

2016 PEO NAVAL ENGINEERING EXAMINATIONS TEXT BOOK REFERENCE LIST

NOTE: Please feel free to use the most recent edition of textbooks referenced in this list

16-Nav-A1 Fundamentals of Naval Architecture

Prime Text:

Edward V. Lewis ed., Principles of Naval Architecture. The Society of Naval Architects and Marine Engineers, Chapters 1, 2, 3, Volume 1.

Supplementary Texts:

Barnaby, Kenneth C., Basic Naval Architecture, latest edition. Hutchinson's Scientific and Technical Publications.

Van Lammeren, W.P.A. ed., Buoyancy and Stability of Ships. The Technical Publications H. Stam.

Attwood, Edward L. et al., Theoretical Naval Architecture. Longmans, Green and Co.

de Heere, R.F. Scheltema, Buoyancy and Stability of Ships. Technical Publications H. Stam.

16-Nav-A2 Hydrodynamics of Ships (I): Resistance and Propulsion

Edward V. Lewis ed., Principles of Naval Architecture. The Society of Naval Architects and Marine Engineers, Chapters 5, 6, Volume II.

16-Nav-A3 Hydrodynamics of Ships (II): Ship Motion

Prime Texts:

Saunders, Harold E. ed., Hydrodynamics in Ship Design. The Society of Naval Architects and Marine Engineers, Volumes I, II and III.

Vossers, G., Behaviour of Ships on Waves. The Technical Publishing Company H. Stam.

Supplementary Text:

Edward V. Lewis, ed., Principles of Naval Architecture. The Society of Naval Architects and Marine Engineers, Chapter 8, Volume III.

16-Nav-A4 Ship Structure and Strength of Ships

Taggart ed., Ship Design and Construction. The Society of Naval Architects and Marine Engineers.

Edward V. Lewis. ed., Principles of Naval Architecture. The Society of Naval Architects and Marine Engineers, Chapter 4, Volume I.

16-Nav-A5 Ship Design

Prime Text:

Taggart ed., Ship Design and Construction. The Society of Naval Architects and Marine Engineers.

Supplementary Texts:

Schokker, J.C., Arkenbout et al., The Design of Merchant Ships. The Technical Publishing Company H. Stam.

Saunders, Harold E. ed., Hydrodynamics in Ship Design. The Society of Naval Architects and Marine Engineers, Volume I.

16-Nav-A6 Advanced Strength of Materials (16-Mec-A7)

Ugural, Ansel, & Saul Fenster, Advanced Strength & Applied Elasticity, latest edition. Prentice Hall Englewood Cliffs New Jersey.

Budynas, R.G., Advanced Strength & Applied Stress Analysis, latest edition. McGraw-Hill.

Boresi, A.P., and R.J. Schmidt, Advanced Mechanics of Materials, latest edition. John Wiley & Sons.

16-Nav-B1 Applied Thermodynamics and Heat Transfer (16-Mec A1)

Fundamentals of Engineering Thermodynamics by Michael J. Moran and Howard N. Shapiro, John Wiley and Sons Incorporated

Heat and Mass Transfer by Yunus A. Çengel and Afshin J. Ghajar, McGraw Hill Publishing Company
Moran, M.J., H.N. Shapiro, B.R. Munson and D.P. DeWitt, Introduction to Thermal Systems Engineering: Thermodynamics, Fluid Mechanics, and Heat Transfer. John Wiley and Sons.

16-Nav-B2 Marine Engineering

Prime Text:

Harrington, Roy L. (ed.), Marine Engineering. The Society of Naval Architects and Marine Engineers.

Supplementary Text:

Sullivan, James A., Fluid Power Theory and Applications, latest edition. Prentice Hall, Inc.

Henke, Russell W., Introduction to Fluid Power Circuits and Systems. Addison-Wesley.

Labbarton, J.M. (ed.), Marine Engineers' Handbook. McGraw-Hill.

I.R. Cameron, Nuclear Fission Reactors. Plenum Press.

J.R. Lamarsh, Introduction to Nuclear Engineering, latest edition. Addison-Wesley.

16-Nav-B3 Small Commercial Ships

Prime Text:

Taggart ed., Ship Design and Construction. The Society of Naval Architects and Marine Engineers.

Supplementary Texts:

Schokker, J.C., Arkenbout et al., The Design of Merchant Ships. The Technical Publishing Company H. Stam.

Saunders, Harold E. ed., Hydrodynamics in Ship Design. The Society of Naval Architects and Marine Engineers, Volume I.

16-Nav-B4 Advanced Structural Analysis

Timoshenko, S. and Young, D.H., Theory of Structures, latest edition. McGrawHill.

16-Nav-B5 Ship Production and Shipyard Management

Prime Texts:

Buffa , Modern Production Operations Management, latest edition. Wiley.

Juran and Gryna , Quality Planning and Analysis, latest edition. Wiley & Sons.

Taggart ed., Ship Design and Construction. The Society of Naval Architects and Marine Engineers, Chapter 15.

Supplementary Texts:

Chase and Aquilano, Production and Operations Management: A Life Cycle Approach, latest edition. Erwin.

Halpern, The Assurance Sciences: An Introduction to Quality Control and Reliability. Prentice-Hall.

Kennedy and Neville, Basic Statistical Methods for Engineers and Scientists, latest edition. Harper and Row.

Duncan, Quality Control and Industrial Statistics, latest edition. Erwin.

Sule, D.R. (Dileep R.), Manufacturing Facilities. PWS-KENT Publishing Co.

Riggs, James L., Production Systems, latest edition. John Wiley & Sons, Inc.

16-Nav-B6 Design and Manufacture of Machine Elements (16-Mec-A4)

As defined

16-Nav-B7 Environmental Control in Ships

Prime Texts:

McQuiston and Parker, Heating Ventilating and Air Conditioning Analysis and Design. Wiley & Sons.

Irwin and Graf, Industrial Noise and Vibration Control. Prentice-Hall.

Supplementary Texts:

Jennings, Environmental Engineering. International Text Book Co.

Carrier and Trane Systems Manuals. (ASHRAE Handbooks).

ASHRAE: Environmental Control Principles: an Educational Supplement to ASHRAE Handbook Fundamentals Volume.

16-Nav-B8 Ocean Engineering and Offshore Structures

16-Nav-B9 Advanced Fluid Mechanics (16-Mec-A6)

White, F.M., Fluid Mechanics, latest edition. McGraw-Hill.

16-Nav-B10 Finite Element Analysis (16-Mec-B10)

Cook, R.D., Finite Element Modeling for Stress Analysis. John Wiley & Sons, Toronto.

Frank L. Stasa, Applied Finite Elements for Engineers, Holt, Reinhart.

Logan, A First Course in Finite Element Method, P.W.S. Engineering, latest edition.

W. Bickford, A First Course in Finite Element Method, Irwin.