

MECH 4825L - Heat Transfer and Thermodynamics Laboratory

Fall 2026 Syllabus, Section 03, CRN 41125,

Credit hours: 1

Instructor

Eric Haake

Email: emhaake@ysu.edu

Public Instructor Information

Instructor Title: Mr. Eric Haake

Instructor Professional Qualifications: M.S, Mechanical Engineering, Youngstown State University, 2020

Instructor Office Location: Moser 2525

Instructor Office Phone: 330-941-1742

Course Description

4825L. Heat Transfer and Thermodynamics Laboratory. Experiments involving basic measurement techniques, power and refrigeration cycles, heat transfer, heat exchangers, and energy systems. Three hours laboratory per week. Prereq.: MECH 3704 and MECH 3720 and MECH 3725. 1 s.h.

Course Readings

Group	Title	Author	ISBN
Optional	Thermodynamics	Cengel	9781265903534

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

Week of	Proposed Topic	Due/To Prepare for Class
8/24	Lab Intro Error Analysis	
8/31	Exp 1	
9/7	Break	Report 1
9/14	Exp 2a	
9/21	Exp 2b	
9/28	Exp 3	Report 2
10/5	Project Proposal	Report 3
10/12	Exp 4	
10/19	Exp 5	Report 4
10/26	Exp 6	Report 5
11/2	CFD	Report 6
11/9	Design Project	Individual Report
11/16	Design Project	
11/23	Break	
11/30		Design Presentation Design Report

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.