

Numerical Analysis

Syllabus Number

4C203

Special Subjects

Elective 2 credit

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1. Course Description

Numerical analysis is a widely used technique to solve various practical problems such as weather forecasting, rocket launching, designing automobiles and aircrafts, among others.

In this course we emphasize both numerical differentiation and numerical integrals, etc.

Numerical differentiation leads to understanding of chaos that are utilized in a number of fields.

2. Course Objectives

After taking this course, students will be able to differentiate a number of functions numerically.

By utilizing numerical differentiation, the students will understand the concept of chaos.

Finally, they will be able to integrate various functions numerically.

3. Grading Policy

Two sets of reports and a final exam.

4. Textbook and Reference

Textbook

There are two reference books:

1. K. Akimoto "Kyoukara tsukaeru bibunhouteishiki" Kodansha Publications Inc.,

2. H. Kawasaki "C&Fortran niyoru suuchi kaiseki no kiso" Kyoritsu Publications Inc.

5. Requirements(Assignments)

Before taking the finals, it is advisable to read the subtext once more.

6. Note

7. Schedule