ENGR 1550H - Honors Engineering Concepts

Fall 2026 Syllabus, Section 02, CRN 42484,

Credit hours: 2

Instructor

Dr. Cory Brozina

Email: scbrozina@ysu.edu

Public Instructor Information

Instructor Title: Associate Professor
Instructor Professional Qualifications:

Ph.D. Engineering Education, Virginia Tech, 2015

M.S., Industrial & Systems Engineering, Virginia Tech, 2007

B.S., Industrial & Systems Engineering, Virginia Tech, 2005

Instructor Office Location: Moser 2020
Instructor Office Phone: 330-941-3028

Course Description

1550H. Honors Engineering Concepts. Introduction to the basic skills needed in engineering including engineering computing and an introduction to the engineering design process utilizing science, technology, engineering, and mathematics (STEM) fundamentals. One hour lecture and three hours laboratory per week. Prereq.: Eligibility to take MATH 1513 or higher level math course. 2 s.h.

Course Readings

Group	Title	Author	ISBN
	No Readings		

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	Proposed Topic	Due/To Prepare for Class
Tue	8/25	Introduction / Syllabus / PowerPoint	
Thu	8/27	Team Building	
Tue	9/1	Excel Basics I	
Thu	9/3	Excel Basics II	
Tue	9/8	Excel Basics III (Mini Exam 1)	
Thu	9/10	Graphing with Excel I	
Tue	9/15	Descriptive Statistics Concepts (Mini Exam 2)	
Thu	9/17	Descriptive Statistics with Excel	
Tue	9/22	Mini Exam 3	
Thu	9/24	STEM EXPO–No Class	
Tue	9/29	Recap	
Thu	10/1	Graphing with Excel II	
Tue	10/6	Excel Graphing	

Thu	10/8	Advanced Excel Topic (Mini Exam 4)
Tue	10/13	Excel ICA Day 1
Thu	10/15	Excel ICA Day 2
Tue	10/20	Project 1 Kickoff
Thu	10/22	Project 1 Workshop--DC1
Tue	10/27	Project 1 Workshop--DC2
Thu	10/29	Project 1 Workshop --DA
Tue	11/3	Project 1 Workshop
Thu	11/5	Project 1 Mini Presentations
Tue	11/10	Project 1 Mini Presentations
Thu	11/12	Project 2 Kickoff
Tue	11/17	Project 2 Work Day
Thu	11/19	Project 2 Work Day
Tue	11/24	Project 2 Work Day
Thu	11/26	
Tue	12/1	Project 2 Debrief
Thu	12/3	Project 2 Debrief
Tue	12/8	
Thu	12/10	

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.