David Smith (2004), Geographies of Development, Person Education Limited, England.

# 6.Development Communication

1	Course Code	GEDS 2006
2	Course Title	Development Communication
3	Number of Credits	05
4	Year	Second Year

#### 5 Rationale (Introductory Notes)

Development Communication is the process of intervening in a systematic or strategic manner with either media (print and electronic) or education for the purpose of positive social change. The change can be economic, personal, as in spiritual, social, cultural or political. It is the application of the processes of communication to the development process. In a very broad sense, development communication is the art and science of human communication applied to the speedy transformation of a country (economic growth, modernization, industrialization) and the mass of its people.

	6	Pre-requisites	None
--	---	----------------	------

### 7 Course Objective

In this course, students will study major theories and their applications concerning the use of communication and media to promote economic development and social change. They will examine the theories and models (such as modernization) that led to the failure of early development programmes and the emergence of alternative models. Students will also explore the influence of culture on communication in a development context and various approaches to viewing the role of culture on human progress. The course concludes with the integration of these approaches in support of an equitable and sustainable development process.

#### **8** Course Outcomes and Expectations

The course content is designed to help students become more aware and knowledgeable about development issues worldwide, especially the historical and cultural context to development and communication. These will be determined through class discussions, small group work and individual assignments with some basic research approaches. In general, students' learning outcomes should be the ability to:

- Define and describe the field of development communication
- Understand the facts, key theories and approaches and be able to apply their knowledge to the real world
- Identify and discuss the various actors and issues in development communication, and
- Facilitate discussion and present topics in development communication, and
- Determine (if appropriate) future directions of study in order to implement knowledge obtained in the course.

#### 9. Content:

#### **WEEK 1 - The Meaning of Development Communication**

Concepts of development; The concept of development communication; The meaning of development communication in India; Cultural nationalism and development; Social issues for development communication; Exposing corruption and right to information in development; Media globalization and economic growth

#### **WEEK 2 - Theories of Development Communication**

The dominant paradigm of development; Modernization theory; Dependency theory; Diffusion of innovations theory; Globalization theory; Alternative development; Participatory communication; Social marketing theory; Media advocacy

# WEEK 3-Communication Policy for Development: An Analytical Framework and Conceptual Model

Conceptual model; Political system; Legal and constitutional framework; Cultural and social factors; Economic and industrial policy; Communication technology infrastructure; International agencies; Media industry

• One hour group discussion

#### **WEEK 4-Communication Strategies for Rural Development**

Rural development: Origin and growth; Print media in development journalism; Radio in development communication; Community radio; New media in rural development

# **WEEK 5-Communication Strategies in Social Movements and Development: Voice for the Voiceless**

Social movements; Folk Media for social mobilization; Theatre for development; Right to information movement;; Women's movement

#### **WEEK 6-Information and Communication Technologies for Development**

Satellite instructional television experiment; IT communication projects; Training and development communication channel; Community radio; Communication convergence and development policy; Information and education; Telemedicine; E-governance; Internet radio; Internet television; Geographic information systems; Implications for development, social media

• One hour group discussion

# WEEK 7-Digital Divide and Digital Opportunities: Issues and Challenges for ICT Policies in Development

Development divide in South Asia; Communications gap in international policy interventions; from digital divide to digital opportunities: ICT policies for development; ICTs, economic policies and development agendas; Measurement of effects of ICTs on development

#### WEEK 8 - MID-TERM TEST

#### **WEEK 9-Political Economy of Mass Media and Development**

Political economy and the news media; Capitalism and the media; Foreign direct investment in media; Sources, approaches and skills in business investigative reporting; Investigating business in the news media; Public sector and the disinvestment battle; The private sector; Power sector and telecommunications; Education, employment and labour reforms; Corporate corruption; Corporate social responsibility of business.

## WEEK 10-Communication for Women's Development and Empowerment

Feminist policy perspectives for development; From women's welfare to women's empowerment; National policy for empowerment of women; Mass media and women's empowerment; Gender inequality and its sources; Health and women's empowerment; Education and social empowerment of women; Employment and economic empowerment of women; Women and politics; Violence against women; Mass media images of women; Implications for national communication policy and women's empowerment

• One hour group discussion

#### **WEEK 11-Health Communication**

Women's health status and child survival; Communication strategies in child survival; A conceptual model of health communication for child survival; Innovative child health programmes; Communication strategies for AIDS prevention; Implications for health communication policies

## WEEK 12-Ecological Conservation, Communication and Development

Asian tradition of ecological protection; Eco-religion; Buddhism and Jainism: Oral tradition: Powerful communication in ancient India; Environment and development; Effects of development on environment; Communication for sustainable development

#### WEEK 13-Development Communication Ethics in the South Asian Mass Media

Ethics in the mass media; Goals of the mass media; Commitment in South Asian mass communication; Reform movements and mass Communication; Exposing corruption; Development communication ethics in South Asia

## WEEK 14 - Project presentation

#### WEEK 15 - Project presentation

10	<b>Evaluation and Assessment</b>		
	In Course Evaluation (Team Work, Presentation, Conference Type Presentation,		
	Projects)		
	Mode of Evaluation	Practical – 20 Marks and Project – 20 Marks (40%)	
	End of Course Evaluation (End Semester evaluation 60 – 80 Marks)		
	Mode of Evaluation	Written Examination – 60 marks (60%)	

#### 11 Recommended Readings

- 1. Approaches to Development Communication: UNESCO, Ed. Jan Servaes, 2002
- 2. Communication for Development and Social Change, Ed. Jan Servaes, UNESCO publication, 2008
- 3. Communication for Development: Strengthening the Effectiveness of the United Nations, Unicef, UNDP, FAO, WHO and ILO, 2011
- 4. Communication for Development: Reinventing Theory and Action, Kiran Prasad, 2009
- 5. Development Communication: Information, agriculture and nutrition in the Third World, Robert C. Hornic. 1993
- 6. Development Communication Sourcebook: Broadening the Boundaries of Communication, Paolo Mefalopulos, 2008
- 7. Environmental Communication: Applying Communication Tools towards Sustainable Development, OECD Working Paper, 1999
- 8. Framework on EFFECTIVE RURAL COMMUNICATION FOR DEVELOPMENT, FAO publication, Edited by Reccardo Del Castello and Paul Matthias Braun, 2006
- 9. Introduction to Development Communication: Its Philosophy and Approach , Fr. Cornelio Lagerwey, 1990
- 10. Strategic Communication for Development Projects, Cecilia Cabanero-Verzosa, World Bank publication, 2003

# **Third Year**

# 1. Disaster Management

1	1. Disaster Management				
1	Course Code	GEDS 3001			
2	Course Title	Disaster Management			
3	<b>Number of Credits</b>	05			
4	Year	Third Year			
5	Rationale	<u> </u>			
	Disaster Management course unit is designed to provide students with graduate level knowledge				
	and associated ability to understand disasters from development perspective and critical thinking				
	for decision making involv	ed in planning, management, relief and 1	ecovery management in		
	disasters. As a core of the s	tudy, students will be exposed to concep	ots, theory and planning,		
	management, response, relie	f, recovery, economies and specific case	s associated with public		
	emergencies in disasters. Th	e course content also concerns to provide	an accurate and rational		
	description about the mechan	nism, issues and challenges of disaster ma	nagement in Sri Lanka.		
6	Pre-requisites	None			
7	Course Objectives (Instruc	tional)			
	Promote the unders	tanding of applicability of disaster m	anagement through the		
		ationship between the environment and de			
		rstanding on the all types of disasters.	1		
		all aspects on Disaster Management plann	ning and implementation.		
		ity of applying disaster management ski	= =		
	purpose		1		
8	<b>Expected Main Teaching C</b>	Outcomes (By Students)			
	By the completion of this co	urse unit students will be able to			
	1	rtance of disaster management while imbi	hing the sense of		
	hazards and their imp		onig the sense of		
	1	pact of hazards for managing disasters an	d emergency situation		
		ch projects and proposals.	a emergency straution		
		o the regional events of disaster managem	ent while familiarizing		
		vities on preparedness, mitigation, respon	_		
9	Content				
	Main Themes	<b>Sub Themes</b>	No. of Hours		
	1. Introduction to	i. Definitions of Hazards and	04		
	Disaster	Disasters			
	Management	ii. Principles of Disaster			
		Management			
	2. Natural disasters	i. Defining natural hazards	04		
		ii. Types and characteristics			
		iii. Short and Long-term impact			
	3. Anthropogenic	i. Definition	04		
	disasters:	ii. Types and characteristics			
1		C1 / 1T / ' /	1		

iii.

Short and Long-term impact

	4. Disaster	i.	Introduction	04
	management cycle		Significance	0.
	munugement eyere	iii.	Main phases	
	5. Pre disaster	i.	Introduction	04
	management	ii.	Structural Methods for Disaster	0.1
	strategies	11.	Mitigation	
	strategies	iii.	Non-Structural Methods for	
		111.	Disaster Mitigation	
		iv.	Preparedness for a disaster	
		v.	Issues and challenges	
			issues una chancinges	
	6. Disaster Response	i.	Introduction	04
	1	ii.	Pre-disaster response	
		iii.	Emergency response	
	7. Post-Disaster	i.	Introduction	04
	Management	ii.	Principles of recovery	
	Strategies	iii.	Strategies for recovery	
	8. Disaster Risk	i.	Introduction	04
	Assessment and	ii.	Contribution of modern	
	Risk Mapping		technology on disaster	
			management	
		iii.	Risk assessment	
		iv.	Risk mapping	
	9. Disaster	i.	Major disasters in Sri Lanka	08
	Management	ii.	Institutional framework of	
	mechanism of Sri		Disaster Management in Sri	
	Lanka		Lanka	
		iii.	Issues and challenges	
	In Course Evaluation	i.	Teamwork	20
		ii.	Institutional visit	
		iii.	Report writing	
		iv.	Presentation	
	m . 1 . 1 1			<b></b>
10	Total student contact hours		I action 2 (200/)	60
10	Mode of delivery		Lectures (80%)	
11	<b>Evaluation and Assessme</b>	nt	In Course Evaluation (20%)	
11	In Course Evaluation	111		
	Mode of Evaluation		Report writing and presentation—	20%
		ı (End	Semester evaluation - 80 Marks)	
	Mode of Evaluation		Written Examination - 80%	

#### 12 Recommended Reading

සංසසුමන හිමි, පී. (2015), ආපදා කළමනාකරණය පාඨමාලා අත්පොත, බාහිර විභාග සහ විස්තාරිත පාඨමාලා ඒකකය, ශීූ ජයවර්ධනපුර විශ්වවිදහාලය.

ධනපාල, ඒ.එච්. (2012), ආපදා කළමණාකරණය, සරසවි පුකාශකයෝ, නුගේගොඩ.

වික්ටර් පෙරේරා, (2014), ආපදා සහ ආපදා කළමනාකරණය, සීමාසහිත ඇස් ගොඩගේ සහ සහෝදරයෝ, කොළඹ.

විජේරත්න, එස්. (2009), සුනාමි වාසනය, කර්තෘ පුකාශන.

සරත් කුමාර, එල්.(2010), ශීූ ලංකාවේ ආපදා කළමනාකරණය, කර්තෘ පුකාශන.

ශකුර්, අයි.එම්. (2005), ගෝලීය පාරිසරික වෙනස්වීම් සහ මානව ලෙඩ රෝග උාරිය පුකාශකයෝ, වරකාපොල (1991).

Disaster Mitigation in Asia and Pacific, Asian Development Bank, Manila.(1994).

Disaster Management in Metropolitan Areas for the 21<sup>st</sup> Century, UNCRD, New York, United nations Secretariat.(2012), Hazard Profiles of Sri Lanka, Disaster management Centre, Colombo.

Alexander, D. (1999), Natural Disasters, Kluwer Acedemic Publishers, London.

Himayatullah KHAN (2014), Disaster maígement Cycle: A theoretical Approach <a href="http://www.mnmk.ro/documents/2008/2008-6.pdf">http://www.mnmk.ro/documents/2008/2008-6.pdf</a>

Pramanic, M.A.H. (1993), Impact of Disasters on environment and Development INCEDE report No. 3, 1993. Tokyo.

Quarantelli, E. L. 1999. The Disaster Recovery Process: What We Know and Do Not Know from Research. Disaster Research Center. Newark: University of Delaware, available from <a href="http://www.udel.edu/DRC/preliminary/pp286.pdf">http://www.udel.edu/DRC/preliminary/pp286.pdf</a>.

Tennakoon, M.U.A. (1986) Drought Hazards and Rural development, Central Bank of Sri Lanka.

White, G.F. (1974) Natural Hazards: Local, National, Global, New York: Oxford University Press.

# 2. Environment Policies & Legislation

1	Course Code	GEDS 3002
2	Course Title	Environment Policies & Legislations
3	Number of Credits	05
4	Year	Third Year

#### 5 Rationale (Introductory Notes)

To promote economic growth in a sound environmental context requires objective efforts to integrate environmental concerns in development decision making. Environmental policy and legislation course unit is designed to provide students with undergraduate level to understand the current major environmental issues prevailed in the country and to make them aware the evolution of environmental policy, legislation and regulatory mechanism in the country implemented and the implementation procedure in different administrative level to overcome environmental problems and to achieve sustainable development. This course also explores the other national and international commitments regarding safeguard the environmental and their strengths and issues in implementation.

6 Pre-requisites None

#### 7 Course Objectives (Instructional)

- Create awareness on the rationale behind environment policy development and formation of legislation.
- Create a critical understanding of the relevance of major pieces of legislations adapted
  to safe guard the natural resources in the country and to achieve sustainable
  development goals.
- Create awareness on acts, ordinance of state relevance to environmental protection as well as conventions and treaties adopted internationally.

#### **8** Expected Main Teaching Outcomes (By Students)

At the end of this course, students are be able to:

- Present an overview of the rationale behind the development of environmental policy in the country and relevance of the legislation.
- Explain fundamental concepts in environmental law and policy
- Describe the existing environmental policy and the legislations of the country at the state and local levels in order to safeguard land, air, water, biodiversity etc.
- Examine and analyze legal approaches to pollution control, environmental planning and natural resource management.
- Critically examine implementation issues associated with environmental regulation and adapting international environmental laws, agreements, conventions and treaties.

	Main Themes		Sub 7	Themes	No. of Hours
	1	Introduction to	i.	What is Environmental Policy	03
	1.	Environmental	ii.	What is Environment Legislation	03
			iii.	_	
		Policy and	111.	Importance of Environment Policy	
		Legislation	:	and Legislation for a country	
			iv.	Concept of sustainable development	
		0 ' 64		and environmental protection	0.2
	2.	Overview of the	i.	Rationale of the development of	03
		development process		environmental policy	
		of environmental	ii.	National environmental Act	
		policy in Sri Lanka.	iii.	Concepts related to the development	
				of environmental policy	
	3.	<b>Development of</b>	iv.	The administrative structure	03
		Environmental	V.	The political setting	
		regulations in Sri	vi.	Legislative process	
		Lanka	vii.	Background of Environment concerns	
				in legislative process	
	4.	An overview of	i.	Ordinances	03
		Environmental	ii.	Acts	
		legislations in Sri	iii.	Laws	
		Lanka	iv.	Examples for Ordinances	
			•	Crown Land Ordinance	
			•	Land Development Ordinance	
			•	Forest Ordinance	
			•	Fauna and flora protection ordinance	
-	5.	An overview of	i.	Mines and Minerals Law	03
		various Acts and	ii.	Soil conservation Act	
		Laws related to	iii.	Coast Conservation Act	
		environmental	iv.	National Environment Act	
		protection	v.	Marine pollution prevention Act	
	6.	<b>Current environment</b>	i.	Regulations for Environmental	03
		Regulations in Sri		Protection	
		Lanka	ii.	Regulations for Air Quality	
				Maintenance	
			iii.	Regulations for Noise Control	
			iv.	Regulations for Waste Management	
ŀ	7.	Environmental	i.	what is EIA?	03
		Impact Assessments	ii.	EIA in NEA	
		Regulations	iii.	EIA in Coast Conservation Act	

				EIA '- E 1E1 B · · ·		
			iv.	EIA in Fauna and Flora Protection		
				Ordinance		
	0 77	• • •	V.	Existing Legal framework for EIA  Determining whether IEE or EIA	0.2	
	8. EIA process	s in Sri	i.	03		
	Lanka		ii.	Approving procedure for Projects/		
				prescribed projects		
			iii.	Role of Project Approving Agencies		
			iv.	Environmental Scoping		
			v.	Preparation of EIA Report		
			vi.	Incorporation of Social Impact		
				assessment		
	9. EIA process	s in Sri	i.	Extended Cost Benefit Analysis	02	
	Lanka cont.		ii.	Analysis of Alternatives		
			iii.	Public Participation		
			iv.	Appeal procedure		
			v.	Constraints in EIA process		
	10. Internation	al	i.	International Conventions, Protocols	02	
	regulations	for		and treaties		
	environmen	tal	ii.	Framework Convention on Climate		
	protection			Change		
	-		iii.	Ramzar Agreement		
			iv.	Biodiversity Convention		
			v.	BASEL convention		
			vi.	Viana Convention		
	11. Combined I	Field	В	ased on a Case study on a Specific	20	
	Study		1	nvironmental issue		
10		Lectures,		sions, Tutorials, Field visit		
11	Evaluation and Ass	sossmont				
11			Work	Presentation, Conference Type Presenta	ation Projects)	
	Mode of	Assignme			ation, Trojects)	
	Evaluation	Assignine	III – 20	70		
		luation (F	nd Sor	master evaluation = 80 Marks)		
	Mode of	Written Examination – 80%				
	Evaluation	WITHCH E.	Aaiiiiia	titon – 8070		
12		dings				
12	Recommended Rea	Ü	~ ~		O . O .	
	හේරත්, එච්. එම්. බී. එස්.(2015), පාරිසරික පුතිපත්ති හා නීති පාඨමාලා අත්පොත, බාහිර විභාග සහ විස්තාරිත පාඨමාලාඒකකය, ශීූ ජයවර්ධනපුර විශ්වවිදාහලය					
		_		view of Environmental Legislation in Sri L	anka	
			•			
	S Hennayake et al (	eds), Enviro	onment	al Impact Assessment: The Sri Lanka expo	erience	

McCormick, John (2001). Environmental Policy in the European Union. The European Series.

South Asia Co – operative Environment Programme, Compendium of Summaries of Judicial Decisions in Environment Related Cases

South Asia Co – operative Environment Programme, Report of the Regional Symposium on the Role of the Judiciary in Promoting the Rule of Law in the Area of Sustainable Development The South Asian Environmental Low Reports, Vol. 2(1), March1995

National Environmental Act (NEA) No. 47 of 1980

National Environmental (Amendment) Act, No. 56 of 1988

National Environmental Act. Order made by Minister of Environment under Section 23 Z specifying "prescribed" projects.

National Environmental (Procedure for the Approval of Projects) Regulations No.1 of 1993.

Central Environmental Authority : Guidance for Implementing the Environmental Impact Assessment (EIA) Process, 1995

Solow R. (1992) *An Almost Practical Step Toward Sustainability*, Resources for the Future, Washington D.C.

Fiorino, D. J. 1995, Making Environmental Policy, Berkeley, Los Angelies, London, University of California Press.

Dasman, R.F. (1984) "An Introduction to World Conservation" In *Sustaining Tomorrow*, F.R. Thibodena and H.H. Field (eds.) pp 16-24.

World Commission on Environment and Development (1987). *Our Common Future*. Oxford: Oxford University Press.

Eccleston C. and March F., Global Environmental Policy: Principles, Concepts And Practice, CRC Press Inc.

http://www.earthsystemgovernance.net/conceptual-foundatins

# 3. Regional Planning and Inter-sectoral Coordination

٥.	Regional Flamming and	1 111101-300	tor ar Coor umation		
1	Course Code		GEDS 3003		
2	Course Title		Regional Planning & Inter-	-sectoral Coordination	
3	Number of Credits		05		
4	Year		Third Year		
5	Rationale (Introductory N	lotes)			
			-	e on Regional Planning and	
				anning process in achieving	
				. It addresses the regional mplementation, monitoring	
	and evaluation and inter-sec	_		implementation, monitoring	
6	Pre-requisites	200141 000141	None		
7	Course Objectives (Instru	ctional)			
			al knowledge on regional pl	anning towards a	
		lopment.		C	
	To give an insight o	n regional v	ariations, mechanisms of im	plementation, monitoring	
	and evaluation of re	gional plann	ning.		
	_	_	r-sectoral coordination wher		
	_	developmen	tal indicators, targets and go	als in national and	
0	international levels.	04	D C4 J4-)		
8	<b>Expected Main Teaching</b>		•		
			eir practical skills acquired	from the course for	
	prospective develop		the regional imbalances. Pri	aritization of ragional	
		-	entation of regional planning	_	
	significance of inter	_		5 activities and the	
			eir skills acquired from the	course for development	
	activities in the futu		_	_	
9	Content				
	Main Themes	Sub Them	ies	No. of Hours	
	1. Introduction to	i. Wł	nat is Regionalization?	04	
	Regional	ii. Wł	nat is Regional Planning?		
	Planning	iii. Ma	jor Components of		
		Re	gional Planning		
	2. The Need of	i. Ine	equalities of Regions	04	
	Regional	ii. Co	mplex Interactions		
1	Planning				

3. Principles of	iii.	Regional Planning and	04
Regional		Environmental Sustainability	
planning	iv.	Synergic Approach in	
		Regional Planning	
4. Constraints for	i.	Lack of Target Group and	04
Regional		Gender Approach	
Planning	ii.	Lack of People's participation	
	iii.	Demand and Resource	
		Limitations	
	iv.	Interference of Powerful	
		Interest Groups	
5. Different	i.	The Blank State Approach	04
Approaches of	ii.	The Problem-oriented	
Regional		Approach	
Planning	iii.	The Strategic Issues Approach	
	iv.	The Blue-sky Approach	
	v.	The Asset-based Planning	
		Approach	
6. Regional	i.	Regional Variations in	04
Variations		Physical and Human resources	
	ii.	Prioritizing the Regional	
		Requirements	
7. Process of	i.	Designing,	04
Regional	ii.	Budgeting,	
Planning	iii.	Implementation,	
	iv.	Monitoring and Evaluation	
8. Stakeholder	i.	Mechanism in Identifying key	04
Analysis		stakeholders	
	ii.	Importance of stakeholder Analysis	
9. Inter-sectoral	i.	Introduction,	04
Coordination	ii.	Mechanism	
	iii.	Constraints	
	iv.		

	10. Involvement of	i. Health, Agriculture,		04	
	different sectors	Edi	ucation, Social Services,		
	in Inter-sectoral	Security, Local Government			
	Coordination	and	l Public Administration		
	11. Combined Field			20	
	Study				
10	Mode of delivery		Lectures, discussions,		
			Tutorials		
11	<b>Evaluation and Assessmen</b>	nt			
	In Course Evaluation(Tea	m Work, P	resentation, Conference Typ	pe Presentation,	
	Projects)				
	Mode of Evaluation		Assignment – 20%		
	<b>End of Course Evaluation</b>	(End Sem	ester evaluation - 80 Mark	(s)	
	Mode of Evaluation		Examination – 80%		
12	Recommended Reading				
	Cole, J. (1996). Geography	of the World	d's Major Regions.		
	Rowntree, L., Lewi, M., Pri	ce, M. and V	Wyckoff, W. (2003), Diversit	y amid Globalization:	
	World Regions, Environment	nt, Developi	ment, Prentice Hall, New Jers	ey.	
	Economic Development and Social Change in Sri Lanka: A Spatial and Policy Analysis. (Ed)				
	Paul A. Groves, Manohar P	r Publishers & Distributors, New Delhi, (1996)			
	Herington, J. (1989). Planni	lanning Processes: An Introduction for Geographers.			
	Geographies of Developmen	nt (Second I	Edition), Robert B. Potter, To	ny Binns, Jennifer A.	
	Elliott, David Smith - Pears	on Educatio	n Limited, England, (1999)		

# 4. Urban Planning and Development

1	Course Code	GEGE 3004		
2	Course Title	Urban Planning and		
		Development		
3	Number of Credits	05		
4	Year	Third Year		
5	Rationale (Introductory Notes)			
	This course is designed as a survey of ideas and issues in urban geography. Because urban			
	geographers focus on a placerather than on a particular topics relevant to development of the			
	country, region and the world.			

## 7 Course Objectives (Instructional)

**Pre-requisites** 

- Understand and be able to explain major concepts and theories from urban geography
- Understand and to able to explain major approaches to and perspective on urban geography

No

- Be able to recognize and critically analyze the geographical dimensions of urban issues they encounter in their future studies
- Describe the effects of urbanization on the environment pollution (air, water, visual and noise), the results of urban sprawl on surrounding areas, the growth of out-of-town urban activities shopping areas, sports facilities, etc.
- To understand the development planning of the country.

# 8 Expected Main Teaching Outcomes (By Students)

- Students will examine the major concepts and Theoretical frameworks in Urbanization and Development
- Student will discuss basic historical, social, political and economical processes that shape of urban landscape.
- Student will explain and compare the differences on the spatial dimensions of urban phenomena and how they impact people.

urs	
(60)	

	4. Globalization of the system and Develop		Development Trends Global Urbanization Urbanization impact of the Development	02 02 02
	5. Urban Land Use		Urban Land use Changing pattern of the Land use	02 02
	6. Urban Issues		Urban Issues	04
	7. The Role of Solve the Issues	he urban	The Plan to Reduce Urban Issues	04
	8. Urbanization in thi	rd world	Urbanization in Third world Urban Trends in Third World Urbanization	02 02
	9. Urbanization and n in Sri Lanka	new trends	Urbanization in Sri Lanka Urban trends in Sri Lanka	04 04
	10. Urban Issues and P	Planning in	The Impact of Urban Issues in SL	02
	SL	g	Methods of Reduce the Urban Issues in SL	02
	11. Urban Impact of th Environment	ne	Urban Impact of the Environment	04
	12. Urban Function and Area	d Service	Urban Morphology Urban Morphology for Third world Countries	04 02
	13. The Relationship be Urbanization and the Development	etween	Development Inequalities Identification of Reasons for development Inequalities The Role of Towns for development	02 02 02
10	Mode of delivery		Lectures and Group Activities	Group Discussions
11	<b>Evaluation and Assessmen</b>	nt – Continue	s assessment and Written Exam	
	In Course Evaluation	- Group As	signment and Individual Present	ation
	Mode of Evaluation (	Group assign	nment and Presentation (20 ma	rks)
	<b>End of Course Evaluation</b>	- Written Ex	xam	
	Mode of Evaluation \(\mathbf{V}\)	Written Exa	mination (80 Marks)	

## 12 Recommended Reading

Tim Hall 91998) Urban Geography, Routledge, London.. ISBN 0415140846

Pacione.M, (1998), Urban Geography; A global perspective (2<sup>nd</sup> Edition), Routladge, London, ISBN 0415343062

Ratnayake.R.M.K., (2007), Rural – Urban Linkages in Regional Devlopment; the experiences of North Central Sri Lanka, (Auther Publication) Piyasiri Printers, Malabe, Colombo. ISBN 978 955 50519 0 3

ආර්,එම්,කේ. රත්නායක, 2008.,**නාගරික දිළින්දන් හා පාරිසරික සෞඛායය** ., එස් ගොඩගේ සහ සහෝදරයෝ ., කොළඔ 10.

ආර්.එම්., කේ., රත්නායක, 2009,ජනාවාස අධ්යයනය ., කර්තෘ පුකාශන ., කොළඔ.

# 5. Geographic Information Systems for Planning

**Course Code** 

2	Course Title	GIS for Planning				
3		05				
4	Year	Third Year				
5	Rationale (Introductory Notes)					
	The analysis functions use the spatial and non-spatial attributes in the database to answer					
	questions about the real world. Geog	graphic analysis	facilitates the study of a	eal-world		
	processes by developing and applying r			_		
	in geographic data and thus make new	information availa	able. Results of geographi	c analysis		
	can be communicated with the help of n	naps, or both for p	lanning.			
	-					
7		GEDS 2001				
/	Course Objectives (Instructional)		of committee court cumplers	400.040		
	<ul> <li>To provide a background to the fundamental design and production.</li> </ul>	amentai principies	or computer cartography,	шар		
		4:	-1			
	• To expose students to a variety of the	11 0	1			
	To gain a practical understanding use	e of GIS for Plann	ing in different purposes			
8	<b>Expected Main Teaching Outcomes (</b>	Ry Students)				
0	Expected Main Teaching Outcomes (1	by Students)				
	While following the concept and ted	hniques and the	practical secessions, st	udent are		
	familiarize the computer cartography as					
	GIS analysis concepts and application o	f GIS for Planning	g purposes			
0		NI C	CITT	NI C		
9	Content (Main Themes)	No. of Hours	Sub Heading	No. of Hours		
		Hours		nours		
	1. Introduction to fundamental c	oncept 10	i. What is GIS	02		
	and digital mapping		ii. Component of	02		
			the GIS	0.2		
			iii. GIS Users	03		
			iv. History of GIS	03		
	2. Introduction to GIS software	06	Practical Session	06		
	3. Working on in class projects (l	L <b>ab</b> 10	Familiarize the basic	10		
	Exercises)		tools			
	4. Practice different types of The	matic 10	i. Density Map	03		
	Maps		ii. Dot Maps	03		
			iii. Chart	06		
	5. Types Analysis	14	i. Mapping	02		
	5. Types Analysis	17		02		
			ii. Spatial	02		
			Measurement			
i	T control of the cont		I iii Tolovilon Amolyzaia	1 1		
			iii. Tabular Analysis	02		

GEDS3005

					roximity Analysis Overlay	04 04			
	6. An Analysis of applicati Planning	ion of GIS for	10	i. ii.	Land use Analysis Application of Agriculture	04 02			
10	Mode of delivery	Lectures		iii. Gr	Urban Planning oup discussions	04			
11	Evaluation and Assessment In Course Evaluation(Mid Sem	nester Evaluation	1)	•					
	Project 01 (20 Marks)	Mid Term Text			,				
	End of Course Evaluation (End				•				
	Mode of Evaluation	One third writter	1	Two Th	ird Particles (40)				
12	Recommended Reading	text (20)							
12	1. ESRI, 2004, Introduction	to ArcGIS Deskt	on ii	United St	tate of America				
	2. ESRI, 1996, Arc View G				ate of America.				
	3. Burrough.P.A. and McDo	-			Geographical Inform	ation			
	Systems, Oxford Univers			-	8 1				
	4. Lo.C.P and Yeung.A.K.W., 2002, Concepts and Techniques of Geographic								
	Information Systems, New Jersey, USA.								
	5. <a href="http://www.esri.com/">http://www.esri.com/</a> About.com, Inc. <a href="http://gis.about.com/science/gis">http://www.esri.com/</a> About.com, Inc. <a href="http://gis.about.com/science/gis">http://gis.about.com/science/gis</a>								
	6. <a href="http://www.colorado.edu/geography/gcraft/notes/datacon/dat&lt;/th&gt;&lt;/tr&gt;&lt;tr&gt;&lt;th&gt;&lt;/th&gt;&lt;th colspan=6&gt;7. http://www.king.ac,uk/geog/gis/intro.htm&lt;/th&gt;&lt;/tr&gt;&lt;tr&gt;&lt;th&gt;&lt;/th&gt;&lt;th&gt;8. &lt;a href=" http:="" i<="" oddens.geog.uu.nl="" th=""><th></th><th></th><th></th><th></th><th></th></a>								
	9.								

# 6. Social welfare and Community Development

1	Course Code	urse Code GEDS 3006			
2	Course Title	Social welfare and Cor	mmunity Development		
3	Number of Credits	05			
4	Year	Third Year			
5	Rationale (Introductory Notes)				
	In accordance with the central policy	of higher education, en	nhancement of relevance and		
	quality of degree programs to the exten	t that they are capable of	developing the employability		
	of graduates, this course unit of Soci	ial Welfare and Comm	unity Development has been		
	designed.				
6	Pre-requisites	None			
7	Course Objectives (Instructional)				
	Learning Objective				
	To make students aware of the con	acepts and theories of so	cial welfare and development		
	To make students aware of social v	welfare and community	development policies and		
	programs in Sri Lanka	werrare and community	ac veropinent poneres and		
	• To develop skills and attitudes requi	red for active involveme	ent in social welfare and		
	community development practices.	red for delive involvenic	in in social wentere and		
	community development practices.				
8	<b>Expected Main Teaching Outcomes</b>	(By Students)			
	• By the completion of this module st	tudents would have a su	fficient understanding of		
	social welfare and community deve	lopment theories and co	ncepts required for working		
	in those fields.				
	By the completion of the course unit	it students would have a	proper awareness of social		
	welfare and community development in programs in Sri Lanka				
By completing the course students would possess the basic skills of social we					
	community development intervention	on.			

Main Themes	Topic	Hours
. Introduction to social welfare an	d Concepts of social welfare and	2
community development	community development	
2. Social welfare history	Social welfare history of Sri	2
	Lanka	
3. Social problems in Sri Lanka	Social problems, disability, crime	3
	and deviance, ageing, problems	
	related to social institutions	
4. Social welfare policies and	Social welfare policies and	4
programs in Sri Lanka	programs pertaining to education,	
	health and care of people	
	suffering from various problems	
5. Social welfare institutions and	State sector institutions, private	2
organizations	sector and non-governmental	
	organizations	
6. Social welfare and social work	Remedial, preventive,	4
approaches	developmental and supportive	
	approaches	
7. Community	Sociological concepts and	3
v	theories of community	
8. Community development theorie		3
J. Commission of the commissio	development,	
	Social system theory in	
	community development,	
	Empowerment theory	
	Communication theory	
9. Community development	Community capacity building,	4
activities	Social capital formation,	
	economic development,	
	community participation,	
	community organization,	
	Community awareness programs	
10. Community development at	Community development	3
various spaces	requirements in Rural, Estate and	
-	Urban Areas	
11. Issues of community developmen		3
and social welfare	development projects and their	
	impacts	
	Issues of social welfare programs	
		1

1	3. In Course Evaluation	Data collection for field based assignment/Data analysis/preparation of assignment report or Self-review of social welfare and community development programs	20		
10	Mode of delivery	A. Lectures B. Reading of prescribed books and other documents C. Self-review of social welfare and community development programs and project			
11	Evaluation and Assessment In Course Evaluation (Team Work, Presentation, Conference Type Presentation Projects)				
	Mode of Evaluation	In course evaluation $-20\%$			
	End of Course Evaluation (Year-end evaluation -80 Marks)				
10	Mode of Evaluation	Written Examination – 80%			
12	Recommended Reading Johnson Butterfield, A. K., and Y. Korazim-Korosy. 2007. <i>Interdisciplinary community development: International perspectives</i> . Binghamton, NY: Haworth.  DeFilippis, J., and S. Saegert, eds. 2007. <i>The community development reader</i> . New				
	Routledge.				
	Chaskin, R., P. Brown, S. Venkatesh, and A. Vidal. 2001. <i>Building community capacity</i> . N				
	York: Aldine DeGruyter.  Campfens, H., ed. 1997. Community development around the world: Practice, theology.				
	research, training. Toronto: Univ. of Toronto Press.				
	Brophy, C., and A. Shabecoff. 2001. <i>A guide to careers in community developmen</i> Washington, DC: Island Press.				

Rachel Carroll-Larson, (2007) Sustainable Rural Community Development: An Annotated Bibliography Edited by Betsy H. Newman WRDC Writer/Editor/Designer, Western Rural

Development Center Logan UT.



External Degrees and Exension Courses Unit University of Sri Jayewardenepura Gangodawila Nugegoda

E.Mail:info.ext@sjp.ac.lk Web- www.external.sjp.ac.lk Virtual Learning Platform - learnext.sjp.ac.lk