

Prototyping Books
BMEEn 2151 “Introductory Medical Device Prototyping”
Prof. Steven S. Saliterman

(If not already on reserve in the class storage cabinet in the MDC, Prof. Saliterman can bring the book in for you.)

Electronics:

- Baker, B. A., *Baker’s Dozen: Real Analog Solutions for Digital Designers*, Elsevier – Newnes, Burlington, MA (2005).
- Belin, H.M. *Design of Op Amp Circuits*, Blacksburg, H.W. Sams Indianapolis, IN (1977).
- Carr, J.C. *IC Timers*, H.W. Sams, Indianapolis, IN, (1997)
- Jung, W., *Op Amp Applications Handbook*, Elsevier Newnes, Analog Devices, Burlington, MA (2006) Free on the web.
- Jung, W.G., *IC Op Amp Cookbook* 3rd ed. H.W. Sams, Indianapolis, IN (1991).
- Kochan, S.G., *Programming in C*, 3rd ed. H.W. Sams, Indianapolis, IN, (2005).
- Lancaster, D. and H.M. Berlin, *CMOS Cookbook*, H.W. Sams, Indianapolis, IN (1988).
- Lancaster, D. *TTL Cookbook*, H.W. Sams, Indianapolis, IN (1974).
- Monk, S. *Fritzing for Inventors*, Tab – McGraw Hill Education, New York, NY (2016).
- Monk, S. *Hacking Electronics*, Tab – McGraw Hill Education, New York, NY (2013).
- Nilsson J.W. and S.A. Riedel, *Electric Circuits*, Pearson, NY, (2015)
- Platt, C, *Encyclopedia of Electronic Components: Power Sources and Conversion*, Vol. 1, MakerMedia, Sebastopol, CA (2013)
- Platt, C, *Encyclopedia of Electronic Components: Signal Processing*, Vol. 2, MakerMedia, Sebastopol, CA (2014).
- Platt, C, *Encyclopedia of Electronic Components: Sensors*, Vol. 3, MakerMedia, Sebastopol, CA (2016).
- Platt, C, *Electronics*, 2nd d., MakerMedia, Sebastopol, CA (2015)
- Platt, C, *More Electronics*, MakerMedia, Sebastopol, CA (2014)
- Scherz, P. and S. Monk, *Practical Electronics for Inventors*, 4th ed., McGraw Hill, NY (2016).
- Ulaby, F.T., M.M. Maharbiz and C.M. Furse, *Circuits* 3rd ed. NTS Press, (2016)

Engineering Drawing & CADD/CAM:

- Cogorno, G.R., *Geometric Dimensioning and Tolerancing for Mechanical Design*, McGraw Hill, 2nd ed., New York, NY (2011)
- Lombard, M. *SolidWorks 2011 Parts (or later)*, Wiley, Indianapolis, IN (2011)
- Madsen, D. A. and D. P. Madsen, *Engineering Drawing and Design*, 5th ed., Delmar Cengage Learning, Clifton Park, NY, (2012)

Machining:

- Fitzpatrick, M., *Machining and CNC Technology*, McGraw Hill, New York, NY (2014).

Materials:

Hill, D., *Design Engineering of Biomaterials for Medical Devices*, Wiley, New York, NY (1998).

John, V. *Introduction to Engineering Materials 3rd ed.*, Industrial Press Inc., New York, NY (1992)

Modjarrad, K. and S. Ebnesajjad, *Handbook of Polymer Applications in Medicine and Medical Devices*, 1st ed., Elsevier, William Andrew (2014)

Ratner, B.D., A.S. Hoffman, F.J. Schoen, J.E. Lemons, *Biomaterials Science 3rd ed.* Society for Biomaterials, Academic Press, New York (2013).

Saliterman, S., *Fundamentals of BioMEMS and Medical Microdevices*, Wiley-Interscience and SPIE Press, Bellingham, Washington (2006).

Microcontrollers and Mechatronics:

Blum, J. *Exploring Arduino*, Wiley, Indianapolis, IN (2013).

Boxall, *Arduino Workshop*, No Starch Press, San Francisco, (2013).

Lynch, K.M., N. Marchuk, E.L. Matthew, *Embedded Computing and Mechatronics with the PIC32 Microcontroller*, Newnes-Elsevier, Waltham, MA (2016). Scarpino, M., *Motors for Makers*, Que, Indianapolis, IN, (2016).

Molloy, D. *Exploring Raspberry Pi*, Wiley, Indianapolis, IN (2016).

Sandhu, H.S., *Making PIC Microcontroller Instruments & Controllers*, McGraw Hill, NY (2009).

Sandhu, H.S., *Running Small Motors with PIC Microcontrollers*, McGraw Hill, NY (2009).

Programming:

Johnson, B., *Professional Visual Studio 2013*, Wrox, Indianapolis, IN. (2014)

Kochan, S.G. *Programming in C, 3rd ed.* Developers library, Sams Publishing, Indianapolis, IN (2005).

Monk, S., *Programming Arduino: Getting Started with Sketches*, Tab – McGraw Hill Education, New York, NY (2012).

Monk, S., *Programming Arduino: Next Steps*, Tab – McGraw Hill Education, New York, NY (2012).

Reas, C and B. Fry, *Processing: A Programming Handbook for Visual Designers and Artists*, 2nd ed. MIT (2014).

Stephens, R., *Visual Basic Programming 24hr Trainer*. Wrox, Indianapolis, IN. (2011).

3D Printing

Smyth, C. *Functional Design for 3D Printing*, 2nd ed., Lexington (2016)

Simulation

Nilsson, J.W. and S.A. Riedel, *Introduction to Multisim*. Pearson, Saddle River, NJ (2014)