

## **Administrative Master Syllabus**

## **Cover Sheet**

<u>Purpose</u>: The Administrative Master Syllabus provides a general course description, defines the required elements of the course, and establishes a faculty-driven foundation for course assessment to ensure continuous improvement in student learning, irrespective of the course timeframe, or mode of course delivery.

Course Title: Introduction to Industrial Maintenance									
Course Prefix and Number:   NMT 1305									
THECB Approval Number (10 digit): 1603130									
Department: CTE	Division: Industrial								
Course Type: (check only one)									
Academic General Education Course (From ACGM but not a CBC Core Course)									
Academic CBC Core Course									
✓ WECM Course (Special Topics or Unique Needs Course: Y or N ✓ )									
Weekly Centest Hours (Lecture Leb Eyternelly)									
Weekly Contact Hours (Lecture – Lab – External): 2 - 2 - 0  Course Catalog Description:									
<u> </u>	chniques common to most fields of industrial								
maintenance. Topics include precision	n measuring instruments and general safety rules								
common in industry, including lock-out	ut/tag-out.								
Prerequisites/Co-requisites:									
Approval: The contents of this document ha	nave been reviewed and are found to be accurate.								
Approval: The contents of this document has Prepared by (Content Expert): Jarod									
	Bleibdrey Digitally signed by Jarod Bleibdrey Date: 2022.09.07 13:24:36 -05'00'								



# **Master Course Syllabus**

**Course Name: INMT 1305 Introduction to Industrial Maintenance** 

**Course Description:** Basic mechanical skills and repair techniques common to most fields of industrial maintenance. Topics include precision measuring instruments and general safety rules common in industry, including lock-out/tag-out.

**Semester Hour Credit: 4** 

Lecture Hrs. per Week/Lab Hrs. per Week/External Hrs. per Week: 2/2/0

## **Curriculum Capacity:**

Face-to-Face Lab
Online Lab
Face-to-Face Lecture

Online: 30

Virtual Face-to-Face

Interactive video (multi-locations): 30

Hybrid Clinical

#### Recommended enrollment threshold:

Face-to-Face Lab
Online Lab
Face-to-Face Lecture

Online: 9

Virtual Face-to-Face

Interactive video (multi-locations): 9

Hybrid Clinical

#### Online book and/or other major required materials:

Title: Industrial Maintenance, Rigging Systems, Blueprint Reading, Hand Tools

**Author:** AMATROL Inc.

Publisher: https://www.learnamatrol.com/

Edition: 2021

**ISBN:** \*This course utilizes inclusive access.

#### The Student Learning Outcomes for the course are the same regardless of modality or location.

# Course Outcomes (WECM or LDACGM)

Student Learning Outcomes – Subject Matter Specific (SLOS):

Upon successful completion of this course, students will:

- 1. Identify various types of fasteners common to industrial maintenance;
- 2. Utilize various hand and power tools;
- 3. Utilize precision measuring instruments;
- 4. Demonstrate proper lock-out/tag-out procedures.

The following general education course competencies (TGE) or Marketable SCAN Skills (CTE/NAH) are addressed in this course: General education course competencies (TGE) or Marketable SCAN Skills (CTE/NAH) assessed are indicated with an asterisk \*.

Student Learning Outcomes – Marketable SCAN Skills (SLOM):

Upon successful completion of this course, students will:

- 1. Demonstrate <u>precision measuring instruments skills</u> by utilizing logic and reasoning to identify best practices and solutions for maintenance and activities related to mechanical drawings, and industrial maintenance.
- 2. Employ general safety rules to reflect the understanding of work-related procedures to work in a safe environment and ensure the protection of personnel and equipment.
- 3. Present effective <u>lock-out/tag-out procedures capability</u> to perform bench work including part layout Drilling, reaming, tapping, press fitting, and location of hole centers.
- 4. Recognize the necessary <u>problem-solving ability</u> to select appropriate precision measuring instruments and <u>decision-making skills</u> to perform maintenance activities in a safe and effective environment.

## The following program student learning outcome is assessed for this course:

Program Learning Outcomes (PLO) as related to this course.

This course provides instructional elements in partial requirements to the following:

- 1. Demonstrate the appropriate use of safety equipment, devices, and procedures in the classroom and industrial environments, including workshop housekeeping, tools storage, and maintenance safety guidelines.
- 2. Evaluate the application of basic theoretical knowledge of Industrial Maintenance to set up and execute proper lock-out/tag-out procedures for industrial equipment and facilities, including hand, hand power, and stationary power tools.
- 3. Utilize precision measuring instruments and perform associated assessings.

#### **Evaluation Methods:**

Activity Types	SLOS	SLOM	PLO	Weights (%)	
Introductory quiz and/or introductory access to				3	
Blackboard					
Periodic quizzes/practices and Mid-term	1, 3, 4, 5,	1, 4	1, 2	50	
assessments	6, 8				
In-Class activities or practices	1, 2, 7	2, 4	2	17	
Hands-on shop practice, online participation,	3, 8	2, 3	3	15	
and tasks submission					
Final Assessment	1, 3, 4, 5,	1, 4	1, 2	15	
	6, 8				
Total:				100%	
**Instructor should remain within the relevant range of stated weights**					

**Course Grading:** Please see individualized instructor policies for course evaluation methods. Students will be assessed on the same measure across each discipline as per CBC guidelines.

## Major Course Assignments and/or exams counting for at least 10% of a final course grade:

- Periodic quizzes/practices and Mid-term assessments
- In-Class activities or practices
- Hands-on shop practice, online participation, and tasks submission
- Final Assessment

## **Grade Scale:**

Final grades for all courses will be based in the following manner:

A = 90% - 100%

B = 80% - 89%

C = 70% - 79%

D = 60% - 69%

F = 59% or Below

# **Course Subject Matter Outline:**

Material	
Fasteners	
Skill- Identify Types of Threaded Fasteners	
Objective - Describe How Parts Are Assembled Using Threaded Fasteners	
Objective Describe How to Use a Combination Wrench	
Skill - Use a Combination Wrench	
Bolt Types	
Objective - Define Threaded and Non-Threaded Fasteners	
Objective - Define Four Categories of Threaded Fasteners	
Bolt Grades	
Objective - Explain How US Customary Bolts Are Graded	
Skill - Identify US Customary Bolt Grade Given a Sample	
Objective - Explain How Metric Bolts Are Graded by Class	
Skill - Identify Metric Bolt Class Given a Sample	
Power Tool Safety	
Objective - Describe Categories of Portable Power Tools	
Skill - Identify Portable Power Tool Hazards	
Power Tool Operations	
Objective - Describe Five Types of Battery-Operated Tools	
Objective - Describe How to Charge a Battery-Operated Power Tool	
Skill - Charge a Battery-Operated Drill/Driver	
Portable Drill/Drivers	
Objective - Describe Four Types of Drill/Driver Tooling	
Objective - Describe How to Install Tooling in a Drill/Driver	
Dial Caliper	
Objective - Describe the Function of a Precision Measurement Tool and Give an Examp	le
Objective - Describe the Function of a Dial Caliper and Give an Application	
Objective - Describe How to Use a Dial Caliper	
Digital Caliper	
Objective - Describe the Function of a Digital Caliper and Give an Application	
Objective - Describe How to Use a Digital Caliper	
Activity - Digital Caliper Operation	
English Micrometer	
Objective - Describe the Function of a Micrometer and Give an Application	
Objective - Describe How to Use an Outside Micrometer	
Metric Micrometer	
Skill - Use an Outside Micrometer Graduated in Metric Units to Measure the Outside	
Dimension of a Part	
Skill - Use a Micrometer to Measure the Outside Diameter of a Cylindrical Part	
Lockout/Tagout	
Define Hazardous Energy and Describe Its Associated Dangers	
Describe Lockout/Tagout and Explain Its Importance	_
Describe How to Use LOTO to Safeguard a Machine	
Describe the Requirements of a Lockout Tagout Device	

## **Additional Course Requirements:**

Students shall be provided a supplemental class document containing, but not limited to: instructor contact and availability information, including student guidance hours and class meeting times and locations, as well as, policies related to course grading, class attendance (both in-person and online), classroom policies, assignment/submission detailed due dates, late assignment provisions, and general information on the nature and calculations of required elements for testing and other assessments.

## **Class Attendance and Classroom Conduct Policies**

**Attendance Policy:** Please see individualized instructor policies for attendance, which is pursuant to any related policy as outlined by the college handbook, financial aid agreements, or any other college-related understanding (e.g. athletics, organizations).

Telephone Support: Toll-Free: 866-722-2838 or Direct Line: 361-354-2508

#### I.T. Support Blackboard

http://coastalbend.edu/it/

IT Help Desk 1-361-354-2508 helpdesk@coastalbend.edu

**Live Chat:** Fall/Spring Hours: Monday - Thursday from 9 a.m. to 4 p.m. Summer Hours: Monday – Thursday from 9 a.m. to 5 p.m.

**Tutoring Services**: Coastal Bend College is committed to the academic success of all students enrolled at the college. A variety of services, including academic support, individual tutoring sessions, group tutoring sessions, and online tutoring, are available to students depending on the availability of tutors for the subject matter requested. All tutoring is provided at no cost to current CBC students who are currently enrolled at CBC. On-demand tutoring services are accessible 24 hours a day, seven days a week through the TutorMe platform, which may be accessed through your Blackboard account. To request a tutor, please complete the online tutor request form found at http://www.coastalbend.edu/tutoring/ to submit your request. If you have any questions about tutoring programs, you can contact to tutoring@coastalbend.edu.

Beeville	Alice	Kingsville	Pleasanton
3800 Charco Road	704 Coyote Trail	1814 Brahma Blvd.	1411 Bensdale
Beeville, TX 78102	Alice, TX 78332	Kingsville, TX	Pleasanton, TX
1-866-722-2838	1-866-891-2981	78363	78064
		1-866-262-1615	1-866-361-4222

**Grady C. Hogue Learning Resource Center (Library):** Located on the Beeville campus, the operation hours are Monday - Friday from 8:00 a.m. to 5:00 p.m.

(Summer semesters will observe the CBC campus operation hours) For locations and hours of the CBC library in Alice, Kingsville, and Pleasanton sites please visit the library web page link below.

Grady C. Hogue Learning Resource Center (Library): http://lrc.coastalbend.edu/about

**Financial Aid:** Resources are available for students for financial aid, work study, and veteran benefits. For additional information, visit our website at <a href="http://coastalbend.edu/finaid">http://coastalbend.edu/finaid</a> or contact us at 361-354-2238. Office hours: Monday - Friday from 8:00 a.m. to 5:00 p.m.

**ADA Statement:** No qualified individual with a disability shall, by reason of such disability, be excluded from participation in or be denied the benefits of the services, programs, or activities of the College District, or be subjected to discrimination by the College District. Nor shall the College District exclude or otherwise deny equal services, programs, or activities to an individual because of the known disability of an individual with whom the individual is known to have a relationship or association. 42 U.S.C. 12132; 28 CFR 35.130(g). See at: GA (Legal)

**Students with Disabilities:** Please notify your instructor of any modification/adaptation you may require to accommodate a disability-related need. You will need to provide documentation to the Director of Accessibility Services so the most appropriate accommodations can be determined. Specialized services are available through the Office of Accessibility Services (OAS) (SSB 4.104, 471-6259). For more information, please email <a href="mailto:oas@coastalbend.edu">oas@coastalbend.edu</a>.

Scholastic Dishonesty: Each student is charged with notice and knowledge of the contents and provisions of Coastal Bend College's rules and regulations concerning student conduct. All students shall obey the law, show respect for properly constituted authority, and observe correct standards of conduct. Scholastic dishonesty shall constitute a violation of these rules and regulations and is punishable as prescribed by Coastal Bend College Policies FLB (Local) and FM (Local). Scholastic dishonesty shall include, but not be limited to, cheating on a test, plagiarism, and collusion. See at: FLB (Local) and FM (Local).

**Use of E-mail for Official Correspondence to Students:** All students should be familiar with the college's official email student notification policy. Students are expected to check their CBC email on a frequent and regular basis to stay current with college-related communications, recognizing that certain communications may be time-critical.

Copyright Law and Intellectual Property Rights Policy: Copyright is the right of an author, artist, composer or other creator of a work of authorship to control the use of his or her work by others. Protection extends to literary works, musical works, dramatic works, pantomimes and choreographic works, pictorial and graphic works, sculpture, motion pictures and other audiovisual works, sound recordings and architectural works. Generally speaking, a copyrighted work may not be reproduced by others without the copyright owner's permission. The public display or performance of copyrighted works is similarly restricted. Generally, the unauthorized reproduction, performance or distribution of a copyrighted work is copyright infringement and may subject the infringer to civil and criminal penalties. The Fair Use Doctrine outlines exceptions to this Law and is outlined in Coastal Bend College Policy, CT (Legal).

Coastal Bend College, its faculty, students and employees must comply with Copyright Law. Detailed information on Copyright Law and Intellectual Property Rights is available in Coastal Bend College Policy CT (Legal) and CT (Local).

Questions regarding this information should be directed to the Director of Library Services at: <a href="mailto:library@coastalbend.edu">library@coastalbend.edu</a> or the Office of Marketing and Public Relations at: <a href="mailto:socialmedia@coastalbend.edu">socialmedia@coastalbend.edu</a>.

**Intellectual Property:** Student /Third Party Works: Rights to copyrightable or patentable works created by a student or a third party, that is, not a College District employee, shall reside with the author/ creator. Detailed information on Copyright Law and Intellectual Property Rights is available in Coastal Bend College Policy <u>CT (Legal)</u> and <u>CT (Local)</u>.

Questions regarding this information should be directed to the Director of Library Services at: <a href="mailto:library@coastalbend.edu">library@coastalbend.edu</a> or the Office of Marketing and Public Relations at: <a href="mailto:socialmedia@coastalbend.edu">socialmedia@coastalbend.edu</a>.

**NOTE:** The College website (<a href="http://coastalbend.edu">http://coastalbend.edu</a>) serves as the main source with the most current version of the Coastal Bend College Board Policies and the Coastal Bend College Catalog.

Student success is our number one priority at Coastal Bend College and we realize that prompt, effective communication (such as emails, assignment feedback, discussion boards and announcements) plays a significant role in achieving that goal. It is vitally important that you have the proper contact information for your instructor. This should include their phone number, email address, and if applicable, their office number, and office hours. **Faculty schedules can be located online at <a href="http://coastalbend.edu/hb2504/">http://coastalbend.edu/hb2504/</a>** If you have any problems contacting your instructor, or do not receive a prompt response to your inquiries, please contact the Dean or Division Coordinator/Program Director as soon as possible. Their contact information is provided below:

Jarod Bleibdrey
Dean of Career and Technical Education
361-354-2339
jbleibdrey@coastalbend.edu

Lisa C. Bowman-Bowen, Ph.D.
Associate Professor of Forensic Science &
Criminal Justice; Division Coordinator of
Public & Professional Services
361-664-2981 Ext. 3005
Ibowman-bowen@coastalbend.edu

We wish you all the best in your education and encourage you to contact us if you have any questions or concerns.

Keeping student success in sight, faculty in each of the courses will review the course information, including specific reading schedules, assignments, and testing information, with students during the first week of class.

Additionally, the course information will be posted to Blackboard.

This Master syllabus is subject to change due to unforeseen circumstances.