

授課教師：花凱龍

Instructor: Kai-Lung Hua

課程名稱：多媒體資訊系統導論

Course Title : Introduction to Multimedia Information Systems

2026/5/6

課程代號：CS3007701 Course Code	必選修：選修/半學年 Required/Elective: Elective/Half Yr.
學分數：3 Credits	先修課程： Prerequisites
節次教室：F10(TR-410) F8(TR-410) F9(TR-410) Time/Location	
專業核心能力： Core Professional Competencies	
課程網址： Course Website	
課程宗旨： Course Objectives	<ol style="list-style-type: none"> 1. 多媒體資料簡介 2. 多媒體發展平台 3. 多媒體編輯軟體 4. 多媒體資訊系統實體設計與建置 <ol style="list-style-type: none"> 1. Introduction to Multimedia <ol style="list-style-type: none"> 1-1 What is Multimedia 1-2 Multimedia and Hypermedia 1-3 Overview of Multimedia Software Tools 2. Graphics and Images Data Representations <ol style="list-style-type: none"> 2-1 Graphics/Images Data Types 2-2 Popular File Formats 3. Color in Image and Video <ol style="list-style-type: none"> 3-1 Color Science 3-2 Color Models in Images 3-3 Color Models in Video 4. Fundamental Concepts in Video <ol style="list-style-type: none"> 4-1 Types of Video Signal 4-2 Analog Video 4-3 Digital Video 5. Basics of Digital Audio <ol style="list-style-type: none"> 5-1 Digitization of Sound 5-2 MIDI (Musical Instrument Digital Interface) 5-3 Quantization and Transmission of Audio 6. Multimedia Data Compression <ol style="list-style-type: none"> 6-1 Lossless Compression Algorithms 6-2 Lossy Compression Algorithms 6-3 Image compression Standards 6-4 Basic Video Compression Techniques 7. Multimedia Communications <ol style="list-style-type: none"> 7-1 Multimedia Information Representation 7-2 Multimedia Networks 7-3 Application and Networking Terminology
課程大綱： Outline of Lectures	<ol style="list-style-type: none"> 1. 多媒體資料簡介 2. 多媒體發展平台 3. 多媒體編輯軟體 4. 多媒體資訊系統實體設計與建置

授課方式： 講授 Lecture：%
Method of Instruction 分組討論 Group discussion：%
案例研討 Case study：%
操做練習 Practical exercises：%
講授 Lecture：%

教科書：
Textbooks

參考書目：
References

修課須知：
Notice

評量方式：
Grading

備註說明：
Notes