

# 102-2 Preliminary Syllabus, Da-Yeh Univ

Information			
Title	高速數位系統設計	Serial No. / ID	1942 / EGR5284
Dept.	電機工程學系碩士班	School System / Class	研究所碩士班1年1班
Lecturer	吳俊德	Full or Part-time	專任
Required / Credit	Optinal / 3	Graduate Class	No
Time / Place	(一)9AB / H369	Language	English

Introduction
<ol style="list-style-type: none"><li>1. A thorough introduction to the digital aspects of basic transmission line theory</li><li>2. Crosstalk and nonideal transmission line effects on signal quality and timings</li><li>3. The impact of packages, vias, and connectors on signal integrity</li><li>4. The effects of nonideal return paths, high frequency power delivery, and simultaneous switching noise</li></ol>

Outline
<ol style="list-style-type: none"><li>1. The Importance of Interconnect Design</li><li>2. Ideal Transmission Line Fundamentals</li><li>3. Crosstalk</li><li>4. Nonideal Interconnect Issues</li><li>5. Connectors, Packages, and Vias</li><li>6. Nonideal Return Paths, Simultaneous Switching Noise, and Power Delivery</li></ol>

Prerequisite
Electromagnetics