99-1 Preliminary Syllabus, Da-Yeh Univ

Information			
Title	內燃機	Serial No. / ID	3055 / MAV3047
Dept.	機械與自動化工程學系	School System / Class	四技部3年5班
Lecturer	黃士哲	Full or Part-time	兼任
Required / Credit	Optinal / 3	Graduate Class	No
Time / Place	(四)ABC / H444	Language	Chinese

Introduction

Establish the capability to anaysis, evaluate, and the method to improve the performance of internal combustion engines.
a. Apply fundamental mathematics and physics to internal combustion engines.
b.Understand the construction and operation principles for different kinds of engines.
c.Learn how to apply thermodynamics to analysis engine cycles and modeling according to gasoline and diesel engine combustion systems.
d.Study the parameter effects on the engine torque, horsepower, fuel economy and exhaust emissions.

Outline

1. Introduction
2. Operating Characteristics
3. Engine Cycles
4. Chemistry and Fuels
5. Air and Fuel Induction
6. Gasoline engine Combustion
7. Diesel engine combustion
8. Exhaust Flow

Prerequisite

Thermodynamics, Chemistry, Engineering mathematics, Mechanics of Materials,