



Universitas Islam Indonesia

Faculty of Economics

INTERNATIONAL PROGRAM

Syllabus Mathematics for Business and Economics

Subject : Mathematics for Business and Economics
Credit : 3 SKS

Description

This subject contains mathematics in economics which includes function, derivative and integral, linear program and application of those materials in business and economics. Economics variable is stated in symbols and the value is stated mathematically. Thus, this subject provide ratio analysis technique such as those symbols which means ratio from the variable represented.

Learning Outcomes

- Able to explain the meaning of function, understanding its characteristics and the types of function
- Able to complete the operationalization of function, determine the maximum and minimum value of function and do derivation and function integral and complete problems related to economics and business by linear program approach.
- Able to use mathematics as the tool in simplifying problems related to economics and business

Topics

1. Explanation of Mathematics for Economics including Function and Graphic
2. Function and Graphic
3. Function and Graphic
4. The Application of Function in Economics and Business
5. The Application of Function in Economics and Business
6. Derivative (result gained from differential)
7. Derivative (result gained from differential)
8. The Use of Derivative
9. The Use of Derivative
10. Integral
11. The Use of Integral
12. The Use of Integral
13. Linier Programming

References

- Weber, Jean C. Harper & Row, Mathematical Analysis Business and Economic Applications, Harper & Row, New York, 1982.

- Chiang, Alpha C. Fundamental Methods of mathematical Economics, Mc Graw-Hill, New York, 1984
- Nababan, M, Pengantar Matematika Ekonomi untuk Ilmu Ekonomi dan Bisnis, Erlangga, Jakarta, 1994.
- Dumairy, Matematika Terapan untuk Bisnis dan Ekonomi, Dumairy, BPFE - UGM, Yogyakarta, 1991.