ECE 90L References

1. Robert Karplus, "Electric Current and Energy Transfer," Chapter 12 of *Introductory Physics: A Model Approach*, 2nd edition published by Fernand Brunschwig, 2011.

This chapter explains the following quantities: voltage, current, energy, and power. Both DC and AC circuits are discussed.

2. Robert Witte, *Electronic Test Instruments: Analog and Digital Measurements*, 2nd edition, Prentice Hall, 2002.

This book offers a nice description of electronic instruments found in a typical circuits laboratory and a description of measurement techniques.

3. Paul Horowitz and Winfield Hill, *The Art of Electronics*, 3rd edition, Cambridge University Press, 2015.

This is a handbook on practical electronics. *The Art of Electronics*, first published in 1981, is popular with electronics design engineers. It would be best to consult the third edition, which was published in 2015.

4. Leon Chua, Charles Desoer, and Ernest Kuh, "Operational-Amplifier Circuits," Chapter 4 of *Linear and Nonlinear Circuits*, McGraw-Hill, 1987. This chapter gives a clear and systematic introduction to operational amplifiers (op amps).

James Blackburn, *Modern Instrumentation for Scientists and Engineers*, Springer-Verlag, 2001. This book describes many kinds of sensors and circuits used for instrumentation.