



Universidad Nacional de Ingeniería (UNI)
Escuela Profesional de
Ciencia de la Computación
Sílabo 2024-II

1. CURSO

EC101FCCS. General Economy (Mandatory)

2. INFORMACIÓN GENERAL

2.1 Curso	:	EC101FCCS. General Economy
2.2 Semestre	:	3 rd Semester.
2.3 Créditos	:	3
2.4 horas	:	2 HT; 2 HP;
2.5 Duración del periodo	:	16 semanas
2.6 Condición	:	Mandatory
2.7 Modalidad de aprendizaje	:	Face to face
2.8 Prerrequisitos	:	None

3. PROFESORES

Atención previa coordinación con el profesor

4. INTRODUCCIÓN AL CURSO

Economics is the study of how societies allocate scarce resources. For computer science students, understanding economic principles is valuable for decision-making in business contexts, evaluating technology projects, and understanding the economic impact of innovations. This course provides an introduction to microeconomic and macroeconomic principles.

5. OBJETIVOS

- Understand the fundamental principles of microeconomics and macroeconomics.
- Analyze supply, demand, and price formation in markets.
- Evaluate economic policies and their impact on society.

6. RESULTADOS DEL ESTUDIANTE

- 1) Analyze a complex computing problem and apply principles of computing and other relevant disciplines to identify solutions. (Assessment)
- 4) Recognize professional responsibilities and make informed judgments in computing practice based on legal and ethical principles. (Usage)
- 6) Apply computer science theory and software development fundamentals to produce computing-based solutions. (Familiarity)

AG-C07) Computing Knowledge: Applies appropriate knowledge of mathematics, science, and computing. (Assessment)

AG-C09) Solution Design and Development: Designs, implements, and evaluates solutions for complex computing problems. (Usage)

AG-C12) Applies computer science theory and software development fundamentals to produce computer-based solutions. (Familiarity)

7. TEMAS

Unidad 1: Introduction to Economics (6 horas)	
Resultados esperados: 1,AG-C07	
Temas	Objetivos de Aprendizaje (<i>Learning Outcomes</i>)
<ul style="list-style-type: none"> • What is economics? • Basic principles of economics. • Microeconomics vs. Macroeconomics. • Economic thinking. 	<ul style="list-style-type: none"> • Define the basic concepts of economics. [Familiarizarse] • Differentiate between microeconomics and macroeconomics. [Usar] • Apply economic thinking to analyze everyday situations. [Evaluar]
Lecturas : [Man18], [SN10]	

Unidad 2: Microeconomics: Supply and Demand (8 horas)	
Resultados esperados: 1,AG-C07	
Temas	Objetivos de Aprendizaje (<i>Learning Outcomes</i>)
<ul style="list-style-type: none"> • The demand curve. • The supply curve. • Market equilibrium. • Elasticity. 	<ul style="list-style-type: none"> • Explain the law of demand and supply. [Familiarizarse] • Determine market equilibrium. [Usar] • Calculate and interpret the price elasticity of demand. [Evaluar]
Lecturas : [Man18], [SN10]	

Unidad 3: Microeconomics: Firms and Markets (10 horas)	
Resultados esperados: 1,AG-C07,AG-C09	
Temas	Objetivos de Aprendizaje (<i>Learning Outcomes</i>)
<ul style="list-style-type: none"> • Production costs. • Perfect competition. • Monopoly. • Oligopoly. 	<ul style="list-style-type: none"> • Analyze the production costs of a firm. [Familiarizarse] • Describe the characteristics of different market types. [Usar] • Compare and contrast perfect competition with monopoly and oligopoly. [Evaluar]
Lecturas : [Man18], [SN10]	

Unidad 4: Macroeconomics: Measuring Economic Activity (8 horas)	
Resultados esperados: 1,AG-C07	
Temas	Objetivos de Aprendizaje (<i>Learning Outcomes</i>)
<ul style="list-style-type: none"> • Gross Domestic Product (GDP). • Inflation and unemployment. 	<ul style="list-style-type: none"> • Define and calculate GDP. [Familiarizarse] • Explain how inflation and unemployment are measured. [Usar] • Analyze the relationship between GDP, inflation, and unemployment. [Evaluar]
Lecturas : [Man18], [SN10]	

Unidad 5: Macroeconomics: Monetary and Fiscal Policy (8 horas)	
Resultados esperados: 1,AG-C07,AG-C09	
Temas	Objetivos de Aprendizaje (<i>Learning Outcomes</i>)
<ul style="list-style-type: none"> • Monetary policy. • Fiscal policy. 	<ul style="list-style-type: none"> • Explain how monetary policy works. [Familiarizarse] • Describe the instruments of fiscal policy. [Usar] • Analyze the impact of monetary and fiscal policies on the economy. [Evaluar]

Lecturas : [Man18], [SN10]

Unidad 6: Economics of Innovation and Technology (8 horas)	
Resultados esperados: 1,AG-C07,AG-C12	
Temas	Objetivos de Aprendizaje (<i>Learning Outcomes</i>)
<ul style="list-style-type: none"> • The role of innovation in economic growth. • Economic impact of new technologies. • Digital markets. 	<ul style="list-style-type: none"> • Explain how innovation drives economic growth. [Familiarizarse] • Analyze the economic impact of new technologies. [Usar] • Understand the characteristics of digital markets. [Evaluar]

Lecturas : [SN10]

8. PLAN DE TRABAJO

8.1 Metodología

Se fomenta la participación individual y en equipo para exponer sus ideas, motivándolos con puntos adicionales en las diferentes etapas de la evaluación del curso.

8.2 Sesiones Teóricas

Las sesiones de teoría se llevan a cabo en clases magistrales donde se realizarán actividades que propicien un aprendizaje activo, con dinámicas que permitan a los estudiantes interiorizar los conceptos.

8.3 Sesiones Prácticas

Las sesiones prácticas se llevan en clase donde se desarrollan una serie de ejercicios y/o conceptos prácticos mediante planteamiento de problemas, la resolución de problemas, ejercicios puntuales y/o en contextos aplicativos.

9. SISTEMA DE EVALUACIÓN

***** EVALUATION MISSING *****

10. BIBLIOGRAFÍA BÁSICA

[SN10] Paul A. Samuelson and William D. Nordhaus. *Economics*. McGraw-Hill Education, 2010.

[Man18] N. Gregory Mankiw. *Principles of Economics*. Cengage Learning, 2018.