99-2 Preliminary Syllabus, Da-Yeh Univ

| Information | | | |
|-------------------|---------------|-----------------------|----------------|
| Title | 永磁式無刷電機設計實務 | Serial No. / ID | 1713 / EGR5270 |
| Dept. | 電機工程學系碩士班 | School System / Class | 研究所碩士班1年1班 |
| Lecturer | 陳盛基 | Full or Part-time | 專任 |
| Required / Credit | Optinal / 3 | Graduate Class | No |
| Time / Place | (二)34N / H367 | Language | Chinese |

Introduction

In recent years, PM brushless machines have been extensively used in industrial, medical and aerospace applications, including medical assist systems, electromechanical flight actuators, electric vehicles, computers and household electric appliances, among others. Therefore, this course will focus on PM brushless machines design and analysis.

Outline

Chap1. Basic Concept

Chap2. Manetic Circuit Model

Chap3. Relationship between Electric

and Mechanical Formulas

Chap4. Brushless Motor Basics

Chap5. Motor Design

Chap6. Winding Layout

Chap7. Magnetic Circuits Design

Chap8. Machine Control

Chap9. Performances of Brushless Motor

Chap10.Motor Design Examples

Prerequisite

Electric Circuit, Calculus