

# 101-2 Preliminary Syllabus, Da-Yeh Univ

Information			
Title	光電量測設備	Serial No. / ID	1970 / EDR5204
Dept.	電機工程學系博士班	School System / Class	研究所博士班1年1班
Lecturer	唐寶婷	Full or Part-time	專任
Required / Credit	Optinal / 3	Graduate Class	No
Time / Place	(五)234 / H367	Language	Chinese

Introduction
<p>The course describes electro-optical methods for innovative measurement and how they are implemented with photonic components.</p> <p>Goals of the course are:</p> <ul style="list-style-type: none"><li>- understanding the steps necessary to develop measuring instruments;</li><li>- characterising measurement performances, down to the noise limits;</li><li>- acquiring the design expertise to tackle new measurement problems with effective solutions;</li></ul>

Outline
1. Alignment, Pointing and Sizing Instruments 2. Laser Telemeters 3. Laser Interferometry 4. Speckle-Pattern Instruments 5. Velocimetry 6. Electro-Optical Gyroscopes 7. Fiber Optic Sensors

Prerequisite
General physics, electromagnetism, solid state electronics