MECH 3720 - Fluid Dynamics

Fall 2026 Syllabus, Section 02, CRN 41307,

Credit hours: 3

Instructor

Eric Haake

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Public Instructor Information

Instructor Title: Mr. Eric Haake
Instructor Professional Qualifications: M.S, Mechanical Engineering, Youngstown State University, 2020
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Course Description

3720. Fluid Dynamics. Physical properties of fluids. Governing equations of fluid dynamics; forces on bodies due to incompressible fluid motion. Dimensional analysis and similitude. Analysis of energy losses in pipe flows. Concept of the viscous boundary layer. Prereq.: MECH 2603; MECH 2641; MATH 3705. 3 s.h.

Course Readings

Group	Title	Author	ISBN
Optional	Fluid Mechanics	R.C Hibbeler	978-0-13-464929-0

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	CH1	
8/31	CH1 CH2	HW1
9/7	CH2	HW2
9/14	CH3 CH4	
9/21	CH4	Test 1 HW3
9/28	CH5	
10/5	CH6	HW4
10/12	CH7	HW5
10/19	CH7 CH8	HW6
10/26	CH9	Test 2 HW7
11/2	CH9 CH10	HW8
11/9	CH11	
11/16	CH11	HW9

11/23	CH11 CH13	
11/30	CH13	HW10
12/7	Final Exam	

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.