## Applied Mathematics For Economics

Department : Applied Mathematics For Economics
Grade $\quad: 3{ }^{\text {rd }}$ Semester (Even Semester 2022/2023)
Credits $\quad: 3(150$ minutes / meeting, 16 meetings in 1 semester $)$
Instructor :,Prof. Dr. Imamudin Yuliadi, S.E., M.Si (imamudin2006@yahoo.co.id)

## 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 :

| Softskill |  | $=10 \%$ |
| :--- | :---: | :---: |
| Task/homework | $(@ \operatorname{Asg}=5)$ | $=15 \%$ |
| Quiz | $(@ \mathrm{Quiz}=5 \%)$ | $=15 \%$ |
| Competency Test | $(@ \mathbf{C E}=\mathbf{1 5 \%})$ | $\mathbf{= 6 0 \%}$ |
| TOTAL |  | $\mathbf{1 0 0 \%}$ |

## Syllabus

| Week | Content |
| :---: | :--- |
| 1 | Unlimited Optimization |
| $2-5$ | Optimization with Constraints |
| $\mathbf{6}$ | Matrix |
| $\mathbf{7}$ | Linear Programming |
| $8-16$ | Application of Mathematics Calculus |

