## **Applied Mathematics For Economics**

Department	: Applied Mathematics For Economics
Grade	: 3 <sup>rd</sup> Semester (Even Semester 2022/2023)
Credits	: 3 (150 minutes / meeting, 16 meetings in 1 semester)
Instructor	:,Prof. Dr. Imamudin Yuliadi, S.E., M.Si ( <u>imamudin2006@yahoo.co.id</u> )

## **Description :**

In this course, students are able to estimate, describe, explain, decipher, predict, interpret, identify, apply, solve, operate, and analyze in economic case solving techniques using the application of mathematics.

# **The Course Features**

# Students will be able to:

- Understand the concepts and methodologies of quantitative and qualitative analysis in the context of the development of science and technology.
- Apply thinking critically, logically, systematically, creatively, innovatively in the context of the development of Science and Technology in accordance with the field of Economics.
- Able to process and analyze data with qualitative and quantitative approaches rationally, critically and systematically.

#### **Reference :**

- Dumairy. 2010. Applied Mathematics For Business And Economics. Twelfth Edition. BPFE. Yogyakarta
- John E Weber. Mathematical Analysis: Business and Economics. McGraw-Hill, New York
- Alpha Chiang & Kevin Wainwright. 2005. Fundamental Methods Of Mathematical Economics. Fourth Edition. Mc. Graw-Hill Book Inc. York
- Ian Jacques, Mathematics for Economics and Business, Addison-Wesley, New York/Tokyo/Singapore

#### Assessment :

TOTAL		100%
<b>Competency Test</b>	(@CE=15%)	= 60%
Quiz	(@Quiz=5%)	= 15%
Task/homework	(@Asg=5)	= 15%
Softskill		= 10%

# Syllabus

Week	Content
1	Unlimited Optimization
2-5	Optimization with Constraints
6	Matrix
7	Linear Programming
8-16	Application of Mathematics Calculus