Principles of Industrial Measurement (INTC 1358) 2A4

CREDIT
3 Semester Credit Hours (3 hours lecture)

MODE OF INSTRUCTION
Online

PREREQUISITE/CO-REQUISITE:
INTC 1301 & INCR 1402

Complete the Online Orientation and answer yes to 7+ questions on the Online Learner Self Evaluation: [https://www.lit.edu/onlinelearning/online-orientation/is-distance-learning-right-for-me](https://www.lit.edu/onlinelearning/online-orientation/is-distance-learning-right-for-me)

COURSE DESCRIPTION
Practical methods of flow measurements and flow integration. Emphasizes primary flow element selection and calculations in accordance with American Gas Association (AGA) and American Petroleum Institute (API) standards.

COURSE OBJECTIVES
Upon completion of this course, the student will be able to
1. Perform flow calculations
2. Select the proper primary flow element under specific conditions
3. Understand basic fluid power concepts, systems and components

INSTRUCTOR CONTACT INFORMATION
Instructor: Chelsea Hoke
Email: clhoke@lit.edu
Office Phone: 409-247-4936
Office Location: PATC 207
Office Hours: Tuesday/Thursday 10:00am-11:00am

REQUIRED TEXTBOOK AND MATERIALS
Fluid Power, ISBN number 9781605259314

ATTENDANCE POLICY
Online attendance is based on the class Discussion Board. LATE Discussion posts will not be graded. Missing 20%, or more of the class discussions will result in an automatic “F” for the course.

DROP POLICY
Approved: CH 01/20/2023
If you wish to drop a course, you are responsible for initiating and completing the drop process. If you stop coming to class and fail to drop the course, you will earn an “F” in the course.

### COURSE CALENDAR (subject to change)

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<th>DATE</th>
<th>TOPIC</th>
<th>READINGS (Due on this Date)</th>
<th>ASSIGNMENTS (Due on this Date)</th>
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<tbody>
<tr>
<td>Week 1</td>
<td>Course introduction, policies, and practice</td>
<td></td>
<td>Practice Assignments</td>
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<tr>
<td>Week 2</td>
<td>Introduction to Fluid Power</td>
<td>Chapter 1</td>
<td>Blackboard exercises</td>
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<tr>
<td>Week 2</td>
<td>Fluid Power Systems</td>
<td>Chapters 2</td>
<td>Blackboard exercises</td>
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<tr>
<td>Week 3</td>
<td>Fluid Power Standards &amp; Symbols</td>
<td>Chapter 4</td>
<td>Blackboard exercises</td>
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<tr>
<td>Week 3</td>
<td>Unit 1 Review</td>
<td>Chapters 1, 2, &amp; 4</td>
<td>Quiz 1 &amp; EXAM 1</td>
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<tr>
<td>Week 4</td>
<td>Safety &amp; Health</td>
<td>Chapter 5</td>
<td>Blackboard exercises</td>
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<td>Week 4</td>
<td>Hydraulic Fluid</td>
<td>Chapter 6</td>
<td>Blackboard exercises</td>
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<tr>
<td>Week 5</td>
<td>Controlling the System</td>
<td>Chapter 10</td>
<td>Blackboard exercises</td>
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<td>Week 6</td>
<td>Unit 2 Review</td>
<td>Chapters 5, 6, &amp; 10</td>
<td>Quiz 2 &amp; EXAM 2</td>
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<td>Week 7</td>
<td>Compressed Air</td>
<td>Chapter 14</td>
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<td>Week 8</td>
<td>Conditioning &amp; Distribution of Compressed Air</td>
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<td>Week 9</td>
<td>Unit 3 Review</td>
<td>Chapters 14 &amp; 16</td>
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<td>Week 10</td>
<td>Controlling a Pneumatic System</td>
<td>Chapter 18</td>
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<td>Week 11</td>
<td>Applying Pneumatic Power</td>
<td>Chapter 19</td>
<td>Blackboard exercises</td>
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<td>Week 12</td>
<td>Unit 4 Review</td>
<td>Chapters 18 &amp; 19</td>
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<td>Week 12</td>
<td>Final Exam Review</td>
<td>Final Exam Review</td>
<td>Final Exam</td>
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### COURSE EVALUATION

Final grades will be calculated according to the following criteria:

EXAMS*- 60%
Discussions- 20%
Quizzes/Assignments- 20%

*There will be 4 major EXAMS and a FINAL EXAM. If you choose to not take the FINAL, your Exam Avg will be used as your FINAL EXAM grade.

### GRADE SCALE

- 90-100 A
- 80-89  B
- 70-79  C
- 60-69  D
- 0-59   F
TECHNICAL REQUIREMENTS
The latest technical requirements, including hardware, compatible browsers, operating systems, etc. can be online at https://lit.edu/online-learning/online-learning-minimum-computer-requirements. A functional broadband internet connection, such as DSL, cable, or WiFi is necessary to maximize the use of online technology and resources.

DISABILITIES STATEMENT
The Americans with Disabilities Act of 1990 and Section 504 of the Rehabilitation Act of 1973 are federal anti-discrimination statutes that provide comprehensive civil rights for persons with disabilities. LIT provides reasonable accommodations as defined in the Rehabilitation Act of 1973, Section 504 and the Americans with Disabilities Act of 1990, to students with a diagnosed disability. The Special Populations Office is located in the Eagles’ Nest Room 129 and helps foster a supportive and inclusive educational environment by maintaining partnerships with faculty and staff, as well as promoting awareness among all members of the Lamar Institute of Technology community. If you believe you have a disability requiring an accommodation, please contact the Special Populations Coordinator at (409)-951-5708 or email specialpopulations@lit.edu. You may also visit the online resource at Special Populations - Lamar Institute of Technology (lit.edu).

STUDENT CODE OF CONDUCT STATEMENT
It is the responsibility of all registered Lamar Institute of Technology students to access, read, understand and abide by all published policies, regulations, and procedures listed in the LIT Catalog and Student Handbook. The LIT Catalog and Student Handbook may be accessed at www.lit.edu. Please note that the online version of the LIT Catalog and Student Handbook supersedes all other versions of the same document.

STARFISH
LIT utilizes an early alert system called Starfish. Throughout the semester, you may receive emails from Starfish regarding your course grades, attendance, or academic performance. Faculty members record student attendance, raise flags and kudos to express concern or give praise, and you can make an appointment with faculty and staff all through the Starfish home page. You can also login to Blackboard or MyLIT and click on the Starfish link to view academic alerts and detailed information. It is the responsibility of the student to pay attention to these emails and information in Starfish and consider taking the recommended actions. Starfish is used to help you be a successful student at LIT.
ADDITIONAL COURSE POLICIES/INFORMATION

1. No Cheating of any kind will be tolerated. Students caught cheating or helping someone to cheat can and will be removed from the class for the semester. Cheating can result from expulsion from LIT.

2. If you wish to drop a course, the student is responsible for initiating and completing the drop process. If you stop accessing the Blackboard class and fail to drop the course, you will earn an ‘F’ in the course.

3. Students must have access to, and knowledge of basic computer functions (including Blackboard)

4. Students should check Blackboard daily.

5. Internet Usage – Students are expected to use proper net etiquette while participating in course emails, assignment submissions, and online discussions.

6. Technical Requirements- The latest technical requirements, including hardware, compatible browsers, operating systems, software, Java, etc. can be found online at: https://help.blackboard.com/Learn/Student/Getting_Started/Browser_Support/Browser_Checker A functional broadband internet connection, such as DSL, cable, or WiFi is necessary to maximize the use of the online technology and resources.

7. There will be a 20 point penalty deducted for each day from late work. Late DISCUSSION POSTS will NOT be graded- This is your attendance for the week.

8. There will be NO make-up Exams. All Exams are open and due dates are posted at the beginning of the semester. NO Exams will be re-opened after the due date has passed. If you miss an Exam for any reason, you automatically forfeit your possible exemption from the Final.