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ASSOCIATION OF CERTIFIED CHARTERED ECONOMISTS
WWS 512B
AAFAM.US
COURSES & EXAMINATIONS DESCRIPTION

The Chartered Economists Program (Ch.E.) offers an ambitious curriculum that puts students in the middle of the Governmental Programs; Financial Institution, Petroleum Organization, Management positions of corporate bodies and non Governmental organizations.

Objective

The Ch.E. provides students with opportunities to develop the analytical, practical and interpersonal skills crucial to sound managerial decision-making in an increasingly complex economics and financial environment.

The Ch.E. is an advance professional program designed to prepare student for a challenging career.

Our commitment is to prepare Ch.E. students for high level careers in an increasingly global economics and financial environment. This program is offered to qualified students who seek to serve in a leadership role in economics. Emphasis is placed on the integration of organizational activities and how the various departments and functions need to work in a concerted effort to optimize organizational output. The courses in this program concentrate on the presentation of techniques that provide skills in analysis, decision-making and effectiveness assessment.

Fundamental Level

The fundamental level is a non-technical course in Economics and accounting as well as exposes students to Quantitative Economics. Study must focus on understanding basic Economics principles and mathematical exposition. Emphasis should not be placed on mathematical calculations but understanding of the application of mathematical exposition to economics. However, little exposure to economics (Macroeconomics and Microeconomics) is assumed. Therefore, keep Math's to the minimum necessary.

Examination Composition: All papers in the fundamental level contains 50 multiple choice questions 2 marks within 2hours

Associate Part I, II & III

The pre-requisite is first degree or equivalent. However, previous exposure to Microeconomics and Macroeconomics is assumed. Econometrics Mathematics must be well exposed to candidates.

Part II & III are intermediate, highly technical course in Economics. Emphasis must be laid on analysis of contemporary Economic issues with economic tools learnt. This is to enhance student's knowledge and skills in Economic issues.

Students are advice to study into detail the course modules provided by the ACCE/AAFAM Board of Standards. Charter will be issued to students who are able to demonstrate adequate knowledge in their field of selected specialization.

Candidate must cover the detailed course module provided by the board of standards.

Examination Description (ACCE Part I, II & III)

The current Part I & II format requires answers to four essay questions (designed to take 45mins).

The paper is 3hrs 15mins, given 15mins. of reading time.

The Part III examination format also requires answers to five essay questions within 3hrs, given 15mins. of reading time.

Most questions (All Parts) tend to require diagrammatical analysis to assess a policy proposal or illustrate a principle, rather than rigorous mathematics to solve formal models. They tend to be structured in the form of mini essays but require focus on a specific issue or example.

Fundamental Level

ACCE G1 Fundamental of Economics
ACCE G2 Quantitative Economics
ACCE G3 Fundamentals of Accounting

PROFESSIONAL EXAMINATIONS (ACCE PART I, II & III)

Associate Part I (ACCE I)

ACCE G4 Economics of Banking
ACCE G5 Investment I
ACCE G6 Risk Management I
ACCE G7 Statistics
ACCE G8 Microeconomics I

Associate Part II (ACCE II)

ACCE G9 Macroeconomics I
ACCE G10 Company Law
ACCE G11 Econometrics I
ACCE G12 International Economics

Specialization ACCE Part II

ACCE G13 Industrial Economics I
ACCE G14 Managerial Economics I
ACCE G15 Energy Economics I
ACCE G16 Health Economics I
ACCE G17 Economic Policy Analysis I
ACCE G18 Financial Economics I
ACCE G30 Petroleum Economics I

Associate Part III (ACCE III)

ACCE G19 Econometrics II
ACCE G20 Investment II
ACCE G21 Risk Management II
ACCE G22 Microeconomics II
ACCE G 23 Macroeconomics II

Specialization ACCE III

ACCE G24 Industrial Economics II (Ch.E.)
ACCE G25 Managerial Economics II (Ch.E.)
ACCE G26 Energy Economics II (Ch.E.)
ACCE G27 Health Economics II (Ch.E.)
ACCE G28 Economics Policy Analysis II (Ch.E.)
ACCE G29 Financial Economics II (Ch.E.)
ACCE G30 Petroleum Economics II (Ch.E.)

FUNDAMENTAL LEVEL

ACCE G1 Fundamentals of Economics

1. The Art and Science of Economic Analysis
The Economic Problem, Resources, Goods and Services
Economic Decision makers, a simple circular – flow model, rational self interest
Microeconomics and Macroeconomics, the science of economics analysis, the role of theory, the scientific Method, normative versus positive Economics, Understanding Graphs, slopes of straight lines, the slope, units of measurement and Marginal analysis
2. Some Tools of Economic Analysis
Choice and opportunity cost, comparative advantage, specialization and exchange, the economy's production possibilities, Economic system
3. Economic Decision Makers
The household, the firm, the government, the rest of the world
4. Demand and Supply Analysis
The law of demand, the demand schedule and the demand curve, shift of the demand curve.
The supply schedule and the supply curve, Shift of the supply curve, market equilibrium, changes in the equilibrium price and quantity, simultaneous shifts of demand and supply curves
5. Elasticity of Demand and Supply
Price elasticity of demand, determinants of the price elasticity of demand, price elasticity of supply, other elasticity measure, Price elasticity and Tax incidence
6. Consumer Choice and Demand
Utility analysis, consumer surplus, the role of time in demand

Recommended Reading

- **Economics: A Contemporary Introduction, 7th Edition by William A. Eachern**

ACCE G2 Quantitative Economics

1. The Nature of Mathematical Economics
Mathematical Versus Nonmathematical Economics, Mathematical Economics versus Econometrics
2. Economic Models
Ingredients of a Mathematical Model, the real-number system, the concepts of sets, relations and functions, types of function, functions of two or more independent variables, levels of generality
3. Equilibrium Analysis in Economics
The meaning of equilibrium, partial market equilibrium-linear model, partial market equilibrium-a nonlinear model, general market equilibrium, equilibrium in national-income analysis
4. Linear Models and Matrix Algebra
Matrices and vectors, matrix operations, notes on vectors operations, commutative, associative and distributive laws, identity matrices and null matrices, transposes and inverses, finite Markov chains, Conditions for nonsingularity of a matrix, test of nonsingularity by use of determinant, basic properties of determinants, finding the inverse matrix, Cramer's rule, application to market and national-income models, Leontief input-output models, limitations of static analysis
5. Comparative Statics and the Concept of Derivative
The nature of comparative statics, rate of change and the derivative, the derivative and the slope of a curve, the concept of limit, digression on inequalities and absolute values, limit theorems, continuity and differentiability of a function.

6 Rules of Differentiation and their Use in Comparative Statics
Rules of differentiation for a function of one variable, rules of differentiation involving two or more functions of the same variable, rules of differentiation involving functions of different variables, partial differentiation, applications to comparative-static analysis, note on Jacobian determinants
- 7 Comparative – Static Analysis of General – Function Models
Differentials, total differentials, rules of differentials, total derivatives, derivatives of implicit functions, comparative statics of general-function models, limitations of comparative statics,

Recommended reading

- **Dowling E.T. (2001) Schaum's Outline of Theory and Problem of Introduction to Mathematical Economics, 3rd edition, The McGraw-Hill Companies, Inc**
- **Holden K. and Pearson A.W. (1992), Introductory Mathematics for Economics and Business, 2nd edition, The Macmillan Press Ltd**

ACCE G3 Fundamentals of Accounting

1. The Accounting world
The nature and purpose of accounting, accounting and the non-accountant, branches of accounting, the accountancy profession, types of entity
2. Accounting Rules
Boundary rules, measurement rules, ethical rules, summary of the basic accounting rules, a conceptual framework
3. Recording Data
The dual aspect rule, working with accounts, a ledger account example, balancing the accounts, the trial balance
4. Basic Financial Accounts
Cash versus profit, preparation
5. Accounting for Adjustments
Accruals and prepayments, bad and doubtful debts, estimating accounting profit
6. Manufacturing Accounts
Construction, links with the other accounts
7. Company Accounts
Limited liability, structure and operation, the profit and loss account, the balance sheet
8. Cash Flow Statements
Profit and cash flow, direct and indirect methods
9. Interpretation of Accounting Data
Ratio analysis, profitability ratios, efficiency ratios, investment ratios, interpretation

Recommended Reading

- **Accounting for Non-Accounting Students, 4th ed, by J.R. Dyson**
- **Financial Accounting and Reporting, 2nd ed by Elliot B. and Elliot J. Prentice Hall, Hemel Hempstead, 1996**

PROFESSIONAL EXAMINATIONS

ASSOCIATE PART I

ACCE G4 Economics of Banking

1. Trends in domestic and international banking
2. Financial intermediation
3. The impact of the capital market
4. Banks and financial intermediation
5. Banking typology
6. International banking
7. The theory of the banking firm
8. Models of banking behaviour
9. Credit rationality
10. Securitization
11. Banking efficiency and the structure of banking
12. Banking competition
13. Banking regulation
14. Risk management
15. The macroeconomics of banking

Recommended reading

- **The Economics of Banking; Kent Matthews and John Thompson**

ACCE G5 Investment I

1. An Introduction To Investments
2. The Creation Of Financial Assets
3. Securities Markets
4. The Time Value Of Money
5. The Tax Environment
6. Risk And Portfolio Management
7. Investment Companies: Mutual Funds
8. Closed-Ended Investment Companies
9. The Valuation Of Common Stock
10. Investment Returns And Aggregate Measures Of Stock Markets
11. Dividends: Past, Present, And Future
12. The Macroeconomic Environment For Investment Decisions

Recommended Reading

- **Investments: An Introduction (With Thomson One – Business School Edition And Stock – Trak Coupon), By Herbert B. Mayo (Author)**

ACCE G6 Risk Management I

1. The Problem of Risk
2. Introduction to Risk Management
3. The Insurance Device
4. Risk Management Applications
5. The Private Insurance Industry
6. Regulation of the Insurance Industry
7. Functions of Insurers
8. Financial Aspects of Insurer Operations
9. The Legal Framework
10. Managing Personal Risks
11. Social Insurance Programs
12. Introduction to Life Insurance
13. The Actuarial Basis of Life Insurance
14. The Life Insurance Contract – General Provisions
15. The Life Insurance Contract – Other Provisions
16. Special Life Insurance Forms
17. Buying Life Insurance

Recommended Reading

- **Fundamentals Of Risk And Insurance , By Emmett J. Vaughan And Therese M. Vaughan**

ACCE G7 Statistics

1. Descriptive Statistics I: Tabular and Graphical Methods
Summarizing qualitative data, summarizing quantitative data, the role of the computer, exploratory data analysis, crosstabulations and scatter diagrams
2. Descriptive Statistics II: Numerical Methods
Measures of location, measures of dispersion, some uses of the mean and the standard deviation, exploratory data analysis, measures of association between two variables, the role of the computer, computing measures of location and dispersion for group data
3. Introduction to Probability
Experiments, the sample space, and counting rules, assigning probabilities to experimental outcomes, events and their probabilities, some basic relationships of probability, Bayes' theorem
4. Discrete Probability Distributions
Random variables, discrete probability distributions, expected value and variance, the binomial probability distribution, the Poisson probability distribution, the hypergeometric probability distribution
5. Continuous Probability Distributions
The uniform probability distribution, the normal probability distribution, normal approximation of binomial probabilities, the exponential probability distribution
6. Sampling and Sampling Distributions
Simple random sampling, introduction to sampling distributions, sampling distribution of \bar{X} , properties of point estimators, other sampling methods
7. Hypothesis Testing
Developing null and alternative hypothesis, type I and type II errors, one-tailed tests about a population mean: large-sample case, two-tailed tests about a population mean: large-sample case, tests about a population mean: small-sample case, tests about a population proportion, hypothesis testing and decision making, calculating the probability of type II errors, determining the sample size for a hypothesis test about a population mean

Recommended Reading

- **P.S. Mann, Introductory Statistics, John Wiley & Sons, 5th edition, 2003**
- **Keller G, and B. Warrack, Statistics for Management and Economics (5th Ed), Duxbury Thomson Learning, 2004**

ACCE G8 Microeconomics I

1. Economics and Economic Reasoning
What economics is, a guide to economic reasoning, economic terminology, economic insights, economic institutions, economic policy options, interpretation graphs about the real world
2. The Economic Organization of Society
Capitalism, socialism, evolving economic systems, the production possibility curve and economic reasoning, comparative advantage, specialization, and trade
3. Supply and Demand
Supply, the marriage of supply and demand, equilibrium
4. Using Supply and Demand
Government inferences: price ceilings and price floors, government inferences: taxes, tariffs, and quotas, the limitations of supply and demand analysis, the roles of government
5. Describing Supply and Demand: Elasticities
Price elasticity, calculating Elasticities, elasticity and supply and demand curves, substitution and elasticity, elasticity, total revenue, and demand, the power of supply and demand analysis
6. Taxation and Government Intervention
Government intervention
7. The Logic of Individual Choice: The Foundation of Supply and Demand
Utility theory and individual choice, rational choice and marginal utility, maximizing utility and equilibrium, rational choice and the laws of demand and supply, applying economists theory of choice to the real world, Sophie's choice, graphing the income constraint, graphing the indifference curve, combining inference curves and income constraints, deriving demand curve from the indifference curve
8. Production and Cost Analysis I & II
The role of the firm, the production process, the costs of production, graphing cost curves, intermission, technical efficiency and economic efficiency, determination of the shape of long-run cost curve, envelope relationship, entrepreneurial activity and the supply decision using cost analysis in the real world, a
9. Perfect Competition
Perfectly competitive market, the profit-maximization level of output, total profit at the profit-maximizing level of output, short-run market supply and demand

Recommended Reading

- **David C. Colander, Economics, 4th Edition: McGraw Hill Irwin**
- **Nicholso, Walter, Microeconomic Theory: Basic Principles and Extensions, 8th edition, New York: Dryden Press, 2002**

ASSOCIATE PART II

ACCE G9 Macroeconomics I

1. Economic Growth, Business Cycles, Unemployment and Inflation
Two frameworks: the long run and the short run, growth, business cycles, unemployment, inflation
2. National Income Accounting
National income accounting, two methods of calculating GDP, using GDP figures, some limitations of national income accounting
3. Growth, Productivity and the Wealth of nations
General observations about growth, the sources of growth, the production function and theories of growth, economic policies to encourage per capita growth
4. Aggregate Demand, Aggregate Supply and Modern Macroeconomics
The historical development of modern Macro, the aggregate demand curve, the aggregate supply curve, the potential output curve, why macro policy is more complicated than the AS/AD model makes it look,
5. The Multiplier Model
The multiplier model, determining the level of aggregate income, the multiplier model in action, limitations of the multiplier model
6. Demand Management Policy
The story of fiscal policy, alternatives to fiscal policy, real-world examples, problems with fiscal and other activist policies, building fiscal policies into institutions,
7. Politics, Surpluses, Deficits and Debt
Defining surpluses and deficits, structural and passive surpluses and deficits, the definition of debt and assets, US government deficits and debt: the historical record, the modern debate about the surplus

Recommended Reading

- **David C. Colander, Economics, 4th Edition: McGraw Hill Irwin**
- **Intermediate Macro, Robert J. Barro, 2009 – 2010**

ACCE G10 Company Law

1. Introduction
General, public and private companies, companies and partnerships, features of the registered company
2. Formation and Promotion
Formation, protection of subscribers and allottees of shares, pre-incorporation contracts
3. Corporate Personality and the Registered Company
The registered company as a separate person, corporate liability, lifting the veil of incorporation
4. The Constitution of the Registered Company
The memorandum of association, the articles of association, using the constitution to contract out of company law
5. Shares
The nature of shares, the power to allot shares, pre-emption rights, payment for shares, classes of shares, variation of class rights, transfer of shares, disclosure of interest in shares

Recommended Reading

- **Company Law, 2nd ed, by Simon Gouling, Cavendish Publishing Ltd**

ACCE G11 Econometrics I

1. The Nature and Scope of Econometrics
What is Econometrics? why study econometrics?, the methodology of econometrics
2. Review of Statistics I: Probability and Probability Distributions
Experiment, sample space, sample point and events, random variables, probability, random variables and their probability distributions
3. Characteristics of Probability Distributions
Expected value: a measure of central tendency, variance: a measure of dispersion, covariance, correlation coefficient, conditional expectation, skewness and kurtosis, from the population to the sample
4. Some Important Probability Distributions
The normal distribution, the t distribution, the chi square probability distribution
5. Statistics Inference: Estimation and Hypothesis Testing
The meaning of statistical inference, estimation and hypothesis testing: twin branches of statistical inference, estimation of parameters, properties of point estimators, statistical inference: hypothesis testing
6. Basic Ideas of Linear Regressions: The Two Variable Model
The meaning of regression, the population regression function, the nature of the stochastic error term, the sample regression function, statistical or stochastic specification of the population regression function, the special meaning of the term "linear" regression, two-variable versus multiple linear regression, estimation of parameters: the method of ordinary least squares, putting it all together
7. The Two Variable Model: Hypothesis Testing
The classical linear regression model, variances and standard errors of ordinary least squares estimators, why OLS?, the properties of OLS estimators, the sampling, or probability, distributions of OLS estimators, hypothesis testing, how good is the fitted regression line: the coefficient of determination, reporting the results of regression analysis, computer output of the lotto example, normality tests, a concluding example: relationship between wages and productivity in the US business sector, 1995-2000, a word about forecasting,
8. Multiple Regression: Estimation and Hypothesis testing
The three-variable linear regression model, assumptions of multiple linear regression model, estimation of parameters of multiple regression, goodness of fit of estimated multiple regression: multiple coefficient of determination, antique clock auction prices revisited, hypothesis testing in a multiple regression, testing hypothesis about individual partial regression coefficients, testing the joint hypothesis $B_2=B_3=0$ or $R^2=0$, two variable regression in the context of multiple regression: introduction to specification bias, comparing two R^2 values, restricted least squares

Recommended Reading

- **Wonnacott R.J. and Wonnacott T.H. Econometrics, Wiley 1970**
- **Johnson J, Econometric Methods, 2nd edn, McGraw-Hill, 1972**
- **Freund J, and Williams F, Modern Business Statistics, Pitman 1959**
- **Bugg D, Handerson M.A et al, Statistical Methods in the Social Sciences, North Holland 1968**
- **Koutsoyiannis A, Theory of Econometrics, 2nd Edition**

ACCE G12 International Economics

1. International Trade Relations
2. The International Economy and Globalization
3. Sources of Comparative Advantage
4. Tariffs
5. Nontariff Trade Barriers
6. Trade Regulations and Industrial Policies
7. Trade Policies for the Developing Nations
8. Regional Trading Arrangements
9. International Factor Movements and Multinational Enterprises
10. The Balance Of Payments
11. Foreign Exchange
12. Exchange Rate Determination
13. Balance Of Payments Adjustments
14. Exchange-Rate Adjustments and the Balance Of Payments
15. Exchange-Rate Systems and Currency Crises
16. Macroeconomic Policy in an Open Economy
17. International Banking: Reserves, Debt, and Risk

Recommendation Reading;

International Economics: Robert J. Carbaugh, Professor of Economics, Central Washington University

SPECIALIZATION ACCE PART II

ACCE G13 Industrial Economics I

1. Industrial Organization: An Introduction
2. Production, costs, demand and profit maximization
3. The neoclassical theory of the firm
4. Managerial and behavioural theories of the firm
5. Transaction costs, agency and resource-based theories of the firm
6. Oligopoly: non-collusive models
7. Oligopoly: collusive models
8. Concentration: measurement and trends
9. Determinants of seller concentration
10. Barriers to entry
11. Market structure, firm strategy and performance

Recommended Reading

- **Industrial Organization: competition, strategy, policy, 3rd ed by John Lipczynski, John Wilson, John Goddard**
- **Ferguson P.R. and Ferguson G.J., Industrial Economics, Issues and Perspective, Macmillan, 1994**
- **Applied Industrial Economics, By Louis Philips**
- **Advanced Industrial Economics , By Stephen Martin**

ACCE G14 Managerial Economics I

1. Introduction and Goals of the Firm
What is managerial economics? The decision-making model, the role of profits, objective of the firm, separation of ownership and control: the principal-agent problem
2. Fundamental Economic Concepts
Demand and supply: a quick review, marginal analysis, the net present value concept, meaning and measurement of risk, the relationship between risk and return, partial differentiation and multivariate optimization
3. Business and Economic Forecasting
Alternative forecasting techniques, deterministic time-series analysis, smoothing techniques, barometric techniques, econometric models, stochastic time-series analysis, forecasting with input-output tables
4. Managing Exports

Introduction, import-export sales and exchange rates, outsourcing, china trade blossoms, the market for US dollars as foreign exchange, foreign exchange risk management, the determinants of long-run trends in exchange rates, purchasing power parity, international trade: a managerial perspective, free trade areas: the European union and NAFTA,

1. Production Economics
The production function, production functions with one variable input

Recommended Reading

- **Economic for Managers, 11th edition, McGuigan Moyer / Harris**
- **Samuelson W.F. and Marks S.G. (2006), Managerial Economics, 5th edition, New York: John Wiley & Sons, Inc (ISM Library)**
- **Paul G. Keat, Philip K.Y. Young (2005), Managerial Economics: Economic Tools for Today's Decision Markers, 5th edition. Upper Saddle River: Prentice Hall (ISM Library)**
- **Managerial Economics: Applications, Strategies And Tactics
By Charles Moyer and Frederick H. Deb, Harris**

ACCE G15 Energy Economics I

1. Energy Economics: an introduction survey
Some basic ideas
Units and heat equivalents
2. Discounting and capital values
First principles, a very small oil well, annuities, some comments on capital values
3. The World Oil Market
Some background of studying the run-up to the oil market endgame
The reserve-production ratio
Oil supply and demand and the reserve-production ratio
A non technical preview of the oil futures market
Oil stocks and oil prices
4. A Fuel of the Future: Natural Gas
Geology, units and some Economics
Economic theory and natural gas: an introduction
Regulation and deregulation
Marginal cost and peak load pricing

Recommended Reading

- **Energy Economics: A Modern Introduction by Ferdinand E. Banks**
- **Robert Schmelzlee and Hussein K. Abdel – Petroleum Economics and Engineering, An Introduction 1978 chap 2,6 and 7**
- **Richard Seba: Economics of Worldwide Petroleum Production**
- **www.OPEC.org**

ACCE G16 Health Economics I

1. Why Health Economics?
2. Utility and Health
3. The Transformation of Medical Care to Health
4. The Demand for Medical Care: conceptual framework
5. Empirical Studies of Medical Care Demand and Applications
6. The Physicians and the Physician Firm
7. Physicians in the Marketplace
8. The Hospital as a Supplier of Medical Care

Recommended Reading

- **Health Economics: International Edition, 4th ed by Charles Phelps**
- **Understanding Health Insurance: A Guide To Billing And Reimbursement
By Jo Ann C. Rowell (Author), Michelle A. Green (Author)**

ACCE G17 Economic Policy Analysis I

1. Unemployment and Inflation
The macroeconomy, unemployment, inflation, which problem is more serious: unemployment or inflation?
2. Government Macroeconomic Policy
Graphing the macroeconomy, gross domestic product (GDP), aggregate demand and supply, government macro policy, the slope of the aggregate supply curve,
3. Taxes, Borrowing and the National Debt
Government taxes, government borrowing, the national debt, proposals to require a balanced budget,
4. Globally Free Markets for the Twenty-First Century?
Markets, the western industrialized world: economic growth, the formerly socialist industrialized world: economic growth, the less-developed world: economic reform,
5. The International Economy and Globalization
Globalization of economic activity, waves of globalization, the United States as an open economy, why is globalization important? Does free trade apply to cigarettes, international competitiveness, competition, productivity, and economic growth, is international trade an opportunity or a threat to workers? Backlash against globalization,
6. Foundations of Modern Trade Theory: Comparative Advantage
Historical development of modern trade theory, production possibilities schedules, trading under constant-cost conditions, changing comparative advantage, trading under increasing cost conditions, comparative advantage extended to many products and countries, exit barriers, empirical evidence on comparative advantage, outsourcing and free trade,
7. Sources of Comparative Advantage
Factor endowments as a source of comparative advantage, does trade make the poor even poorer? Are actual trade patterns explained by the factor – endowment theory? Increasing returns to scale and specialization, overlapping demands as a basis for trade, intraindustry trade, the product cycle: a technologically based theory of trade, dynamic comparative advantage: industrial policy, industrial policies support Boeing and Airbus, government regulatory policies and comparative advantage, business services and comparative advantage, transportation costs and comparative advantage,
8. Tariffs
The tariff concept, types of tariffs, smuggled steel evades US tariffs, effective rate of protection, tariff escalation, production sharing and offshore – assembly provision, posting import duties, tariff welfare effects: consumer surpluses and producer surplus, tariff welfare effects: small – nation model, tariff welfare effects: large –nation model, how tariff burdens exporters, tariff examples, arguments for trade restrictions, the political economy of protectionism,

Recommended Reading

- **Economic Issues and Policy, 3rd ed, by Jacqueline Murray Brux**
- **A. Boardman D, Greenberg, A. Vining D. Weimer, Cost-Benefit Analysis, Concepts and Practice, 2nd edition, 2001**
- **K. Portney, Approaching Public Policy Analysis: An Introduction to Policy and Program Research, Englewood Cliffs, NJ: Prentice-Hall**
- **Hyman, David C., Public Finance: A Contemporary Application of Theory to Policy, (9th Ed), Thomson South-Western, 2008**

ACCE G18 Financial Economics I

1. Finance and the Financial System
Financial Economics
Financial markets and institutions
Managing financial health and performance
2. Time and Resource Allocation
Allocating resources over time
Household saving and investment decisions
The analysis of investment projects
3. Valuation Models
Principles of markets valuation
Valuation of known cash flows: Bonds
Valuation of common stocks

Recommended reading

- **Financial Economics (2nd Edition) (Prentice Hall Series In Finance), By Zvi Bodie (Author), Robert Merton (Author), David Cleeton (Author)**
- **Z. Bodie A. Kane And A.J. Marcus: Investments, 7th Edition, 2008, Mcgraw-Hill**
- **Caprio G. Honohan P. And Stiglitz J (Eds) (2001) Financial Liberations: How Far? How Fast? Cambridge: Cambridge University Press**
- **S.A Ross, R.W. Westerfield And J. Jaffe: “Corporate Finance, 8th Edition, 2007, McGraw-Hill**

ACCE G30 Petroleum Economics I

1. Oil and Oil Prices
2. The markets for energy
3. Natural gas
4. Some principles of petroleum production
5. Theories of price formation for petroleum – Petroleum rents
6. Taxation of oil extraction
7. The management of petroleum wealth
8. Petroleum discoveries and structural charges

Recommended reading

- **Petroleum Economics: Issues and Strategies of Oil and Natural Gas Production, by Rognvaldun Hannesson**
- **Oil and Gas Law – In a nut Shell, 5th Edition, John S. Lowe**

ASSOCIATE PART II

ACCE G19 Econometrics II

1. Functional Forms of Regression Models

How to measure elasticity: the log-linear model, comparing linear and log-linear regression models, multiple log-linear regression models, how to measure the growth rate: the semi-log model, the lin-log model: when the explanatory variable is logarithm, reciprocal models, polynomial regression models, regression through the origin,

2. Dummy Variable Regression Models

The nature of dummy variables, ancova models: regression on one quantitative variable and one qualitative variable with two categories, regression on one quantitative variable and one qualitative variable with more than two classes or categories, regression on one quantitative explanatory variable and more than one quality variable, comparing two regressions, the use of dummy variables in seasonal analysis, what happens if the dependent variable is also a dummy variable? The linear probability model (LPM),

3. Model Selection: Criteria and Tests

The attributes of a good model, types of specification errors, omission of relevant variables bias: “underfitting” model, inclusion of irrelevant variables: “overfitting” a model, incorrect functional form, errors measurement, detecting specification errors: tests of specification errors,

4. Multicollinearity: what happens if explanatory variable are correlate?

The nature of Multicollinearity: the case of perfect Multicollinearity, the case of near, or imperfect, Multicollinearity, theoretical consequences of Multicollinearity, practical consequences of Multicollinearity, detection of Multicollinearity, is Multicollinearity necessarily bad? An extended example: the demand for chickens in the United States, 1960 to 1982, what to do with Multicollinearity: remedial measures,

5. Heteroscedasticity: what happens if the error variable is non-constant?

The nature of Heteroscedasticity, consequences of Heteroscedasticity, detection of Heteroscedasticity: how do you know when there is Heteroscedasticity problem? What to do if Heteroscedasticity is observed: remedial measures, White's Heteroscedasticity-corrected standard errors and t statistics,

6. Autocorrelation: what happens if error terms are correlated?

Consequences of autocorrelation, detecting autocorrelation, How to estimate ρ ,

7. Simultaneous Equation Models

The nature of simultaneous equation models, the simultaneous equation bias: inconsistency of OLS estimators, the method of indirect least squares (ILS), indirect least squares: an illustrative example, the identification problem: a rose by any other name may not be a rose, rules for identification: the order condition of identification, estimation of an overidentified equation: the method of two-stage least squares,

8. Selected Topics in Single Equation Regression Models

Dynamic economic models: autoregressive and distributed lag models, the phenomenon of spurious regression: nonstationary time series, tests of stationarity, cointegrated time series, the random walk model, the logit model,

Recommended Reading

- **Wonnacott R.J. and Wonnacott T.H. Econometrics, Wiley 1970**
- **Johnson J, Econometric Methods, 2nd edn, McGraw-Hill, 1972**
- **Freund J, and Williams F, Modern Business Statistics, Pitman 1959**
- **Bugg D, Handerson M.A et al, Statistical Methods in the Social Sciences, North Holland 1968**
- **Koutsoyiannis A, Theory of Econometrics, 2nd Edition**

ACCE G20 Investment II

1. Analysis Of Financial Statements

2. Behavioural Finance And Technical Analysis

3. The Bond Market

4. The Valuation Of Fixed – Income Securities

5. Government Securities

6. Convertible Bonds And Convertible Preferred Stock

7. An Introduction To Options

8. Option Valuation And Strategies

9. Commodity And Financial Futures

10. Investing In Foreign Securities

11. Investing In Nonfinancial Assets: Collectibles, Natural Resources, And Real Estate

12. Portfolio Planning And Management In An Efficient Market Context

Recommended Reading

- **Investments: An Introduction (With Thomson One – Business School Edition And Stock – Trak Coupon) By Herbert B. Mayo (Author)**

ACCE G21 Risk Management II

1. Annuities and Pension Benefits
2. Managing the Retirement Risk
3. Health Insurance: Disability Income Insurance
4. Health Insurance: Coverage for Medical Expenses
5. Health Insurance for the Elderly
6. Employee Benefits and other Business Uses of Life and Health Insurance
7. The Homeowners Policy – General Provisions
8. The Homeowners Policy Forms
9. Other Personal Forms of Property Insurance
10. Negligence and Legal Liability
11. General Liability Insurance for the Individual
12. The Automobile and its Legal Environment
13. The Personal Auto Policy
14. Commercial Property Insurance
15. Commercial Liability Insurance
16. Surety Bonds and Trade Credit Insurance
17. Insurance in the Future online

Recommended Reading

- **Fundamentals Of Risk And Insurance ; By Emmett J. Vaughan And Therese M. Vaughan**

ACCE G22 Microeconomics II

1. Perfect Competition
Long-run competitive equilibrium, adjustment from the short run to the long run
2. Monopoly
The key difference between a monopolist and a perfect competitor, a model of monopoly, profits and monopoly, the price-discrimination monopolist, the welfare loss from monopoly, barriers to entry and monopoly, normative views of monopoly, government policy and monopoly: aids drugs
3. Monopolistic Competition, Oligopoly and Strategic Pricing
The problem of determining market structure, characteristics of monopolistic competition, output, price and profit of monopolistic competitor, characteristics of oligopoly, models of oligopoly behavior, game theory, oligopoly, and strategic decision making
4. Globalization, Technology and Real World Competition
The goals of real-world firms and the monitoring problem, the fight between competitive and monopolistic forces, how firms protect their monopolies, driving forces in today's economy, technology, efficiency and market structure,
5. Government Policy and Market Failures
Externalities, alternative methods of dealing with externalities, public goods, informational problems, policies to deal with informational problems, government failure and market failures
6. Antitrust Policy and Regulation
Antitrust policy: judgment by performance or structures, history of US antitrust laws, three recent antitrust cases, mergers, acquisitions and takeovers, international competition and antitrust policy in other countries, regulation, government ownership and industrial policies,
7. Microeconomic Policy, Economic Reasoning and Beyond
Economists' differing views about social policy, agreement among economists about social policy, economists' cost/benefit approach to government regulation, failure of market outcomes, government failure, politics and economic policy

1. Politics and Economics; the case of Agricultural Markets
The nature of agricultural markets, the good/bad paradox in agriculture, four price support options, economics, politics and real-world policies, the principle of comparative, varieties of trade restrictions, free trade associations,
2. International Trade Policy
Why economists generally oppose trade restrictions,
3. Who Gets What? The Distribution of Income
Ways of considering the distribution of income
4. Work and the Labor Market
Defining poverty, international dimensions of income inequality, the distribution of wealth, socioeconomic dimensions of income inequality, the problems of redistributing income, income redistribution policies, the supply of labor, the role of other forces in wage determination, imperfect competition and the labor market, political and social forces and the labor market

Recommended Reading

David C. Colander, Economics, 4th Edition: McGraw Hill Irwin

Nicholson, Walter, Microeconomic Theory: Basic Principles and Extensions, 8th edition, New York: Dryden Press, 2002

ACCE G23 Macroeconomics II

1. Politics, Surpluses, Deficits and Debt
2. Money, Banking and the Financial Sector
Why is the financial sector important to macro? The definition and functions of money, alternative measures of money, banks and the creation of money, regulation of banks and the financial sector, financial markets, types of financial assets,
3. Monetary Policy and the Debate about Macro Policy
Duties and structure of the fed, tools of monetary policy, monetary policy in the AS/AD model, problems in the conduct of monetary policy
4. Inflation and its Relationship to Unemployment and Growth
Some basics about inflation, Theories of inflation, inflation and unemployment: the Philips curve, the relationship between inflation and growth,
5. Open Economy Macro: Exchange Rate and Trade Policy
The balance of payments, advantages and disadvantages of alternative exchange rate systems, adjusting the economy to the exchange via trade policy, the gold standard: a fixed exchange rate system, the Bretton woods system: a fixed exchange rate system, the present US system: a partially flexible exchange rate system,
6. International Dimensions of Monetary and Fiscal Policy
The ambiguous international goals of macroeconomic policy, monetary policy and fiscal policy with fixed exchange rates, monetary and fiscal policy with flexible or partially flexible exchange rate regimes, international phenomena and domestic goals,
7. Tools, Rules and Policy
Models, using models to understand and discuss policy

Recommended Reading

- **David C. Colander, Economics, 4th Edition: McGraw Hill Irwin**
- **Intermediate Macro, Robert J. Barro, 2009 – 2010 Edition**

SPECIALIZATION ACCE PART III

ACCE G24 Industrial Economics II

1. Pricing
2. Auctions
3. Product differentiation
4. Advertising
5. Research and development
6. Horizontal mergers and strategic alliances
7. Vertical integration
8. Vertical restraints
9. Diversification
10. Competition policy
11. Regulation

Recommended Reading

- **Industrial Organization: competition, strategy, policy, 3rd ed** by John Lipczynski, John Wilson, John Goddard
- **Ferguson P.R. and Ferguson G.J., Industrial Economics, Issues and Perspective, Macmillan, 1994**
- **Applied Industrial Economics, By Louis Philips**
- **Advanced Industrial Economics , By Stephen Martin**

ACCE G25 Managerial Economics II

1. Production Economics
The law of diminishing marginal returns, determining the optimal use of the variable input, production functions with multiple variable inputs, determining the optimal combination of inputs, a fixed proportions optimal production process, returns to scale, the meaning and measurement of cost
2. Cost Analysis
Short-run cost functions, long-run cost functions, economies and diseconomies of scale,
3. Prices, Output and Strategy: Pure and Monopolistic Competition
Competitive strategy, price-output determination under pure competition, price-output determination under monopolistic competition, selling and promotional expenses, competitive markets under asymmetric information (optional advanced section), solutions to the adverse selection problem, monopoly defined,
4. Price and Output Determination: Monopoly and Dominant Firms
The sources of market power for a monopolist, price and output determination for a monopolist, the optimal markup, contribution margin, and contribution margin percentage, regulated monopolies, the economic rationale for regulation,
5. Price and Output Determination: Oligopoly
Price leadership, the Kinked demand curve model, avoiding price wars, optimal differential price levels,
6. Pricing Techniques and Analysis
Differential pricing in target market segments, pricing in practice,
7. Government Regulation
The regulation of market structure and conduct, antitrust regulation statutes and their enforcement, antitrust prohibition of selected business decisions, the regulation of externalities, governmental protection of business, the optimal deployment decision: to license or secure captive use, the nature of capital expenditure decisions
8. Long – Term Investment Analysis
A basic framework for capital budgeting, the capital budgeting process,, estimating the firm's cost of capital, cost-benefit analysis, steps in cost-benefit analysis, objectives and constraints in cost-benefit analysis, analysis and valuation of benefits and costs, the appropriate rate of discount, cost-effectiveness analysis,

Recommended Reading

- **Economics for Managers, 11th ed, McGuigan/ Moyer / Harris**
- **Samuelson W.F. and Marks S.G. (2006), Managerial Economics, 5th edition, New York: John Wiley & Sons, Inc (ISM Library)**
- **Paul G. Keat, Philip K.Y. Young (2005), Managerial Economics: Economic Tools for Today's Decision Markers, 5th edition. Upper Saddle River: Prentice Hall (ISM Library)**
- **Managerial Economics: Applications, Strategies And Tactics
By Charles Moyer and Frederick H. Deb, Harris**

ACCE G 26 Energy Economics II

1. Some Aspects of the World Coal Market
Introducing coal supply and demand, Supply and cost
Some theoretical aspects of coal and the environment, Coal and CO₂
2. Energy Derivatives
Future markets terminology and nomenclature
Further mechanics of hedging and speculation, Basic risk
An options fable, The simple algebra of options
Oil swaps, A simple futures market
Rolling a hedge forward, Electricity and economics
3. Daily Load Curves and Load Duration Curves
The economics of load division
Observations on electricity tariffs
4. Uranium, Nuclear Energy and an Introduction to Intertemporal Production Theory
Some nuclear background
Some intertemporal cost and production theory
A few bad nuclear vibrations and comment on option theory
5. Additions, Extensions and Final Remarks
The hotelling hypothesis examined graphically
Convenience yield
Analytical odds and ends: A statistical observation; the Winner's Curse; and real options
Conclusion: from the 20th to the 21st Century

Recommended Reading

- **Energy Economics: A Modern Introduction by Ferdinand E. Banks**
- **Robert Schmelzlee and Hussein K. Abdel – Petroleum Economics and Engineering, An Introduction 1978 chap 2,6 and 7**
- **Richard Seba: Economics of Worldwide Petroleum Production**
- **www.OPEC.org**

ACCE G27 Health Economics II

1. Hospitals in the Marketplace
2. The Demand for Health Insurance
3. Health Insurance Supply and Managed Care
4. Government Provision of Health Insurance
5. Medical Malpractice
6. Externalities in Health and Medical Care
7. Managing the Market: Regulation and Technical Change in Health Care
8. Universal Insurance Issues and International Comparisons of Health Care Systems

Recommended Reading

- **Health Economics: International Edition by Charles E. Phelps**
- **Understanding Health Insurance: A Guide To Billing And Reimbursement
By Jo Ann C. Rowell (Author), Michelle A. Green (Author)**

ACCE G28 Economic Policy Analysis II

1. World Poverty
Economic growth, economic development and standards of living, growth and development, population growth, urbanization and rural-urban migration, aids, a people-oriented strategy,
2. Agriculture
Characteristics of agriculture, government policy toward agriculture, agriculture and less-developed countries
3. Nontariff Trade Barriers
4. Trade Regulations and Industrial Policies
5. Trade Policies for the Developing Nations
6. Regional Trading Arrangements
7. International Factor Movements and Multinational Enterprises
8. The Balance of Payments
9. Exchange – Rate Determination
10. Balance – of – Payments Adjustments

Recommended Reading

- **Economic Issues and Policy, 3rd ed, by Jacqueline Murray Brux**
- **Carl Walsh, Monetary Theory and Policy, chp 1**
- **Frederic S. Mishkin. “Monetary Policy Strategy: How did we get here?” NBER Working Paper No. 12515 (Sept. 2006)**
- **Belcourt, M. McBey K. (2007), Strategic Human Resources Planning. Toronto: Nelson Education Ltd.**

ACCE G29 Financial Economics II

1. Risk Management and Portfolio Theory
Principles of risk management
Hedging, Insuring, and Diversifying
Portfolio Opportunities and Choice
2. Asset Pricing
Capital market equilibrium
Forward and futures markets
Markets for options and contingent claims
3. Corporate Finance
Financial structure of the firm
Real options

Recommended Reading

- **Financial Economics (2nd Edition) (Prentice Hall Series In Finance), By Zvi Bodie (Author), Robert Merton (Author), David Cleeton (Author)**
- **Z. Bodie A. Kane And A.J. Marcus: Investments, 7th Edition, 2008, Mcgraw-Hill**
- **Caprio G. Honohan P. And Stiglitz J (Eds) (2001) Financial Liberations: How Far? How Fast? Cambridge: Cambridge University Press**
- **S.A Ross, R.W. Westerfield And J. Jaffe: “Corporate Finance, 8th Edition, 2007, Mcgraw-Hill**
- **Public Sector Economics & Finance, Abdallah Ali-Nakyea & Samuel Addo**

ACCE G31 Petroleum Economics II

1. The nature and production of oil and gas rights
 - The formation and production of oil and gas
 - Ownership of oil and gas rights
 - Kinds of oil and gas interest
 - Protection of oil and gas rights
2. Conveying oil and gas rights
 - Creation and transfer of oil and gas interests
 - Joint ownership of oil and gas rights
 - Interpretive problems in oil and gas conveyancing
3. Oil and gas leasing
 - Essential clauses of modern oil and gas leases
 - Oil and gas lease savings clauses
 - The lease royalty clause
 - Implied covenant in oil and gas leases
 - Lease transfers
4. Tax and business matters
 - Oil and gas taxation
 - Oil and gas contracts

Recommended reading

- **Petroleum Economics: Issues and Strategies of Oil and Natural Gas Production, by Rognvaldun Hannesson**
- **Oil and Gas Law – In a nut Shell, 5th Edition, John S. Lowe**