

**Midland College Syllabus**  
**ELMT 1305 – Basic Fluid Power**  
**(2-2)**

**Course Description:** Basic fluid power course covering vacuum systems, pneumatic and hydraulic systems, fluid power symbols, operating theory, components, and basic electrical and manual controls.

Students **MUST** actively participate by completing an academic assignment required by the instructor by the official census date. Students who do not actively participate in an academically-related activity will be reported as never attended and dropped from the course.

**Text, References, and supplies.** **Fluid Power Systems**, Second Edition, Klette, safety glasses. ISBN: 9780826936349

**Goals and Objectives**

Upon successful completion of the course, students will have the ability to accomplish the following competencies accurately and efficiently:

Competencies	Purpose and/or sample of real life applications	Projects or supporting laboratory exercises	Used throughout the course
Identify fluid power symbols	Explain their purpose	Will be a daily exercise	Yes
Demonstrate knowledge of basic fluid power theory	Design and interpret the functions of the a fluid system	Overview and practice using each of these devices	Yes
Demonstrate knowledge of component operations	Identify the functions of each component in the system	Use a laboratory system	Yes
Generate basic fluid power circuits	Demonstrate how a working system operates	Build a working system	Yes
Demonstrate fluid circuits using electrical controls	Demonstrate an electrical circuit	Build a circuit in the lab	Yes
Demonstrate a fluid circuit with manual controls	Demonstrate A manual circuit	Build a circuit in the lab	Yes

**Students may perform the following tasks in order to maintain safe lab and classroom spaces:**

- Participate in shop and classroom maintenance which may include, but not limited to sweeping, mopping, disposing of trash, cleaning work benches, organize tools and equipment, organize tool room, disinfect classroom tables and chairs.
- Disassemble discontinued lab training vehicles or equipment for salvage.
- Repurpose lab vehicles to be utilized in lab assignments.
- Other course related tasks as assigned by instructor.

**Student Contributions/Class Policies:** The college attendance policy will be strictly adhered to. Attendance is critical in this class. Make-up work and exams will be allowed **solely** at the discretion of the instructor.

1. Safety procedure will be observed at all times in this class.
2. **Safety glasses will be worn at all times** when working with or around live fluid components.
3. Telephones will be turned **ON** and silenced during lectures to receive RAVE Alerts.
4. For your safety and/or well-being please advised the instructor of any disabilities or problems that you may have that may affect your College experience.
5. Clean and store tools, equipment, and parts properly.
6. Clean your tables and replace chairs at the end of class.
7. Turn off equipment and store parts properly before the end of class.

**Grading/Evaluation:**

Participation/Teamwork	10%
Attendance	10%
Quizzes (over homework and labs)	30%
Midterm Exam	25%
Final Exam	<u>25%</u>
Total	100%

This course will focus on lecture, hands-on lab work, teamwork, and participation.

- ***All work will be graded on neatness, following directions, on-time delivery, and content.***
- Make-ups are solely at the discretion of the instructor.
- Attendance is a concern in industry and the college attendance policy will be adhered to.

**Administrative Information:**

Curt Pervier, Dean of Applied Technology  
Lisa Hays, Applied Technology Secretary  
(432) 685-4676  
Fax: (432) 685-6472

**Instructor:**

Lynn Bryant, Professor  
Office: Room 122, ATC  
Phone: (432) 681-6355  
E-Mail: lbryant@midland.edu

**Note:** Students are encouraged to contact the instructor at any time. However, making an appointment will guarantee the instructor's availability at a specific time.

**Non-Discrimination Statement**

Midland College does not discriminate on the basis of race, color, national origin, sex, disability or age in its programs and activities. The following individual has been designated to handle inquiries regarding the non-discrimination policies:

**Tana Baker**

Title IX Coordinator/Compliance Officer

3600 N. Garfield, SSC 131

Midland, Texas 79705

(432) 685-4781

[tbaker@midland.edu](mailto:tbaker@midland.edu)

For further information on notice of non-discrimination, visit the ED.gov Office of Civil Rights website, or call 1 (800) 421-3481.

**Americans with Disabilities Act (ADA) Statement:**

Midland College provides services for students with disabilities through Student Services. In order to receive accommodations, students must visit [www.midland.edu/accommodation](http://www.midland.edu/accommodation) and complete the Application for Accommodation Services located under the Apply for Accommodations tab. Services or accommodations are not automatic, each student must apply and be approved to receive them. All documentation submitted will be reviewed and a "Notice of Accommodations" letter will be sent to instructors outlining any reasonable accommodations.