Oppenheim, A.V., 1975. *Digital Signal Processing*. Prentice-Hall.

Chapter 1, discrete time signals and systems
Chapter 3, discrete Fourier transform

Eugene N. Bruce, 2001. *Biomedical Signal Processing and Signal Modeling*. Wiley.
Chapter 1: The nature of biomedical signals
Chapter 2: memory and correlation*
Chapter 3: The impulse response
Chapter 4: the frequency response
Chapter 7: Modeling signals as sums of discrete time sine waves
Chapter 8, section 11~20: filter design**

Semmlow, J.L., 2005. *Circuits, Signals, and Systems for Bioengineers: A MATLAB-based Introduction*. Elsevier Academic Press. (mostly analog/continuous time)
Chapter 2: Basic signal processing
Chapter 3: Frequency transformations

Jerry L. Prince & Jonathan Links, 2006. *Medical Imaging Signals and Systems*. Pearson.

Chapter 5: Projection Radiography*
Chapter 6, section 1&2: CT
Chapter 10: Ultrasound Physics
Chapter 11, section 5, 6: Ultrasound modalities
Chapter 12: MRI Physics
Chapter 13: MRI

Image processing text book:
Gonzalez, R.C., Woods, R.E., 2008. *Digital Image Processing*. Prentice Hall.

*: optional but basic materials you should know
**: optional advanced materials