

MET 4860 - Robotics Technology

Fall 2026 Syllabus, Section 01, CRN 43019,

Credit hours: 2

Instructor

Brian Vuksanovich

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Public Instructor Information

Instructor Title: Professor

Instructor Professional Qualifications: Ph.D. Materials Science and Engineering, Youngstown State University, 2022

Instructor Office Location: Moser Hall 4102

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Course Description

4860. Robotics Technology. An application-oriented course on the technology and use of industrial robots, including classification, tooling, sensors, workcell design, safety, and programming. Prereq.: "C" or better in ENTC 1505. Coreq.: MET 4860L. 2 s.h.

Course Readings

Group	Title	Author	ISBN
Optional	Robot Technology Fundamentals	J. Keramas	0827382367

Notes will be provided in Blackboard

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
8/31		Due 9/4 at 11pm: HW Sect 2 Quiz - Safety, Due 9/4/2026
9/7		Due 9/11 at 11pm: HW Sect 3 Quiz1 - Robot Technology, Due 9/11/2026 by 11:00:00 PM HW Sect 3 Quiz2 - Robot Technology, Due 9/11/2026 by 11:00:00 PM
9/14		Due 9/18 at 11pm: HW Sect 4 Quiz - Robot Classifications, Due 9/18/2026 by 11:00:00 PM
9/21		Due 9/25 at 11pm: HW Sect 5 Quiz - Robot Power Systems, Due 9/25/2026 by 11:00:00 PM
9/28		Due 10/2 at 11pm: HW Sect 6 Quiz - Grippers and EOAT, Due 10/2/2026, by 11:00 PM
10/5		Due 10/5 at 7pm: Test 1, October 5, 2026 (Paper Test)
10/12		Due 10/16 at 11pm: HW Sect 7 Quiz - Sensing Systems, Due 10/16/2026, by 11:00 PM
10/19		Due 10/23 at 11pm: HW Sect 8 Quiz - Vision Systems, Due 10/23/2026, by 11:00 PM

11/2	Due 11/6 at 11pm: HW Sect 9 Quiz - Hydraulics and Pneumatics, Due 11/6/2026, by 11:00 PM
11/16	Due 11/20 at 11pm: HW Sect 10 Quiz - PLCs and Logic Systems, Due 11/20/2026, by 11:00 PM
11/23	Due 11/27 at 11pm: HW Sect 11 Quiz - Economics, Due 11/27/2026, by 11:00 PM

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.