DEPARTMENT OF PHYSICS - Spring 2007 Textbook List
January 11, 2007

7A: 1, 2 & 3 – Lin, R., Boggs, S. & Charman, A.
REQ Giancoli, PHYSICS FOR SCIENTISTS & ENGINEERS, Vol. 1, 3rd edition, 2000, Prentice Hall
REQ Elby, PHYSICS FOR SCIENTISTS & ENGINEERS, PORTABLE TA PROBLEM SOLVING GUIDE, V. 1, Prentice Hall
REQ Mastering Physics, STUDENT ACCESS KIT, Prentice Hall

7B: 1 & 2 – Wohl, C. & Brown, D.
REQ Giancoli, PHYSICS FOR SCIENTISTS & ENGINEERS, Vol. 1, 3rd edition, 2000, Prentice Hall
REQ Giancoli, PHYSICS FOR SCIENTISTS & ENGINEERS W/ MODERN PHYSICS, Vol. 2, 3rd edition, 2000, Prentice Hall
REQ WEBASSIGN, Student Access Code Card (College Semester), 2003, Webassign
REC Elby, PHYSICS FOR SCIENTISTS & ENGINEERS, PORTABLE TA PROBLEM SOLVING GUIDE, V. 2, Prentice Hall

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H7B: Huang, X.
REQ Purcell, ELECTRICITY & MAGNETISM (Berkeley Physics Course), Vol. 2, 2nd edition, 1985, McGraw Hill

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7C: 1& 2 - Battaglia, M. & Lee, A.
REQ Giancoli, PHYSICS FOR SCIENTISTS & ENGINEERS W/ MODERN PHYSICS, Vol. 2, 3rd edition, 2000, Prentice Hall
REQ Tipler, MODERN PHYSICS, 4th edition, 2003, Freeman/VHPS
REQ WEBASSIGN, Student Access Code Card (College Semester), Webassign

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H7C: Marrus, R.
REQ Serway, MODERN PHYSICS, 3rd edition, 2004, Thompson/Brooks Cole
REQ Hecht, OPTICS, 4th edition, 2001, Addison-Wesley

8A: 1 & 2 – Kolomensky, Y. & Dalven, R.
packaged together:
REQ Halliday, Resnick & Walker, FUNDAMENTALS OF PHYSICS, V.1, 8th Edition, Wiley
REQ UC Berkeley, STUDENT LEARNING HANDBOOK, PHYSICS 8A, 3rd edition, Wiley
REQ Wiley Plus – Online Homework, Wiley

8B: 1 & 2 – Pomerantz, M. & Liphardt, J.
packaged together:
REQ Halliday, Resnick & Walker, FUNDAMENTALS OF PHYSICS, V.2, 7th Edition, Wiley
REQ UC Berkeley, STUDENT LEARNING HANDBOOK, PHYSICS 8B, 3rd edition, Wiley
REQ Wiley Plus – Online Homework, Wiley

C10: Muller, R.
REQ Muller, R., PHYSICS FOR FUTURE PRESIDENTS, Thompson/Brooks Cole

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24: 1 & 2 – Jacobsen, R. & Sadoulet, B.
REQ Hawking, S., A BRIEFER HISTORY OF TIME

39: 1 - Luk, K.
REQ Fraser, G., THE NEW PHYSICS FOR THE TWENTY-FIRST CENTURY, Cambridge Univ.

105: 1 & 2 – Qiu, Z.
REQ Marion & Thornton, CLASSICAL DYNAMICS OF PARTICLES AND SYSTEMS, 5th edition, Thompson/Brooks Cole

110A: 2 – Kerth, L.
REQ Griffiths, INTRODUCTION TO ELECTRODYNAMICS, 3rd edition, 1999, Prentice Hall

110B: Strovink, M.
REQ Griffiths, INTRODUCTION TO ELECTRODYNAMICS, 3rd edition, 1999, Prentice Hall
REQ Pedrotti & Pedrotti, INTRODUCTION TO OPTICS, 3rd edition, Prentice Hall

111: 1 - Siegrist, J.
REQ Horowitz, ART OF ELECTRONICS, 2nd edition, 1989, Cambridge University Press
REQ Sedra, MICROELECTRONIC CIRCUITS (W/ CD), 5th edition, 2004, Oxford University Press

111: 2 & 3 – Orenstein, J. & Stamper-Kurn, D.
REQ Melissinos, EXPERIMENTS IN MODERN PHYSICS, 2nd edition, 2003, Academic Press
REQ Taylor, INTRODUCTION TO ERROR ANALYSIS, 2nd edition, 1997, University Science Books

112: 1 & 2 - Hellman, F.
REQ Kittel & Kroemer, THERMAL PHYSICS, 2nd edition, 1980, Freeman

137A: 1 – Lee, D-H.,
REQ Griffiths, INTRODUCTION TO QUANTUM MECHANICS, 2nd edition, 2005, Prentice Hall

137A: 2 – Moore, J.
REQ Griffiths, INTRODUCTION TO QUANTUM MECHANICS, 2nd edition, 2005, Prentice Hall
REC Bransden, QUANTUM MECHANICS, 2nd edition, 2000, Prentice Hall

137B: 1 – Clarke, J.
REQ Bransden, QUANTUM MECHANICS, 2nd edition, 2000, Prentice Hall

137B:2 - Steiner, H.
REQ Bransden, QUANTUM MECHANICS, 2nd edition, 2000, Prentice Hall
OR
REQ Griffiths, INTRODUCTION TO QUANTUM MECHANICS, 2nd edition, 2005, Prentice Hall

139: Hall, L.
REQ Hartle, GRAVITY: INTRODUCTION TO EINSTEIN'S GENERAL RELATIVITY, 2003, Addison-Wesley

141A: Louie, S.
REQ Kittel, INTRODUCTION TO SOLID STATE PHYSICS, 8th edition, 2005, Wiley
REC Ashcroft, SOLID STATE PHYSICS, 1976, ITP
REC Ibach & Luth, SOLID STATE PHYSICS, 3rd edition, Springer

141B: Souza, I.
REQ Kittel, INTRODUCTION TO SOLID STATE PHYSICS, 8th edition, 2005, Wiley
REC Ashcroft, SOLID STATE PHYSICS, 1976, ITP
REC Ibach & Luth, SOLID STATE PHYSICS, 3rd edition, Springer

142: Bale, S.

REQ Chen, F., INTRODUCTION TO PLASMA PHYSICS & CONTROLLED FUSION, 2nd edition, Springer

REC Bellan, P., FUNDAMENTALS OF PLASMA PHYSICS, Cambrige Univ.

C161: Ma, C.

REQ Ryden, INTRODUCTION TO COSMOLOGY, 2003, Addison Wesley

H190: Gaillard, M.

REQ Oerter, R., THE THEORY OF ALMOST EVERYTHING: THE STANDARD MODEL, THE UNSUNG TRIUMPH OF MODERN PHYSICS

205A: Knobloch, E.

REQ Jose & Saletan, CLASSICAL DYNAMICS: A CONTEMPORARY APPROACH, CUP

REC Whitham, LINEAR & NONLINEAR WAVES, Wiley

211: Vishwanath, A.

REQ Chandler, D., INTRODUCTION TO MODERN STATISTICAL MECHANICS, Oxford Univ.

221B: Littlejohn, R.

REQ J.J. Sakurai, ADVANCED QUANTUM MECHANICS, Addison Wesley

229B: Bauer, C.

No Text Required

230A: Murayama, H.

REQ Peskin, INTRODUCTION QUANTUM FIELD THEORY, 1995, Harper Collins

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231: Bousso, R.

REQ Wald, GENERAL RELATIVITY, 1984, University of Chicago Press

REC Carroll, SPACETIME & GEOMETRY: INTRO TO GENERAL RELATIVITY, 2004, Addison Wesley Publishing Co.

240B: Cohen, M.

REC Ashcroft, SOLID STATE PHYSICS, 1976, Thompson/Brooks Cole

REC Cohen, ELECTRONIC STRUCTURE & OPTICAL PROPERTIES OF SEMICONDUCTORS, Springer

REC Kittel, QUANTUM THEORY OF SOLIDS, 2nd rev., 1987, Wiley

REC Kittel, INTRODUCTION TO SOLID STATE PHYSICS, 8th edition, 2005, Wiley

REC Marder, CONDENSED MATTER PHYSICS, 2000, Wiley

REC Madelung, INTRODUCTION TO SOLID STATE THEORY, Springer

REC Schrieffer, THEORY OF SUPERCONDUCTIVITY

REC Yu, FUND OF SEMICONDUCTORS, 3rd edition, 2001, Springer

REC Ziman, PRINCIPLES OF THEORY OF SOLIDS, 2nd edition, 1972, Cambridge University Press

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250: 1 - Yu, P.

REC Yu, P. & Cardona, M., FUNDAMENTALS OF SEMICONDUCTORS: PHYSICS AND MATERIAL PROPERTIES, 3rd edition, Springer

REC Barenham, K., & Vvedensky, D., LOW-DIMENSIONAL SEMICONDUCTOR STRUCTURES, Cambridge Univ.

REC Davies, J., THE PHYSICS OF LOW-DIMENSIONAL SEMICONDUCTORS, Cambridge Univ.

250: 2 - Budker

REC Budker, Kimball & DeMille, ATOMIC PHYSICS, Oxford Univ. Press

250: 3 – White, M.

No Text Required

250: 4 – Horava, P.

REQ Becker, Becker & Schwarz, STRING THEORY & M-THEORY: A MODERN INTRODUCTION, Cambridge Univ.

REC J. Polchinski, STRING THEORY, Vol. 1-2, Cambridge Univ. Press

250: 5 – Genzel, R.

REC Lemd, Lebtum, Mignard, OBSERVATIONAL ASTROPHYSICS, Springer

REC Rieke, DETECTION OF LIGHT, Cambridge Univ.

REC Rohlfs & Widson, TOOLS OF RADIO ASTRONOMY, Springer

Walker, Jearl Fundamentals of physics / Jearl Walker, David Halliday, Robert Resnickâ€"10th edition. volumes cm Includes index. ISBN 978-1-118-23072-5 (Extended edition) Binder-ready version ISBN 978-1-118-23061-9 (Extended edition) 1.Â I had spent six years slugging my way through many dozens of physics textbooks that were carefully written with the best of pedagogical plans, but there was something missing. Physics is the most interesting subject in the world because it is about how the world works, and yet the textbooks had been thor- oughly wrung of any connection with the real world. The fun was missing. I have packed a lot of real-world physics into Fundamentals of Physics, con- necting it with the new edition of The Flying Circus of Physics. Include a list of apparatus and a sketch or circuit diagram where appropriate. B. Show your data in tabular and/or graphic form, including an estimate of the errors or uncertainties. Data should be entered in the lab notebook as they are taken.Â Department of Physics and Astronomy Goals and Learning Outcomes 1. Students know basic physics principles [BS, BA, MS] 1.1 Students can demonstrate an understanding of Newton s laws 1.2 Students can demonstrate. More information.Â MATH 2 Course Syllabus Spring Semester 2007 Instructor: Brian Rodas Class Room and Time: MC83 MTWTh 2:15pm-3:20pm Office Room: MC38 Office Phone: (310)434-8673 E-mail: rodas brian@smc.edu Office Hours: More information. Physics Textbooks. Stability of Ships and Other Bodies - ver 0.5.2. Contributor: Bar-Meir.Â This textbook on Coastal Dynamics focuses on the interrelation between physical wave, flow and sediment transport phenomena and the resulting morphodynamics of a wide variety of coastal systems. The textbook is unique in that it explicitly connects the dynamics of open coasts and tidal basins; not only is the interaction between open coasts and tidal basins of basic importance for the evolution of most coastal systems, but describing the similarities between their physical processes is highly instructive as well. This textbook emphasizes these similarities to the benefit of understanding shared processes such as nonlinearities in flow and sediment transport. 2007 Spring PHYSICS & ASTRONOMY NEWSLETTER. Page 3. Magnetic Protection.Â The R. Greg Hussey Scholarship in the Department of Physics and Astronomy is awarded annually to a student who is showing exceptional promise both in the classroom and in research. The fellowship was made possible by a donation from Professor and Mrs. Greg Hussey. Dr. Hussey was a member of the Department faculty for 43 years and also served as Associate Dean of the College of Basic Sciences from 1971-2000.