

課程名稱：生醫訊號處理

英文課名：Biomedical Signal Processing

學分數：3

課程編號：BMES5465

開課時間：W3W4Wn

授課地點：BMES 401

授課對象：碩士班一年級以上、大學部三、四年級

授課教師：葉秩光 助理教授

課程目的：

Students learn principles and applications of biomedical digital signal processing.

課程大綱：

1. Introduction to Biomedical Signals
2. Signals and Systems
3. Fourier Transform
4. Sampling
5. Laplace Transform
6. Z-transform
7. Fast Fourier Transform Processing
8. Filter Design
9. Models for Real-Time Processing

授課方式：

Lecture

成績：

Midterm: 30%

Final: 30%

Home works: 40% (Matlab Program)

參考書目：

1. System Theory and Practical Applications of Biomedical Signals, by G. D. Baura, John Wiley & Sons, 2002
2. Signals and System, by A. V. Oppenheim and A. S. Willsky, 2nd ed., Prentice-Hall, 1997
3. Medical Instrumentation: Application and Design, 3rd edition, John G. Webster, John Wiley & Sons, New York, 1998.