Program Outcome (PO) and Course Outcome (CO)

Microeconomics (I)

Program Outcomes (POs

PO1: Demonstrate a deep understanding of the fundamental concepts of microeconomics, including demand, supply, market structures, and consumer behavior.

PO2: Analyze and interpret economic data using appropriate tools and techniques.

PO3: Apply economic principles to real-world scenarios and make informed decisions.

PO4: Communicate effectively, both orally and in writing, on economic concepts and issues.

PO5: Recognize the interdependence of economic agents and the importance of markets in resource allocation.

PO6: Critically evaluate economic policies and their implications.

PO7: Appreciate the role of economics in understanding societal issues and promoting sustainable development.

Course Outcomes (COs)

CO1: Define and explain the basic concepts of economics, including scarcity, opportunity cost, and efficiency.

CO2: Analyze the determinants of demand and supply, and how they interact to determine market equilibrium.

CO3: Understand the different types of market structures and their implications for pricing and output decisions.

CO4: Calculate and interpret elasticity measures, such as price elasticity of demand and income elasticity of demand.

CO5: Apply the theory of consumer choice to understand how consumers make decisions.

CO6: Analyze the role of government in the economy, including the provision of public goods and the regulation of markets.

CO7: Evaluate the impact of economic policies on individuals, businesses, and society.

CO8: Recognize the interconnections between economic, social, and environmental factors.

CO9: Communicate economic concepts effectively, both orally and in writing; and demonstrate the ability to analyze economic data and draw meaningful conclusions.

These POs and COs provide a clear framework for the course and ensure that students develop the necessary knowledge and skills in economics.

Mapping COs to Pos

| | P01 | P02 | P03 | P04 | P05 | P06 | P07 | |
|-----|-----|-----|--------------|--------------|--------------|-----|-----------------------|--|
| C01 | ✓ | | ✓ | | \checkmark | | ✓ | |
| CO2 | ✓ | ✓ | ✓ | | | | ✓ | |
| CO3 | ✓ | ✓ | \checkmark | | \checkmark | | \checkmark | |
| CO4 | ✓ | ✓ | ✓ | | \checkmark | | ✓ | |
| C05 | ✓ | | ✓ | | | | ✓ | |
| C06 | | | ✓ | | \checkmark | ✓ | ✓ | |
| C07 | | | ✓ | | | ✓ | ✓ | |
| C08 | | ✓ | | | | | | |
| C09 | | | | \checkmark | | | | |

Here's a breakdown of how the Course Outcomes (COs) align with the Program Outcomes (POs) for the Microeconomics I course:

This breakdown demonstrates how the COs are designed to contribute to the achievement of the broader POs. By mastering the COs, students will develop a strong foundation in microeconomics and be able to apply their knowledge to real-world situations.

Macroeconomics (I)

Program Outcomes (POs)

PO1: Demonstrate a deep understanding of fundamental macroeconomic concepts, including national income accounting, income determination, money, inflation, and economic policy.

PO2: Analyze and interpret macroeconomic data using appropriate tools and techniques.

PO3: Apply macroeconomic principles to real-world scenarios and make informed decisions.

PO4: Communicate effectively, both orally and in writing, on macroeconomic concepts and issues.

PO5: Recognize the interdependence of economic variables and the importance of macroeconomic policy in achieving economic stability and growth.

PO6: Critically evaluate macroeconomic policies and their implications.

PO7: Appreciate the role of economics in understanding societal issues and promoting sustainable development.

Course Outcomes (COs)

CO1: Define and explain key macroeconomic concepts, such as GDP, NNP, inflation, and unemployment.

CO2: Calculate national income using different methods and understand the circular flow of income.

CO3: Analyze the determinants of consumption, investment, and government spending in the Keynesian model.

CO4: Determine equilibrium income in the Keynesian model and explain the multiplier effect.

CO5: Understand the classical theory of money and its implications for economic growth and stability.

CO6: Differentiate between demand-pull and cost-push inflation and analyze their causes and effects.

CO7: Evaluate the effectiveness of different anti-inflationary policies; and apply macroeconomic concepts to real-world scenarios, such as analyzing the impact of fiscal and monetary policies.

CO8: Communicate macroeconomic concepts effectively, both orally and in writing; and demonstrate the ability to analyze macroeconomic data and draw meaningful conclusions.

These POs and COs provide a clear framework for the Macroeconomics course, ensuring that students develop the necessary knowledge and skills to understand and analyze macroeconomic issues.

Mapping COs to POs

Here's a breakdown of how the Course Outcomes (COs) align with the Program Outcomes (POs) for the Macroeconomics course:

| | P01 | P02 | P03 | P04 | P05 | P06 | P07 |
|-----|--------------|--------------|-----|--------------|-----|--------------|--------------|
| CO1 | \checkmark | \checkmark | ✓ | | ✓ | | \checkmark |
| CO2 | √ | √ | ✓ | | ✓ | | ✓ |
| CO3 | \checkmark | ✓ | ✓ | | ✓ | | ✓ |
| CO4 | √ | √ | ✓ | | ✓ | | ✓ |
| CO5 | \checkmark | \checkmark | ✓ | | ✓ | \checkmark | \checkmark |
| C06 | \checkmark | ✓ | ✓ | | ✓ | \checkmark | ✓ |
| C07 | \checkmark | ✓ | ✓ | | ✓ | ✓ | √ |
| C08 | | | | \checkmark | | | |

This breakdown demonstrates how the COs are designed to contribute to the achievement of the broader POs. By mastering the COs, students will develop a strong foundation in macroeconomics and be able to apply their knowledge to real-world situations.

Introductory Statistics and Applications (I)

Program Outcomes (POs)

PO1: Demonstrate a strong understanding of basic statistical concepts, including data collection, presentation, and analysis.

PO2: Apply statistical methods to analyze and interpret data effectively.

PO3: Utilize statistical software to perform data analysis and visualization.

PO4: Communicate statistical findings clearly and concisely, both orally and in writing.

P05: Recognize the limitations and assumptions of statistical methods.

P06: Critically evaluate the quality and relevance of data.

Course Outcomes (COs)

CO1: Define and explain key statistical terms, such as variable, attribute, population, and sample.

CO2: Collect data using appropriate methods and sources.

CO3: Organize and present data effectively using various techniques, including tables, charts, and graphs.

CO4: Calculate and interpret measures of central tendency (mean, median, mode) and dispersion (range, variance, standard deviation).

CO5: Construct and analyze frequency distributions, including histograms and frequency polygons.

CO6: Calculate and interpret index numbers, such as price index numbers and quantity index numbers.

CO7: Understand the concepts of skewness and kurtosis and their implications for data analysis.

CO8: Analyze bivariate data using correlation and regression analysis.

CO9: Apply statistical methods to solve real-world problems.

CO10: Critically evaluate the quality and relevance of data.

These POs and COs provide a clear framework for the course and ensure that students develop the necessary knowledge and skills in statistics.

Mapping COs to POs

Here's a breakdown of how the Course Outcomes (COs) align with the Program Outcomes (POs) for the Introductory Statistics and Applications course:

| | P01 | PO2 | P03 | P04 | P05 | P06 |
|------|--------------|--------------|--------------|-----|--------------|-----------------------|
| C01 | \checkmark | | | | | ✓ |
| CO2 | ✓ | ✓ | ✓ | | | ✓ |
| CO3 | \checkmark | ✓ | ✓ | | | |
| CO4 | \checkmark | ✓ | ✓ | | \checkmark | |
| CO5 | ✓ | ✓ | ✓ | | \checkmark | |
| C06 | \checkmark | ✓ | ✓ | | \checkmark | |
| C07 | ✓ | ✓ | ✓ | | \checkmark | |
| C08 | \checkmark | ✓ | ✓ | | \checkmark | ✓ |
| C09 | ✓ | ✓ | ✓ | ✓ | | |
| CO10 | \checkmark | \checkmark | \checkmark | | \checkmark | \checkmark |

This breakdown demonstrates how the COs are designed to contribute to the achievement of the broader POs. By mastering the COs, students will develop a strong foundation in statistics and be able to apply their knowledge to real-world situations.

Introductory Statistics and Applications (II)

Program Outcomes (POs)

PO1: Demonstrate a strong understanding of data types, structures, and their applications in statistical analysis.

PO2: Utilize spreadsheet software (e.g., Microsoft Excel) proficiently for data manipulation, analysis, and visualization.

PO3: Apply descriptive statistical techniques to summarize and analyze data effectively.

PO4: Interpret and communicate statistical findings clearly and concisely.

PO5: Recognize the limitations and assumptions of statistical methods.

PO6: Critically evaluate the quality and relevance of data.

Course Outcomes (COs)

CO1: Differentiate between different types of data (cross-sectional, time series, panel data).

CO2: Collect and organize data using appropriate methods and tools.

CO3: Create and manipulate data frames in a spreadsheet environment.

CO4: Apply data cleaning and formatting techniques to ensure data accuracy and consistency.

CO5: Calculate and interpret measures of central tendency and dispersion for both ungrouped and grouped data.

CO6: Construct and analyze frequency distributions using various techniques.

CO7: Create and customize different types of charts and graphs to visualize data effectively.

CO8: Perform bivariate analysis, including correlation and simple regression.

CO9: Generate random numbers using spreadsheet functions.

CO10: Apply statistical concepts to real-world problems and interpret the results.

These POs and COs provide a comprehensive framework for the course and ensure that students develop the necessary skills in data analysis and application.

Mapping COs to POs

Here's a breakdown of how the Course Outcomes (COs) align with the Program Outcomes (POs) for the Introductory Statistics and Applications (II) course:

| | P01 | PO2 | P03 | P04 | P05 | P06 |
|------|-----------------------|--------------|-----------------------|--------------|--------------|--------------|
| C01 | ✓ | | | | | ✓ |
| CO2 | \checkmark | \checkmark | | | | \checkmark |
| CO3 | \checkmark | \checkmark | | | | |
| CO4 | \checkmark | ✓ | | | | |
| CO5 | | ✓ | ✓ | | \checkmark | |
| C06 | | ✓ | ✓ | | \checkmark | |
| C07 | | ✓ | ✓ | | \checkmark | |
| C08 | | ✓ | ✓ | | \checkmark | ✓ |
| CO9 | | ✓ | | \checkmark | | |
| CO10 | | \checkmark | | | | ✓ |

This breakdown demonstrates how the COs are designed to contribute to the achievement of the broader POs. By mastering the COs, students will develop a strong foundation in data analysis and application using spreadsheet software.