

# **Multimedia Techniques & Applications**

## **Syllabus (教學大綱)**

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Office Hours: by appointment

一、【開課系所】：資訊工程學系( ☒學士班 ☐進修學士班 ☐碩士班 ☐碩士在職專班 )

二、【開課年級】：二年級

三、【修別】：選修

四、【科目名稱】（中文）：多媒體技術與應用

（英文）：Multimedia Techniques & Applications

五、【先修科目】：N/A

六、【學分數】：下學期 3 學分

七、【授課時數】：（正課） 3 小時

八、【教學目標】：

Multimedia has become an indispensable part of modern computer technology.

In this course, students will be introduced to principles and current technologies of multimedia system design and gain hands-on experience in this area. Topics include multimedia systems design, multimedia hardware and software, issues in effectively representing, processing, and retrieving multimedia data such as text, graphics, sound and music, image and video.

九、【內容綱要】：

1. Introduction & Fundamentals (Chapters 1 & 2)
2. Bitmapped Images (Chapters 4 & 5)
3. Vector Graphics (Chapter 3)
4. Video (Chapter 6)
5. 3D Stereo Image
6. Workshops: PhotoShop, Lightroom, Adobe Premier, Unity & Blender.  
(+Presentation Tools).

十、Textbook:

N. Chapman and J. Chapman, "Digital Multimedia", 3<sup>rd</sup> ed. Wiley, 2009

Course materials are available on my web-site.

十一、【成績評定原則】：

\* 電機資訊學院同學：

1. Two On-site Programming Exams 20% (10% each)
2. Four Projects: (1) PhotoShop (10%), (2) Lightroom (10%),  
(3) Adobe Premier (20%) –Teamwork, (4) Unity & Blender (15%)

嚴禁抄襲或違反著作權，違者零分計算

Grading Policy : A: 15% of class (score=95),

B: 30% of class (score=85),

C: 30% of class (score=75),

D: 15% of class (score=65),

F: 缺交或遲交 (score=0),

Your project score = the average of two TAs' grades

3. Final Exam – open book (20%)
4. Field Trip/Exhibition Experiencing and Report (5%)
5. Class Attendance: take out 1% per absence.

\* 非電機資訊學院同學：

1. One Multimedia Presentation Tool Practice 10%
2. Four Projects: (1) PhotoShop (15%), (2) Lightroom (10%),  
(3) Adobe Premier (20%) –Teamwork, (4) Unity (20%)

嚴禁抄襲或違反著作權，違者零分計算

Grading Policy: A: 15% of class (score=95),

B: 30% of class (score=85),

C: 30% of class (score=75),

D: 15% of class (score=65),

F: 缺交或遲交 (score=0),

Your project score = the average of two TAs' grades

3. Final Exam – open book (20%)
4. Field Trip/Exhibition Experiencing and Report (5%)
5. Class Attendance: take out 1% per absence.

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