

SUPPLEMENTARY COURSE UNITS

ECONOMICS

EC 201 Introductory Economic Theory (3 credits)

Introduction to microeconomics : Scopes, subject matter and concepts, economical problems; scarcity and choice, opportunity costs, different economic systems. Theory of price: theories of Demand and Supply, the price determination, theory of elasticity. Government role in the economy: Government intervention, taxation and expenditure. Theory of production: short run and long run production functions

Theory of costs: short run and long run costs, law of diminishing marginal productivity, law of returns to scale

Theory of the firm: perfect competition, monopoly and monopolistic competition

Factor markets and price determination. Introduction to macroeconomics: problems and issues: inflation and economic growth. Macroeconomic modeling: circular flow of income, aggregate demand and supply: macroeconomic equilibrium, determination of National Income and output, fiscal and monetary policies.

Money supply and demand; definition of money, creation of money, real GNP and price level.

The global economy: international trade, balance of payment and determination of exchange rate 6hrs

Recommended Texts:

Lipsey, R.G and K. Alec Chrystal, 1995, *Introduction to Positive Economics*, 8th Edition, Oxford: Oxford University Press.

Samuelson P.A and William D. Nordhaus, 1998, *Economics*, 16th Edition, New York: The McGraw Hill.

Parkin M, Powel M and Kent Matthews, 1997, *Economics*, 3rd Edition, Addison Wesley Longman Limited

Shapiro E and William J. Baumol, 1970, *Macroeconomic Analysis*, Harcourt, Brace & World.

Dornbusch R and Stanley Ficsher, 1980, *Macroeconomics*, 2nd Edition, New York: McGraw Hill.

Ghosh B.N and Rama Ghosh, 1993, *Modern Macroeconomics*, 1st Edition, Bombay, Himalaya Pub House.

EC 301 The Sri Lankan Economy (2 credits)

(Prerequisite EC 201)

An introduction to the Sri Lankan economy, Economic progress in independent Sri Lanka: an overall assessment, Sri Lanka's position in the world economy. Primary sector performance, issues and prospects, Industrial sector issues and prospects, services sector, issues and prospects. Government activity, External trade and balance of payments.

Foreign direct investment, Financial institutions and capital markets. Population, poverty and unemployment, Economic development and natural environment. Regional cooperation and economic integration.

Recommended texts:

1. Athukorala,P. and Jayasuriya, S.(1994) *Macroeconomic Policies, Crises and Growth in Sri Lanka, 1960-1990*, The World Bank, Washington.

2. Central Bank (1998) *Economic progress of Sri Lanka*, Central Bank, Colombo.

3. Karunathilake, H.N.S. (1987) *The Economy of Sri Lanka*, Centre for Development studies, Colombo.

4. Lakshman, W.D. (ed.) (1997) *Dilemmas of Development: Fifty years of Economic Change in Sri Lanka*, Sri Lanka Association of Economists, Colombo.

5. Lake House (1986), *Facets of Development in Independent Sri Lanka*, Lake House, Colombo.

MANAGEMENT STUDIES

MG 201 Management Studies I (2 credits)

Business Organizations and Environment :Why Organization Exists, Vision, Missions, Goals .An introduction to the Type of Businesses. The Business And Its Environment

Evolution of Management:Managerial Roles And Skills. Model of effective management

Planning: Plan, Goal Setting, Assess Alternatives, Selecting Best Path, Implementation of Plan

Organizing: Division of Labor, Co-ordination, and Guideline for organizing, Staffing: HR Planning, Job Analysis & Design, Recruitment and Selections, Motivation, Communication, Team Building, Trades Unions, Industrial Relations, Inter-personnel Relations, Conflict Management. Directing: Leadership.

Controlling Accounting: Introduction to Financial Statements. Preparation & Analysis of Financial Statements

Recommended Texts:

1. Beardwell Ian and Len Holden, 1997. *Human Resource management, 2nd edition*, Pitman London.
2. George, Claude S. Jr. 1974. *The History of Management, Trought*. New Delhi: Prentice Hall
3. Jennings, A.R. 1997, *Financial Accounting, 2nd edition*, ELBS, London.
4. Koontz, Harold and Heninz Wehrich, 1993. *Management: A Global Perspective, 10th edition*, McGraw-hill, New York
5. Stoner, James A.F. and Freeman Edward K, 1995. *Management*, Prentice Hall, New Delhi
6. Wood, Frank, 1984. *Business Accounting, Vol.1 & 2, 4th edition*, Pitman, London.

MG 301 Management Studies II (2 credits)

Operation Management: The Process, Planning and controlling, scheduling & Loading and Designing, Quality control, Quality Circle. Industrial Engineering: Plat location & layout, Material handling, Work & Method Study, MIS for operation, Equipment Replacement Management. Design Project and Project management Inventory & Ware-House Management. Productivity and 5 S' system

Marketing Management :The role of Marketing organization and society .Fundamentals of Marketing. Marketing Mix and Production Mix. Product Life Cycle & Consumer Behavior. Issues in Market Segmentation and Target Market. Corporate Marketing Strategies.

Financial Management: Evolution of Financial Management. Goals of FM. Financing, Investing and Dividend Decisions. Capital Budgeting, Working Capital Management, Financing and Financial Institutions

Management Quantitative Techniques: Business Mathematics and Decision-Making, Business Forecasting. Project Evaluation, Linear Programming, Quality Control, Inventory model, Network Analysis, Queuing theory, Regression Analysis, Transportation Model.

Recommended Texts:

1. Jain, K.C.& Aggraval, 1990. *Production Planning and control and Industrial Management* , Khanna Publishers, Delhi.
2. Karunaratne, K.M.R.T.1995, *Quantitative Methods For Management: with applications in planning and decision making*, Author Published, Moratuwa.
3. Kotler , Philip, 1999. *Marketing Management: Analysis, Planning and control*, Prentice-Hall, USA
4. Kooper , V.K. 1994. *Operations Research, (for Managerial decision making)*,New Delhi. Sultan Chand.
5. Lucey, T. 1992, *Quantitative Techniques*, D.P.Publications ,London.
6. Schall , L.D. and Haley C.W. 1991. *Introduction to Financial Management, 6th edition*, McGraw-Hill, New York.
7. Woolf, Emile, 1985, *Financial Management, 3rd edition*, Prentice-hall, Delhi.

SCIENCE EDUCATION

SE 101 Science and Society (3 credits)

(Only for the students who follow the Computational Management programme)

The Scientific Method; Induction and Deduction; Scientific Revolutions: Ancient and Modern Science; Science of Non-Western Societies; Colonial Science; Science and Ethics; Values in Scientific Research and Results; Indigenous Knowledge systems; Technology and Science; Science and Technology in Development; Important Discoveries of Modern Science and their Development; Institutionalization of Science and Technology; Modern Scientific Research and its Funding; Role of Multinationals; Science and Warfare; Scientists and Social Responsibility; Risk and Uncertainty in Science; Science and the Media; Food and Population; Energy; Environment; Oceans; Outer Space; Technology and Trade; Science and Developing Countries

Recommended Text:

1. Okasha, S. 2002, *Philosophy of Science, A Very Short Introduction*, Oxford: OUP
2. Bird, A, 1998, *Philosophy of Science*, Montreal: McGill-Queen's University Press
3. Kuhn, T, 1962, *The Structure of Scientific Revolutions*, Chicago: University of Chicago Press
4. Harre, R., 1981, *Great Scientific Experiments*, New York: Dover Publications
5. Moore, P 2002, *E=mc², The Great Ideas that shaped our World*, London: Quintet Publishing
6. Barnes, B (ed.), 1972, *Sociology of Science*, Penguin, London
7. Barnes, B *et al.*, 1996, *Scientific Knowledge: A Sociological Inquiry*, Athlone, London

SE 201 Foundations in Science Education (2 credits)

How science and science education has progressed in Sri Lanka and globally. Philosophical background that supported to develop science as a discipline. Scientific inquiry and scientific thinking. Nature of science, Scientific method and applications. Cognitive and psycho-social development of the child. Socialisation process in the classroom, school and community.

Recommended text:

1. W.Harlen, *Teaching, learning and assessing science.*

SE 202 Educational Philosophy and Educational Management (2 credits)

(Prerequisite: SE 201)

What is philosophy? Need of philosophy in science teaching. Contributions of Dewey, Plato and Rousseau and their relevance to education in a modern society.

School and classroom management. Functions of an educational manager. Monitoring, mentoring, supervision and inspection of school contexts.

Recommended texts:

1. RB Sund and LW Torbridge, *Teaching science by inquiry in the secondary school*,
2. M.Brainne, D.Kerry and M.Piling, *Practical classroom management*

SE 301 Methodology in Teaching Science (2 credits)

(Prerequisite: SE 201)

Preparation to be a science teacher. How to teach science using different methods and strategies to encourage active student learning with special reference to cooperative and collaborative learning and constructivism. A learning model towards meaningful learning. Teaching practice. Curriculum design. How to plan a science lesson, laboratory activity, demonstration.

Recommended texts:

1. K.Barry and L.King, (1998) *Beginning teaching*, Social sciences Press
2. W.Harlen, (2000) *Teaching, Learning and assessing Science*, Paul Chapman publishing Ltd.

*SE 302 Teaching practice (2 credits)

(Prerequisite: SE 201)

Lesson planning to teach a unit or two units in Grades 6-10 science/mathematics syllabus and implement those plans in classroom teaching.

Recommended texts:

1. K.Barry and L.King, (1998) *Beginning teaching*, Social sciences Press
2. JE Kemp, (2000) *Instructional design, A plan for unit and course development*, John Wiley .

SE 303 Assessing students in the learning process (2 credits)

(Prerequisite: SE 201)

Scales of measurement (nominal, ordinal, interval & ratio). Measures of central tendency (mean, median & mode) frequency distributions, normal and skewed distributions. Taxonomy of educational objectives in cognitive domain. Different types of assessments. On going assessments and assessing practicals. School-based assessment (SBA). Constructing a test and checking for validity and reliability. Marking answer scripts and awarding a grade using formal and non-formal assessments.

Recommended texts:

1. K. Barry and L. King, (1998) *Beginning teaching*, Social sciences Press
2. W. Harlen, (2000) *Teaching, Learning and assessing Science*, Paul Chapman publishing Ltd.

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