

ENTC 1505 - Engineering Technology Concepts

Fall 2026 Syllabus, Section 01, CRN 40843,

Credit hours: 4

Instructor

John Carballo

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Public Instructor Information

Instructor Title: Mr. John Carballo

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Course Description

1505. Engineering Technology Concepts. The role of the technician, technologist, engineer and scientist in the technology team; a study of basic mathematical, scientific, and communicative techniques as applied to the work of engineering technologists; ethical, global, and societal issues facing the engineering technology professional. Three hours lecture, three hours lab per week. Grading is A, B, C, NC. Prereq.: Grade of "C" or better in MATH 1510 or 1510C or higher. Prereq. or Coreq.: MATH 1511 or 1511C or 1513. 4 s.h.

Course Readings

Group	Title	Author	ISBN
Required	Engineering Fundamentals - With WebAssign	Saeed Moaveni	ISBN 13: 9780357952719

WebAssign for Moaveni's *Engineering Fundamentals: An Introduction to Engineering*, Single-Term Instant Access | 7th Edition

WebAssign + eBook ISBN – 9780357684481

Engineering Fundamentals, by Saeed Moaveni, 7th Edition, Cengage Publishing

ISBN-13 978-0-357-68441-2

The course readings are subject to change in the event of extenuating circumstances, research developments, current events, and/or to ensure better learning.

Schedule of Topics and Assignments

Day	Date	Reading(s)	Proposed Topic	Due/To Prepare for Class
Mon	8/24	CH 1 & CH2	Intro. to Engineering Prof. & Preparing for a Career	
Wed	8/26	CH 3	Introduction to Engineering design	
Mon	8/31	CH 4 & CH 5	Engineering Communication & Engineering Ethics	
Wed	9/2	CH 4	LAB (rm. 4200) Engineering Communication	
Mon	9/7	Labor Day, University Closed	Labor Day, University Closed	
Wed	9/9	CH 6 (CH1 – 5)	Fundamental Dimensions and Units & Quiz #1	
Mon	9/14	CH 6	LAB (rm. 4270): Problem Session	
Wed	9/16	CH 7	Length and Length Related Variables	
Mon	9/21	CH 7	LAB (rm. 4270): Problem Session	



Wed	9/23	CH 8	Time and Time Related Variables
Mon	9/28	CH 8	LAB (rm. 4270): Problem Session
Wed	9/30	CH 9 (CH6 – 8)	Mass and Mass Related Variables & Quiz #2
Mon	10/5	CH 9	LAB (rm. TBD): Problem Session
Wed	10/7	CH 10	Force and Force Related Variables
Mon	10/12	CH 10	LAB (rm. TBD): Experiment & Problem Session
Wed	10/14	CH 10	Force and Force Related Variables
Mon	10/19	CH 10	LAB (rm. TBD): Experiment & Problem Session & Quiz #3
Wed	10/21	CH 11 (CH9 – 10)	Temperature and Temperature Related Variables
Mon	10/26	CH 11	LAB (rm. TBD): Problem Session
Wed	10/28	CH 12	Electric Current and Related Variables
Mon	11/2	CH 12	LAB (rm. 4270): Experiment & Problem Session
Wed	11/4	CH 13	Energy and Power
Mon	11/9	CH 13	LAB (rm. 4270): Experiment & Problem Session
Wed	11/11	Veteran's Day University Closed	Veteran's Day University Closed
Mon	11/16	CH 14 & Project	Introduction to Excel Spreadsheets & Functions
Wed	11/18	CH 14 (CH 11 – 13)	LAB: (rm. 4200) Entering Formulas in Excel & Quiz #4
Mon	11/23	CH 15	Introduction to MATLAB
Wed	11/25	CH 14	LAB (rm 4200) Graphing in Excel
Mon	11/30	CH 14 & CH 15	LAB Excel & MATLAB Miscellaneous – Project work
Wed	12/2	CH 14 & CH 15	LAB Excel & MATLAB Miscellaneous – Project work
Mon	12/7	Final Exam Week - Final Project Due	Final Exam Week - Final Project Due
Wed	12/9	Final Exam Week - Final Project Due	Final Exam Week - Final Project Due

The course schedule, policies, procedures, and assignments in this course are subject to change in the event of extenuating circumstances, by mutual agreement, and/or to ensure better learning.