

Module Code	21349008	Course Term
Course Subject Name	Physical Mathematics and Practices	Autumn Semester
Course Tutor	Ton V. TA	
Credit	3	Taught Day
Schools	School of Agriculture	MON-3,4
Taught Year	The second year	
Campus	Ito campus	
Subject Area	Lecture	
Course Subject Classification	Common basic subject	
Course Requirements	Class attendance	
Course Requirement (Pre-requisite)	None	
Course Outline		
To study basic concepts and techniques of mathematics, and their applications in other fields		
key words		
Differentiation, Integration, Matrices, Differential Equations		
Study Objectives (General)		
How to use mathematical tools for solving realistic scientific and engineering problems		
Study Objectives (Specific)		
To learn and practise		
a) fundamental concepts on calculus, algebra, and ordinary and partial differential equations		
b) applications of mathematics in physics and engineering		
Course Plan		
1. Infinite Series and Power Series		
2. Complex Numbers		
3-4. Differentiation		
5-6. Integration		
7. Matrices and Determinants & Midterm exam		
8. Vector Analysis		
9. Fourier Series & Transforms		
10. Ordinary Differential Equations and Applications		
11. Partial Differential Equations and Applications		
12. Functions of a Complex Variable & Final exam		
Course Approaches	Lectures, class exercises, assignments, exams	
Textbooks	Mathematical Methods in the Physical Sciences, Third Edition, Mary L. Boas	
Reference Books	Higher Engineering Mathematics, Sixth Edition, John Bird	
Study consultation (office hour)	Make an appointment with the instructor by email or phone	
	Office: Rm 786, Bldg W5, Ito campus	
	Email: ta.viet.ton.050@m.kyushu-u.ac.jp	Phone: 092-802-4770
Exams/Results	Attendance: 20%	Assignments: 20%
Evaluation Method	Midterm exam: 30%	Final exam 30%
Others		