COOPER UNION SCHOOL OF
ENGINEERING
FALL 2011 BOOKLIST
www.cooper.edu/~lent

ALL BOOKS CAN BE PURCHASED AT:

SHAKESPEARE & CO.
716 BROADWAY(btwn. Astor Place & West 4th Street) AND ARE ON
RESERVE IN THE COOPER UNION LIBRARY

CHEMISTRY

Ch 110 General Chemistry - All Sections
General Chemistry, Hill, et. al., (Pearson Prentice Hall, 4th ed.)

Ch 111 Chemistry Laboratory – All Sections
Fundamentals of Analytic Chemistry, Skoog et. al.,
(Thomson, Brooks, Cole, 8th ed.)

Ch 160 Physical Principles of Chemistry – Topper
Physical Chemistry, Atkins, et. al., (Freeman, 8th ed.-ONLY)

Ch 231 Organic Chemistry I – Bove
Organic Chemistry, Solomons, et. al, (Wiley, 9th or latest ed.)

Ch 251 Instrumental Analysis Laboratory – A/Savizky, B/Kolack, C/
Newmark

Section C Principles of Instrumental Analysis,
Skoog, et. al., (Thompson, Brooks, Cole, 6th ed.)

Ch 261 Physical Chemistry I – Topper
Quantum Chemistry, McQuarrie,
(University Science Books, 2nd ed.-ONLY)
Elements of Statistical Thermodynamics, Nash, (Dover, 2nd ed.)

*Optional:
Solution Manual for Quantum Chemistry, Leung, et. al.,

Ch 333 Advanced Organic Chemistry – Chung
Modern Organic Synthesis,
Zweifel, et. al., (W.H. Freeman, 2007)

CHEMICAL ENGINEERING

ChE 131 Advanced Chemical Engineering Thermodynamics – Brazinsky
The Principles of Chemical Equilibrium,
Denbigh, (Cambridge University Press, 4th ed.)

ChE 440 Advanced Fluid Mechanics – Lepek

ChE 475 Pharmaceutical Engineering – Lepek
*Please note: Do not purchase prior to class
Chemical Engineering in the Pharmaceutical Industry,
am Ende, (Wiley, 1st ed.)

CIVIL ENGINEERING

CE 121 Structural Engineering I - Tzavelis
Structural Analysis, Hibbeler,
(Pearson, Prentice Hall, latest ed.)

CE 331 Foundation Engineering - Guido
Principles of Foundation Engineering,
Braja Das, (Cengage Learning, 7th ed.)

CE 342 Design of Reinforced Concrete Structures – Ahmad
Design of Reinforced Concrete, McCormac, et. al., (Wiley, 8th ed.)
Building Code Requirements for Structural Steel,
American Concrete Institute, (ACI 318-08)

CE 351 Urban Transportation Planning – Selinger
Transportation Engineering and Planning,
C. S. Papacostas, et. al., (Prentice Hall, 3rd ed.)

CE 444 Water and Wastewater Technology - Cataldo
Introduction to Hydrology, Viessman, et. al,(Prentice Hall, 5th ed.)
ELECTRICAL ENGINEERING

ECE 114  Digital Signal Processing – Fontaine

ECE 121  Control Systems I – A/Ahmad; B/Shinners
         Section B Modern Control System Theory and Design,
         Shinners, (Wiley and Sons, 2nd ed.)

ECE 132  Electromechanical Energy Conversion - Shinners
         Circuits, Devices and Systems, Smith, et. al., (Wiley, 5th ed.)

ECE 140  Circuits and Electronics I –All Sections
         Electric Circuits, Nilsson, et. al., (Pearson, 9th ed.)

ECE 142  Circuits & Electronics II –A/Cumberbatch; B/Chatterjee
         Section B Fundamentals of Microelectronics, Razavi, (Wiley, 1st ed.)

ECE 406  Monte Carlo Methods – Chatterjee
         Statistical Electromagnetics,
         Holland, et. al., (Electromagnetics Library,
         Taylor, et.al., latest ed.)

ECE 410  Radar and Sensor Array Processing – Fontaine
         Fundamentals of Radar Signal Processing,
         Richards, (Mc-Graw-Hill, 1st ed.)

INTERDISCIPLINARY ENGINEERING

EID 101  Engineering Design and Problem Solving – A/Cumberbatch, B/
         Delegrammatikas, C/Kirtman, D/Tzavelis
         Section D Engineering Design Process, Haik, et. al.,
         (Cengage Learning, latest)

EID 170  Engineering Economy - Barrett
         Fundamentals of Engineering Economics,
         Park, (Pearson/Prentice Hall, 2nd ed.)

EID 320  Special Topics in Bioengineering - Orbach
         Biology for Engineers, Johnson, (CRC, 2nd ed.)
EID 370   Engineering Management - Barrett
Management, Pearce, et. al., (McGraw Hill, 1st ed., used only)

EID 374   Business Economics – Synnott
How the Economy Works, Mennis, (New York Institute of
Finance, 2nd ed.)
*Suggested Reading:
Hot, Flat and Crowded, Friedman, (Picador, Release 2.0)

ENGINEERING SCIENCE

ESC 100   Engineering Mechanics – C/Dodhia; M/Sidebotham
Section C  Vector Mechanics for Engineers: Statics and Dynamics,
Beer and Johnston, (McGraw-Hill, 9th ed.)

ESC 120/   Principles of Electrical Engineering – Ungar
121 K     Introduction to Electrical Engineering, Paul, et. al.,
(McGraw-Hill, 2nd ed.)

ESC 140   Fluid Mechanics & Flow Systems –C/Cataldo; K/Brazinsky; M/
Section C: Mechanics of Fluids, Shames, (McGraw-Hill, 4th ed.)
*Purchase only at Shakespeare-they have Primis versions
Section K: Fluid Mechanics for Chemical Engineers,
Wilkes, (Prentice Hall, 2nd ed.)

MATHEMATICS

MA 110   Introduction to Linear Algebra - All Sections

MA 111   Calculus I - All Sections
Thomas’ Calculus, Thomas, et. al., (Prentice Hall, latest ed.)

MA 113   Calculus II – All Sections
Thomas’ Calculus, Thomas, et. al., (Prentice Hall, latest ed.)

MA 326   Linear Algebra – Smyth
Linear Algebra, Friedberg, et. al., (Pearson Prentice Hall, 4th ed.)

MA 336   Statistics – Agrawal

MA 350 Advanced Calculus I – Agrawal
Elementary Classical Analysis, Marsden, et. al., (W.H. Freeman, latest ed.)
Analysis on Euclidean Space, Hoffman, (Dover Pub., latest ed.)

MECHANICAL ENGINEERING

ME 151 Feedback Control Systems – Baglione
Systems Dynamics, Ogata, (Pearson Prentice Hall, 4th ed.)

ME 312 Manufacturing Engineering - Wei
Manufacturing Engineering and Technology, Kalpakjian, et. al., (Pearson Prentice Hall, 6th ed.)

ME 408 Introduction to CAE – Bondi
Finite Element Analysis: Theory and Applications with Ansys, Saeed Moaveni, (Pearson Prentice Hall, 3rd ed.)

PHYSICS

Ph 165 Concepts of Physics I – Kreis (for Architects)
College Physics, Serway, et. al, (Thomson, Brooks, Cole, 6th ed.)

Ph 213 Electromagnetics Phenomena - All Sections-Same book as PH112

Ph 291 Introductory Physics Laboratory – Uglesich

Ph 330/Ph 330 EID Introduction to Neural Physics – Uglesich