# Essay on mathematics 106 versus economics 100

Psychology, Success

Economics is not Mathematics but mathematics has a great help for economics. It has a dose of reality to some economist according to Michael Edesess, a mathematician. Mathematics from economics has a major difference; there is no mathematician that uses a term in a formula or any statement of any theorem if the said term has defined with accuracy. Economists defined terms such as aggregate demand or economic growth but a thorough study on some real mathematics is suggested to assure an exact definition of the term. Overviews on both subjects are necessary to ensure clarity and depth of learning. Both subjects differ in its objectives of learning and level of difficulties. The subjects had similarities and benefits too. Mathematics 106 and Economics 100 cover several major topics and subtopics. Mathematics 106 or Calculus Business and Economics; it covers functions, intuitive limits, derivatives, applications of the derivative and mathematics of finance. While Economics 106 or an introductory unit in Economics, it covers the key principles of both microeconomics and macroeconomics. Different techniques are presented in each subject and many significant theories and real life applications that is applicable for the future of the students. Both subjects can be understood easily with the assistance or expertise of professors that is vital for the learning and comprehension of the students; without their expertise, everything in the subjects is ineffective. For the students, the subjects are not just easy to past without a thorough understanding of each subject. In the class, these subjects require the students their great attention to be able to learn and focus.

Mathematics 106 or Calculus Business and Economics, the subject provides

mathematical foundations in economics, management, and international relations. It starts with pre-calculus topics such as equations, functions, limits, derivatives, applications of the derivative, and matrix algebra with applications in mathematics of finance. Mathematics is the continuous learning throughout the subject; analyzes of various functions and their graphs, use of financial formulae, and apply all the methods of differential calculus to problems and applications. The application of mathematical methods is to characterize theories and evaluate problems in economics. In Mathematics 106, the approach of mathematics in economics allows formulation of theoretical relationship with simplicity and generality; it is discussed that mathematics allows economist to form a testable and meaningful propositions about wide range and complex topics. In addition, the subject of mathematics allows economist to make positive and specific claims regarding controversial topics that are impossible without mathematics. For example, the quantities demanded are functions of prices. Supplies and prices or costs and quantities demanded are some other variables. Calculus aids in finding the rate like the quantity of change. One of the significant uses of calculus in business and economics is in marginal analysis. In economics, the word marginal refers to a rate of change that is to the derivative. Similarly, the marginal revenue is the derivative of the total revenue function and the marginal profit is the derivative of the total profit function. In this framework, differential calculus aids in solving problem of the maximum profits or minimum costs.

Economics 100 or an introductory course in Economics, it emphasizes the application of economic concepts and principles to understand the world.

The subject is also an introductory course in science of consumption, production, and trade, demand, supply, market equilibrium and elasticity. In addition, it discusses on theory of cost and market structure. The objectives of the subject are the nature of the economic problem and the economic way of thinking. The application of analyzes in real world events and its evaluation on issues using economic theory. In microeconomics, it deals with the understanding the behavior of producers, consumers, and markets. It focuses on individuals in their economic decision, business firms, and government agencies as link together. In macroeconomics, the whole economy aggregates economic activity and the business cycle. It is a basic understanding of essential concepts and questions with the fundamental concerns on inflation, unemployment, and output growth. In addition, macroeconomics is the basic concepts of national income, saving, investment, cost of living, and inflation.

The emphasis is first focused on what is mathematics and what is economics. Mathematics is utilized in the universe as a vital tool; in several fields like natural science, engineering, medicine, social science, and finance. Economics is the learning on production and consumption of goods. It explains the interactions of people in the market and accomplishes goals. The comparison between mathematics and economics has started in the idea that if something is not measured and modeled mathematically, everything has no meaning. There is a massive used in mathematics and expected about economics; poor in quality and alter some ideas. The mathematical idea is the focal point of the critical condition of the economic theory that is worsened by financial crisis according to Edesess. Partly, the

crisis is made through the dependency on exactness but not an accurate mathematical model as utilized. The dependency on mathematics is traced to an economics that is falsely desired to some mathematical sciences. The different approaches of the two subjects, Mathematics 106 and Economics 100 are shown in different views in terms of its objectives, level of difficulties, some similarities covered, and the benefits to the students and experts on the field. The general objectives on both subjects have the same vision that is to learn appropriate lessons in the class but on its specific objectives it differs according to its topic discuss. In the level of difficulties, Mathematics 106 is more difficult than Economics 100. It is obviously shown by every topic each subjects have. Mathematics involves computation on complex problems such as derivatives of functions and its application. There is a similarity on the application in the real life situation problems but differ in its process. For example, in dealing on supply and demand, mathematics deals on its derivative functions by real mathematical solutions while in economics, it merely shows the principles and concepts though graph are shown accordingly. Generally, the benefits are common that is the learning of every student and the challenge of every professor teaching the subjects. In addition, benefits outside the class are good and functional, in every individual, government, and the entire community as a whole.

The desire of every individual and the community is well expected accordingly. Economist remains relevant and to return to mathematics and the accuracy it provides to any part of discipline. Mathematics is the tool utilized by economists. Economists focused on addressing humanity and morals with ethical dilemmas and mathematics helps is the heart of

everything. Mathematics 106 is allows the economists to create optimistic and detailed assertions on topics that are impractical without it. Economics 100 conferred on the assumption of cost and market construction. In general, both the subjects have its significance and advantages.

## Reference

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