

Medical Imaging System: Spring 2024

Time and Location:

Thursday PM 1:10~4:00 @ EC8037

Instructor:

莊子肇, Associate Prof.

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Website: (Class notes and news are released here.)

https://bmilab.ee.nsysu.edu.tw/lab/course_mis.html



Google Classroom Code: **4nzfpa**

Prerequisites:

信號與系統、數位影像處理(Optional)

Textbooks/References:

1. 自編投影片
2. “Medical imaging signals and systems”, Jerry Prince and Jonathan Links, Pearson Prentice Hall, 2014 (2nd Edition)
3. “Introduction to Medical Imaging: Physics, Engineering, and Clinical Applications”, Nadine Barrie Smith and Andrew Webb, Cambridge University Press, 2010 (1st Edition)

Schedule:

2/22	Introduction to Medical Imaging: Historical review
2/29	X-Ray Radiography and CT
3/7	X-Ray Radiography and CT
3/14	X-Ray Radiography and CT
3/21	Nuclear Medicine Imaging
3/28	Nuclear Medicine Imaging
4/4	停課 (清明節)
4/11	Ultrasound

4/18	Ultrasound
4/25	Magnetic Resonance Imaging
5/2	Magnetic Resonance Imaging
5/9	Magnetic Resonance Imaging
5/16	Safety
5/23	Image quality
5/30	Medical Imaging Processing
6/6	Project report (Imaging in clinical cases)
彈性課程	*Visiting Kaohsiung Veteran General Hospital (Date TBD)

Grading:

Quiz	40%
Class participation	20%
Term project	40%