

Fall 2011 Textbook List

Unless otherwise stated in this list, students are expected to purchase the current version/edition of the textbook with CDs or other enclosed materials.

ASEN 2001-010 Aero 1: Statics, Structures & Materials (Maute/Jackson)

1. Bedford and Fowler: "Engineering Statics and Mechanics," 5th edition, Pearson, ISBN-13: 978-0136129158
2. Beer & Johnston: "Mechanics of Materials", 6th edition, McGraw-Hill, ISBN 9780073380285

ASEN 2002-010 Aero 2: Thermo & Aerodynamics (Forbes/Kantha/Jackson)

1. John D. Anderson, Jr.: "Introduction to Flight," 7th edition, McGraw Hill Higher Education, ISBN-978-0-070352939-4
2. Michael J. Moran, Howard N. Shapiro, Bruce R. Munson and David P. DeWitt: "Introduction to Thermal Systems Engineering - Thermodynamics, Fluid Mechanics and Heat Transfer", ISBN 978-0-471-20490-9

ASEN 2012-001 Experimental & Computational Methods in ASEN (Larson)

1. Pratap, Rudra: "Getting Started with MATLAB: A Quick Introduction for Scientists and Engineers", 2010, Oxford University Press, ISBN-13: 978-0199731244
2. Taylor, John R.: "An Introduction to Error Analysis: The Study of Uncertainties in Physical Measurements", 1996, 2nd edition, University Science Books, ISBN-13: 978-0935702750

ASEN 3111-010 Aerodynamics (Biringen)

John D. Anderson, Jr.: "Fundamentals of Aerodynamics," 5th edition, 2011, McGraw Hill

ASEN 3112-010 Structures (Felippa)

No required textbooks. All lecture material, along with general course information, will be available from the public web site:

<http://www.colorado.edu/engineering/CAS/courses.d/Structures.d/Home.html>

Restricted course information will be available from CULearn.

ASEN 3113-010 Thermo Dynamics and Heat Transfer (Emery/Jackson)

Moran, Shapiro, Munson and Dewitt: "Introduction to Thermal Systems Engineering," 2003, John Wiley & Sons, ISBN 047120490-0

ASEN 3519-001 Humans in Aviation (Scott)

1. Grant, R.G., Flight: "100 Years of Aviation, 2007", DK Publishing (March 19, 2007), ISBN-10: 0756619025, ISBN-13: 978-0756619022
2. Hopkin, & Garland: "Handbook of Aviation Human Factors", Second Edition, 2009, CRC Press, ISBN-10: 0805859063, ISBN-13: 978-0805859065

ASEN 4012-001 Aero Materials (Koster)

Ashby: "Materials Selection in Mechanical Design", 4th edition, 2011. Elsevier

ASEN 4018-810 Senior Projects (Koster)

AIAA: "Aerospace Design Engineers Guide", 5th edition, 2003, AIAA

ASEN 4114-020 Automatic Control Systems (Lawrence)

Franklin, Powell, and Emami-Naeini: "Feedback Control of Dynamic Systems", 6th edition, ISBN 0136019692

ASEN 4123-001 Vibrational Analysis (Hussein)

Rao, Singrisu, "Mechanical Vibrations, 5th Edition, Prentice Hall

ASEN 4138-010 Aircraft Design (Gerren)

1. Roskam: "Airplane Design, Part 1", 1999, DAR Corp, 978-1884885426
2. Roskam: "Airplane Design, Part 2", 1999, DAR Corp, 978-1884885433

ASEN 4215-00 Oceanography (Emery)

Talley, Pickard, Emery and Swift: "Descriptive Physical Oceanography," 6th Edition, Elsevier

ASEN 4519-010 Special Topics: Microavionics (Palo)

Gaonkar, Ramesh: "Fundamentals of Microcontrollers and Applications in Embedded Systems with PIC," 1st Edition, 2007, ISBN-13: 978-1401879143 Cengage Publishing

ASEN 5007-001 Intro Finite Elements (Felippa)

No required textbooks. All course material will be available from the public web site:

<http://www.colorado.edu/engineering/CAS/courses.d/IFEM.d/Home.html>

ASEN 5012-001 Mech of Aero Structures (Doostan)

Optional Reference:

1. Y. C. Fung and P. Tong, "Classical and computational solid mechanics", World Scientific Publishing, Singapore, 2001
2. P. Boresi and K. P. Chong, "Elasticity in Engineering Mechanics", 2nd edition, Wiley Interscience Publications, New York, 2000
3. A.F. Bower, "Applied Mechanics of Solids", Taylor and Francis, 2009
4. M. E. Gurtin, "An introduction to continuum mechanics", Academic Press, 2003
5. L. E. Malvern, "Introduction to the mechanics of a continuous medium", Englewood Cliffs, N.J. : Prentice-Hall, 1969
6. W. M. Lai, D. Rubin, and E. Krempf, "Introduction to continuum mechanics", 4th ed., Butterworth-Heinemann/Elsevier, Amsterdam, 2010

ASEN 5014-001 Linear Control Systems (Frew)

Brogan, William, Modern Control Theory, Prentice-Hall, 3rd edition, 1991, ISBN 0-13-589763-7

ASEN 5018-013 Graduate Projects (Tanner)

Cook, Curtis R.: "Just Enough Project Management", 2005, McGraw-Hill, 0071445404

ASEN 5050-001 - Space Flight Dynamics (Nerem)

Vallado, David A.: "Fundamentals of Astrodynamics and Applications", 3rd Edition, 2007, Microcosm

ASEN 5051-001 Fluid Mechanics (Jansen)

Kundu: "Fluid Mechanics", 4th edition, 2010, Academic

ASEN 5053-001 – Rocket Propulsion (Kantha)

Sutton and Biblarz: "Rocket Propulsion Elements", 8th edition Wiley ISBN 978-0-470-080245

ASEN 5070-001 Statistical Orbit Determination I (Born)

Tapley, Schutz, and Born: "Statistical Orbit Determination", 2004, Academic ISBN 0-12-683630-2

ASEN 5090-001 Intro to GNSS (Axelrad)

P. Misra and P. Enge: "Global Positioning System, Signals Measurements, and Performance", 2nd edition, Ganga-Jamuna Press

Information on ordering this text is available on the course website:

<http://www.colorado.edu/ASEN/asen5090/>

ASEN 5114-020 Automatic Control Systems (Lawrence)

Franklin, Powell, and Emami-Naeini: "Feedback Control of Dynamic Systems", 6th edition, ISBN 0136019692

ASEN 5158 - 001 Space Habitat Design (Klaus)

Larson and Pranke: "Human Spaceflight Mission Analysis and Design, eds." 2000, McGraw-Hill

ASEN 5215-002 Oceanography (Emery)

Talley, Pickard, Emery and Swift: "Descriptive Physical Oceanography," 6th Edition, Elsevier

ASEN 5227-991 Aerospace Math I (Hussein)

Optional:

Harman, T.L., Dabney, J.B., and Richert, N.J.: "Advanced Engineering Mathematics", 2nd, 2000, Wadsworth, 978-0534371647

ASEN 5417-001 Numerical Methods for Differential Equations (Tom Lund)

No required textbooks.

ASEN 5519-001 Special Topics: Commercial Spaceflight Operations (Born/Cheetham)

No required textbooks.

ASEN 5519-010 Special Topics: Microavionics (Palo)

Gaonkar, Ramesh: "Fundamentals of Microcontrollers and Applications in Embedded Systems with PIC," 1st Edition, 2007, ISBN-13: 978-1401879143 Cengage Publishing

ASEN 6018-001 Spacecraft Formation Flying (Schaub)

H.P. Schaub and J. L. Junkins: "Analytical Mechanics of Space Systems", AIAA Education Series, 2nd Edition, Reston, VA, 2009, ISBN-13: 978-1600867217

ASEN 6028-010 Graduate Projects 2 (Tanner)

No required textbooks

ASEN 6519-002 Special Topics: Astro Sat Navig Seminar (Palo)

No required textbooks

ASEN 6519-003 Special Topics: Astro Sat Navig Seminar (Palo)

No required textbooks

ASEN 6519-005 Special Topics: Optimal Trajectories (Scheeres)

No required textbooks

ASEN 6519-006 Special Topics: Advanced GPS RX (Backén)

Borre, Akos, Bertelsen, Rinder, and Jensen: "A Software-Defined GPS and Galileo Receiver: A Single-Frequency Approach", 2006, Birkhauser (Springer Verlag)

LMS08/19/11 3:40pm