# Principles of Industrial Measurement (INTC 1301) 2A1

### **CREDIT**

3 Semester Credit Hours (3 hours lecture)

#### **MODE OF INSTRUCTION**

Online



## PREREQUISITE/CO-REQUISITE:

Complete the Online Orientation and answer yes to 7+ questions on the Online Learner Self Evaluation: <a href="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</a>

#### **COURSE DESCRIPTION**

Principles of measurement. Includes operation of devices used to measure process variables and basic control functions.

#### **COURSE OBJECTIVES**

Upon completion of this course, the student will be able to

- 1. Apply selected principles of process measurement
- 2. Describe the control loop as applied to selected process variables
- 3. Demonstrate safety procedures.

### **INSTRUCTOR CONTACT INFORMATION**

Instructor: Minus Hargrave
Email: mjhargrave@lit.edu

Office Phone: 409-247-4883
Office Location: PATC 209

Office Hours: Tuesday/Thursday 11:00am-1:00pm

#### **REQUIRED TEXTBOOK AND MATERIALS**

- 1. Process Technology-Equipment and systems Fourth Edition by Charles E. Thomas
  - a. ISBN number is 9781285444581

## 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**

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.

Approved: CH 01/20/2023

## **COURSE CALENDAR (subject to change)**

DATE	TOPIC	READINGS	ASSIGNMENTS
		(Due on this Date)	(Due on this Date)
Week 1/2	Course introduction,		Practice Assignments
	policies, and practice		
Week 3	Compressors	Chapter 5	Blackboard exercises
Week 4	Heat Exchangers	Chapters 7	Blackboard exercises
Week 5	Unit 1 Review	Chapters 5 & 7	Quiz 1 & EXAM 1
Week 6	Cooling Towers	Chapter 8	Blackboard exercises
Week 7	Boilers	Chapter 9	Blackboard exercises
Week 8	Unit 2 Review	Chapters 8 & 9	Quiz 2 & EXAM 2
Week 9	Furnaces	Chapter 10	Blackboard exercises
Week 10	Utility Systems	Chapter 13	Blackboard exercises
Week 11	Unit 3 Review	Chapters 10 & 13	Quiz 3 & EXAM 3
Week 12	Reactor Systems	Chapter 14	Blackboard exercises
Week 13	Distillation Systems	Chapter 15	Blackboard exercises
Week 14	Unit 4 Review	Chapters 14 & 15	Quiz 4 & EXAM 4
Week 15	Final Exam Review	Final Exam Review	Final Exam

## **COURSE EVALUATION**

Final grades will be calculated according to the following criteria:

EXAMS\*- 60%

Discussions- 20%

Quizzes/Assignments- 20%

#### **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 <a href="https://lit.edu/online-learning/online-learning-minimum-computer-requirements">https://lit.edu/online-learning/online-learning-minimum-computer-requirements</a>. A functional broadband internet connection, such as DSL, cable, or WiFi is necessary to maximize the use of online technology and resources.

<sup>\*</sup>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.

### **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 <a href="mailto:specialpopulations@lit.edu">specialpopulations@lit.edu</a>. You may also visit the online resource at <a href="mailto:specialpopulations@lit.edu">Specialpopulations@lit.edu</a>. You may also visit the online resource at <a href="mailto:specialpopulations">Specialpopulations@lit.edu</a>.

#### 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 <a href="https://www.lit.edu">www.lit.edu</a>. 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\_C hecker 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.