

100-1 Preliminary Syllabus, Da-Yeh Univ

Information			
Title	工程數學(三)	Serial No. / ID	1951 / MAV3049
Dept.	機械與自動化工程學系	School System / Class	四技部3年1班
Lecturer	吳佩學	Full or Part-time	專任
Required / Credit	Optinal / 3	Graduate Class	No
Time / Place	(一)56 / H466 (四)2 / H441	Language	Chinese

Introduction
<p>Objective: To train students to be able to apply mathematics to solving engineering problems.</p> <ol style="list-style-type: none">1.1 Gain ability in complex number manipulation.1.2 Learn analytic complex functions and their basic operations.1.3 Learn line integrals of analytic complex functions and their applications.1.4 Understand infinite series of complex functions and their applications in potential theories.1.5 Learn fundamentals of partial differential equations

Outline
<ol style="list-style-type: none">1. Complex Numbers and Functions. Conformal Mapping2. Complex Integration3. Power Series, Taylor Series4. Laurent Series, Residue Integration5. Complex Analysis Applied to Potential Theory6. Partial Differential Equations

Prerequisite
Calculus (1 and 2), Engineering Mathematics (1 and 2)