



NATIONAL UNIVERSITY OF ENGINEERING
COLLEGE OF GEOLOGICAL, MINING AND
METALLURGICAL ENGINEERING
GEOLOGICAL ENGINEERING PROGRAM

BEG01 – ECONOMY

I. GENERAL INFORMATION

CODE	: BEG01 Economy
SEMESTER	: 4
CREDITS	: 3
HOURS PER WEEK	: 4 (Theory–Practice)
PREREQUISITES	: None
CONDITION	: Compulsory
DEPARTMENT	: Mining Engineering

II. COURSE DESCRIPTION

The course prepares students for the analysis of the economy of a country, its underlying principles and the Government role in the economy. Principles of microeconomy are analyzed together with the law of demand and supply, their elasticity, costs and prices of goods and services. Macroeconomy concepts are also analyzed including inflation, devaluation, GDP, monetary mass, taxes, employment, among other concepts for understanding the economy behavior. Country development factors are also analyzed for understanding the economic position of Peru in the global context.

III. COURSE OUTCOMES

At the end of the course, students:

1. Understand the principles governing economy behavior, markets, competition and companies in the financial and economic activity.
2. Interpret the demand, company production and costs.
3. Explain taxation and formation of companies, economy as a science, microeconomics, consumers and utility.
4. Analyze market failures and potentials, production factors, macroeconomics and its indicators.
5. Analyze the role of the Government and fiscal policy, as well as growth and economic development.

IV. LEARNING UNITS

1. THE COMPANY IN THE FINANCIAL AND ECONOMIC ACTIVITY

Nowadays economy / Market and its features / The world that surrounds us / Prices of goods and services / Cost and price of a product / Supply, demand, balance and imbalance / Competition / Prices of similar products / Mistrust of offers that seem attractive / Entrepreneurship / Success factors / Who could be an entrepreneur? / Uncertainty / Companies prepared before a surprise change / Saving and investment / Financial system / Peruvian Reserve Central Bank / Modern tendencies for the financing of companies (stocks, bonds, etc.) / Globalization of economy.

2. ROLE OF THE GOVERNMENT IN THE ECONOMY - TAXATION – SOCIAL ECONOMY

Role of the Government in the economy, its importance / Market economy / The Government as arbiter of the economy / Functions of the State / State presence in the economy / Inflation / Causes and effects of inflation / How to protect yourself from inflation / Poverty and distribution of income in Peru / Magnitude and indicators of poverty in Peru / Social policy, priorities / Need and importance of taxes / SUNAT / Tax evasion / Informal economy / Companies formation / Initiation of a business / Types of companies / Individual companies / Scarcity, competition, cooperation and efficiency / Economic system components / Economic changing theory and

models / Microeconomics / Goods and services / Production and its factors: labor, capital, natural resources and knowledge / Adam Smith, initiator of the modern economy / Consumers, their features / Consumers and prices related to real income

3. DEMAND: BEHAVIOR, PRODUCTION AND COSTS

Demand and demanded quantity / Demand laws / Elastic and inelastic demand / Consumer surplus / Individual and market demand / Factors that determine demand / Price of goods, revenue, income, expenses and population / Elasticity and seasonality of demand / The short and long term / Efficiency. Technological, economic, cost / Cost in the short term: total cost, fixed and variable costs / Costs in the long term / Marginal costs / The law of diminishing returns / Size or scale of a company.

4. SUPPLY: BEHAVIOR, MARKET FUNCTIONING

Law of supply / Individual and industry quote / Factors that determine supply: prices of other goods, productive factors, changes in technology and producers expectations / Elasticity of supply / Effect of time on supply elasticity / Seasonality supply / Short and long term supply / The free market and Government role / Changes in demand and supply / Control of prices / Competition in markets / Market of free competition / Monopoly / Oligopoly.

5. FAILURES AND POTENTIAL MARKET, FACTORS OF PRODUCTION, MACROECONOMICS AND INDICATORS

Market failures / Public goods / Externalities / Free-market potential / Exchange production factors / Job market / Market of natural resources / Capital markets / Macroeconomics / Fundamentals of microeconomics and macroeconomics / The economy as a system / Terms of trade in an economy / Macroeconomic indicators / Gross Domestic Product GDP / GDP and added expenses / Gross National Product GNP / Price index / Employment indicators.

6. THE STATE AND THE FISCAL POLICY

The finances of the State / Size of the State / Incomes and expenditures of the State / The public budget / Surplus and fiscal deficit / Money and monetary policy / Peruvian status in the world / International trade / Free trade versus protectionism / Foreign capital / Foreign investment / External borrowing / Development assistance / External sector indicators / Exchange rate Peruvian economic activity with other countries which have greater commercial links / Aggregate supply / Keynes: Birth of macroeconomics / Friedman: Monetarism / Fiscal deficit: Financing / Other causes of inflation and its effects / Unemployment: Causes and how to combat it

V. PRACTICAL EXPERIENCES

- Session 1: Financial and economic activities.
- Session 2: Role of the state in the economy.
- Session 3: Demand analysis.
- Session 4: Offer analysis.
- Session 5: Failures and potential markets.
- Session 6: Peruvian status in the global economy.

VI. METHODOLOGY

The course takes place in theory and practice sessions. In theory sessions, faculty presents concepts, principles and methods. In practice sessions, students analyze different problem on microeconomy, macroeconomy, the role of government, free market, and the Peruvian economy and its status in the global economy. At the end of the course the student should present and exhibit a final project. Student active participation is promoted.

VII. GRADING FORMULA

The Final Grade PF is calculated as follow:

$$PF = EP + 2*EF / 3$$

EP: Mid-Term Exam

EF: Final Exam

VIII. BIBLIOGRAPHY

1. PINDYCK, R. S.
Microeconomics, fifth edition.
2. FERNANDEZ BACA.
Microeconomics, Theory and Applications. Volume I & II, 2010