

SYLLABUS
ELPT 2339
ELECTRICAL POWER DISTRIBUTION

INDUSTRIAL AND COMMERCIAL ELECTRICITY
BRAZOSPORT COLLEGE
LAKE JACKSON TEXAS

The Brazosport College District shall not discriminate against, or exclude from participation in any benefits or activities either on the staff or in the student body, any person on the grounds of sex, race, color, religion, national origin, age, or handicap.

Brazosport College
500 College Dr.
Lake Jackson, Texas 77566

COURSE EVALUATION

STUDENT EVALUATION

- A. Participation will account for no more than 15% of total grade.
- B. Homework will account for no more than 15% of total grade.
- C. Quizzes will account for no more than 35% of total grade.
- D. Labs will account for no more than 15% of the total grade.
- E. Final exam will account for no more than 20% of total grade.

INSTRUCTOR EVALUATION

- A. Students will be given an opportunity to evaluate their instructor and the course content.
- B. The instructor will review and evaluate in terms of withdrawal rate.
- C. Final grades given will be reviewed in an effort to determine if a pattern of high or low grades exists.

DEPARTMENT EVALUATION OF COURSE

- A. Faculty and the Division Chair will review student grades and withdrawal trends.
- B. Faculty and the Division Chair will review the Course Competencies and Perspectives Assessment.

SYLLABUS ELPT 2339 ELECTRICAL POWER DISTRIBUTION

GENERAL GOALS/OBJECTIVES

The student will learn the design, operation, and technical details of modern power distribution systems including generating equipment, transmission lines, plant distribution, and protective devices. Also includes calculations of fault current, system load analysis, rates and power economics.

Instructor: Allen Matejek

Office: L-202C

Office Phone:(979) 230-3268

E-mail:allen.matejek@brazosport.edu

COURSE DESCRIPTION

An introduction to basic direct current (DC) theory including electron theory and direct current applications. NCCER credit available. (3 SCH, 2 lecture, 2 lab)

TEXT AND REFERENCES

NCCER Contren Learning Series, Electrical Level 3 & 4 Trainee Guide, Electric Power System Fundamentals, Robert M. Clough 2nd edition
ISBN:978-1-939815-06-4

National Electric Code, 2014 published by National Fire Protection Association. ISBN:978-145590672-7

"Required course materials are available at the Brazosport College bookstore, on campus or online at <http://www.brazosport.edu/bookstore>. A student of this institution is not under any obligation to purchase a textbook from the college bookstore. The same textbook is/may also be available from an independent retailer, including an online retailer."

Modules:

26306-14 Distribution Equipment

26403-14 Stand-by & Emergency Systems

26411-14 Medium Voltage Terminations/Splices

**SYLLABUS
ELPT 2339
ELECTRICAL POWER DISTRIBUTION**

STUDENTS WITH DISABILITIES

Brazosport College is committed to providing equal education opportunities to every student. Brazosport College offers services for individuals with special needs and capabilities including counseling, tutoring, equipment, and software. Please contact the Special Populations Counselor at (979) 230-3236 for further information.

ACADEMIC HONESTY

Brazosport College assumes that students eligible to perform on the college level are familiar with the ordinary rules governing proper conduct including academic honesty. The principle of academic honesty is that all work presented by you is yours alone. Academic dishonesty including, but not limited to, cheating, plagiarism, and collusion shall be treated appropriately. Please refer to the Brazosport College Student Guide for more information. This is available online at <http://www.brazosport.edu>. Click on the CATALOGS AND SCHEDULES link under STUDENTS.

Academic dishonesty violates both the policies of this course and the Student Code of Conduct. In this class, any occurrence of academic dishonesty will be referred to the Dean of Student Services for prompt adjudication, and will, at a minimum, result in 0 for that assignment in this course. Sanctions may be imposed beyond your grade in this course by the Dean of Student Services.

COURSE GOALS

The following list of course goals will be addressed in the course. These goals are directly related to the performance objectives (Addendum A).

(* designates a CRUCIAL goal)

1. Describe the purpose of switchgear.
2. List the National Electric Code (NEC) requirements pertaining to switchgear.
3. Explain the difference between emergency systems, legally required standby systems, and operational standby systems.
4. Describe the National Electric Code (NEC) requirements that pertain to the installation of standby and emergency power systems.
5. Select the proper materials and tools for medium-voltage terminations and splices.
6. Complete cable assemblies using terminations and splices.

STUDENT CONTRIBUTIONS

Each student will spend at least 4 hours per week preparing for class. The student will have an opportunity to evaluate the instructor.

COURSE EVALUATION

Student grades will be assigned according to the following criteria:

PARTICIPATION 15%
HOMEWORK 15%
QUIZZES 35%
LABS 15%
FINAL EXAM 20%

The student will be graded in accordance with established college policy.

Grades of A through F will be assigned according to the chart below:

100-90 = A
89-80 = B
79-70 = C
69-60 = D
59-0 = F

**SYLLABUS
ELPT 2339
ELECTRICAL POWER DISTRIBUTION**

ATTENDANCE AND WITHDRAWAL POLICIES

The class meets for 2 lecture hours and 2 lab hours per week. Each student will spend at least 4 hours per week preparing for class.

Attendance is critical since this class meets only once a week. Attendance will be taken each class period. If you miss a class, it is your responsibility to schedule any make-up test, homework, or lab with the instructor.

Because many assignments are prepared during class time, absences may adversely affect the final grade in the class.

Students will be dropped if they miss more than 20% of the classes before the drop date.

Tardies and leaving early will count as one half of an absence.

Students are also expected to take care of the equipment in the classroom. **PLEASE DO NOT BRING FOOD, DRINKS, OR UNAUTHORIZED PERSONS INTO THE CLASSROOM.**

It is the student's responsibility to withdraw from a course if circumstances occur that could prevent the student from successfully completing that course. Students should notify instructor of decision to withdraw and must not assume the instructor will complete the paperwork for the student. The instructor will complete required paperwork only if the instructor decides to drop a student for cause. Failure to notify instructor of withdrawal could result in the student failing the course.

During class, cell phones are to be turned off or set on “vibrate” mode for the entire class period. If you are expecting a call of an urgent nature, please inform me before class to make arrangements in handling the call.

SYLLABUS
ELPT 2339
ELECTRICAL POWER DISTRIBUTION

ASSIGNMENTS AND MAKE-UP POLICY

Students are responsible for completing all reading and homework assignments prior to class. All assignments are due on the date assigned. No late work will be accepted unless the student has an excused absence. An excused absence is when the student notifies the instructor of his or her absence prior to class.

Please note that changes in the Texas Education Code state that students enrolling for the first time in a Texas public institution of higher education in the fall of 2007 or after, will not be permitted to withdraw from more than a total of six courses (no minimum number of credit hours on each course) in which the student is officially enrolled during the student's period of undergraduate study at all such institutions (this includes any course a transfer student has dropped at another institution of higher education). See <http://www.brazosport.cc.tx.us/CurStu.html> for more information.

SCANS Competencies:

The Secretary's Commission on Achieving Necessary Skills (SCANS) identified competencies in the area of Resources, Interpersonal, Information, Systems, and Technology; and foundation skills in the area of Basic Skills, Thinking Skills, and Personal Qualities. This course is part of a program in which each of these competencies and skills in this course, see **Addendum A**.

SYLLABUS ELPT 2339 ELECTRICAL POWER DISTRIBUTION

ADDENDUM A

PERFORMANCE OBJECTIVES

Module 26306-14 No Performance

Module 26403-14 No Performance

Module 26411-14

Objective	Task
1	1. Prepare a cable and complete a splice or stress cone.

CLASS SCHEDULE

The following is a tentative schedule for the course. The instructor reserves the right to make schedule changes based on the needs of the students in the class.

WK	<i>LECTURE TOPIC LABS/PRACTICE</i>	<i>ASSIGNMENTS</i>	<i>DUE DATES QUIZZES/EXAMS ASSIGNMENTS</i>
1	REVIEW SYLLABUS, INTRODUCTIONS, COURSE OVERVIEW TOUR LAB		
2	MODULE-26306	MODULE 26306 Homework assigned	
4	MODULE-26306 LAB	MODULE 26306 Homework assigned	Homework due
5	START MODULE-26306 LAB	MODULE 26306: Homework assigned	UNIT EXAM 26306 Homework due

6	MODULE-26403 LAB	MODULE 26403 Homework assigned	Homework due
7	MODULE-26403 LAB	MODULE 26403 Homework assigned	Homework due UNIT EXAM-26403
8	REVIEW MODULE-26411 LAB	Homework assigned	Homework due
9	START MODULE-26411 LAB	MODULE 26411 Homework assigned	Homework due
10	FINISH MODULE-26411 LAB REVIEW MODULE	MODULE 26411 . Homework assigned	Homework due UNIT EXAM-26411
11	Electric Power System Fundamentals	. Homework assigned	Homework due
12	Electric Power System Fundamentals	Homework assigned	Homework due
13	Electric Power System Fundamentals LAB	. Homework assigned	Homework due
14	Electric Power System Fundamentals LAB	HOMEWORK ASSIGNED	Homework due
15	FINAL REVIEW	STUDY FINAL REVIEW NOTES	Homework due
16	FINAL		

**SYLLABUS: ELPT 2339
ELECTRICAL POWER DISTRIBUTION
COURSE SYLLABUS AGREEMENT FORM**

YEAR_____ **SEMESTER**_____

LAST/FIRST NAME (PRINT) _____

DATE_____ **TIME** _____

INSTRUCTOR _____

I have enrolled in ELPT 2339 – ELECTRICAL POWER DISTRIBUTION and agree that I have received a copy of the course syllabus. I agree as a condition of enrollment and participation in the course that I have read the syllabus and will comply with the requirements. It is understood that during the semester the instructor may have to make adjustments to the weekly class schedule.

SIGNATURE

DATE