



Coastal Bend COLLEGE

Administrative Master Syllabus Cover Sheet

Purpose: 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: **Basic Electrical Theory**

Course Prefix and Number: **ELPT 1311**

THECB Approval Number (10 digit): **4603010000**

Department: **Oil & Gas Technology** 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 Contact Hours (Lecture – Lab – External): **2** - **4** - **0**

Course Catalog Description:
Basic theory and practice of electrical circuits. Includes calculations as applied to alternating and direct current.

Prerequisites/Co-requisites:
None

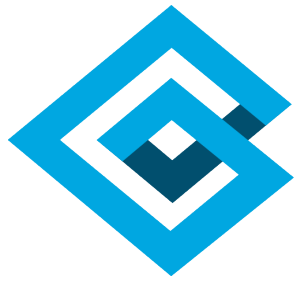
Approval: The contents of this document have been reviewed and are found to be accurate.

Prepared by (Content Expert): **Roy Coley** Digitally signed by Roy Coley
Date: 2022.08.11 09:59:08 -05'00'

Reviewed by Director or Coordinator: **Macedonio Gonzalez** Digitally signed by Macedonio Gonzalez
Date: 2022.08.12 09:12:15 -05'00'

Approved by Dean of CTE or NAH or TGE:

Revised 8/11/2021



Coastal Bend COLLEGE

Master Course Syllabus

Course Name: ELPT 1311 Basic Electrical Theory

Course Description: Basic theory and practice of electrical circuits. Includes calculations as applied to alternating and direct current.

Semester Hour Credit: 3

Lecture Hrs. per Week Lab Hrs. per Week: 2-4-0

Curriculum Capacity:

Face-to-Face Lab: 25

Online Lab: N/A

Face-to-Face Lecture: 25

Online: N/A

Virtual Face-to-Face: N/A

Interactive video (multi-locations): N/A

Hybrid: N/A

Clinical: N/A

Recommended enrollment threshold:

Face-to-Face Lab: 9

Online Lab: N/A

Face-to-Face Lecture: 9

Online: N/A

Virtual Face-to-Face: N/A

Interactive video (multi-locations): N/A

Hybrid: N/A

Clinical: N/A

Textbook and/or other major required readings:

Title: Basic Electricity for the Petroleum Industry

Author: Nancy Grona

Publisher: PETEX by the University of Texas at Austin

Edition: 2nd

ISBN: 0-88698-109-3

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

**Course Outcomes
(WECM or LDACGM)**

1. Explain atomic structure and basic values such as voltage, current, resistance, and power
2. Determine electrical values for combination circuits in direct current (DC) and alternating current and (AC) containing resistance, inductance, and capacitance
3. Summarize the principles of magnetism
4. Calculate voltage drop based on conductor length, type of materials, and size
5. Utilize electrical measuring instruments

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 *.

- The student will use hands on skills to determine electrical circuit values.
- The student will use logic and reasoning to identify the difference between A/C and D/C current.

The following program student learning outcomes are assessed for this course:

- The student will demonstrate comprehension through one or more forms of how to install a series circuit on both A/C and D/C circuits.
- The student will demonstrate comprehension through one or more forms of how to install a parallel circuit on both A/C and D/C circuits.

Evaluation Methods:

1. Homework Assignments
2. Quizzes
3. Tests
4. Class Participation

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:

1. Homework Assignments
2. Quizzes
3. Tests
4. Class Participation
5. Tests & Assignments 75%
6. Final Exam 25%

Grade Scale:

90 to 100 = A
80 to 89 = B
70 to 79 = C
60 to 69 = D
Below a 60 = F

Course Subject Matter Outline:

Chapters used:

1. What is Electricity
2. Flow of Electricity
3. Power in Electrical Circuits
4. Magnetism And Electricity

Additional Course Requirements:

Class Attendance is a must. Students who are absent more than three consecutive absences will be dropped from the class.

Class Attendance and Classroom Conduct Policies

Attendance Policy: Please see individualized instructor policies for attendance, which are 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/>

helpdesk@coastalbend.edu

Live Chat: Fall/Spring Hours: Monday - Thursday from 8 a.m. to 5 p.m. Summer Hours: Monday – Thursday from 7 a.m. to 6 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 tutoring@coastalbend.edu.

Beeville	Alice	Kingsville	Pleasanton
3800 Charco Road Beeville, TX 78102 1-866-722-2838	704 Coyote Trail Alice, TX 78332 1-866-891-2981	1814 Brahma Blvd. Kingsville, TX 78363 1-866-262-1615	1411 Bensdale Pleasanton, TX 78064 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 <http://coastalbend.edu/finaid> 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 accommodating a disability-related need. You will need to provide documentation to the Director of Accessibility Services so the most appropriate accommodation can be determined. Specialized services are available through the Office of Accessibility Services (**OAS**) (SSB 4.104, 471-6259). For more information, please email oas@coastalbend.edu.

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: library@coastalbend.edu or the Office of Marketing and Public Relations at: socialmedia@coastalbend.edu.

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 [CT \(Legal\)](#) and [CT \(Local\)](#).

Questions regarding this information should be directed to the Director of Library Services at: library@coastalbend.edu or the Office of Marketing and Public Relations at: socialmedia@coastalbend.edu.

NOTE: The College website (<http://coastalbend.edu>) 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 <http://coastalbend.edu/hb2504/>** 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	Macedonio Gonzalez Coordinator of Industrial Workforce 361-354-2571 mgonzalez@coastalbend.edu
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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.