

**SOUTH PLAINS COLLEGE  
COURSE SYLLABUS**

**Levelland Campus  
Fall 2023**

COURSE TITLE: **ELPT 2305**                      **MOTORS AND TRANSFORMERS**

INSTRUCTOR: Paul Harbin  
OFFICE LOCATION LE 104  
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OFFICE HOURS: As posted

**SOUTH PLAINS COLLEGE IMPROVES EACH STUDENT'S LIFE**

Course Description: This course is the study of the principles and operation of single and three-phase motors and transformers. Topics included here are transformer banking, power factor correction, and protective devices.

Course Learning Outcomes: The goals/objectives of this course are:  
The student will match the type of single-phase motor with its type of operation. Compare the operating characteristics of three types of three-phase motors. Explain the advantages of Wye and Delta connections in motor and transit applications. Size overcurrent, short circuit, and ground fault protection devices. Utilize nameplate information.

Academic Integrity: The attempt of any student to present as his or her own work which he or she has not honestly performed is regarded by the faculty and administration as a most serious offense and renders the offender liable to serious consequences, possibly suspension. If you have a question as to whether you may work with other students on any assignment, ASK YOUR INSTRUCTOR.

Assignment Policy: All required work must be turned in on time in order that the student may benefit from the corrections and study for future examinations. Assigned outside work is DUE ON THE CLASS PERIOD ASSIGNED. The instructor has sole discretion as to whether late work is acceptable.

Attendance Policy: **Students are expected to attend all classes in order to be successful in a course.** The student may be administratively withdrawn from the course when absences become excessive as defined in the course syllabus. **Students with four (4) or more absences MUST contact their instructor.** When an unavoidable reason for class absence arises, such as illness, an official trip authorized by the college or an official activity, the instructor may permit the student to make up work missed. It is the student's responsibility to complete work missed within a reasonable period of time as determined by the instructor. **Students with illness related or other absences must communicate with the instructor for those absences to be excused.**

SPECIFIC COURSE/INSTRUCTOR REQUIREMENTS:

Textbook and Other Materials: Electrical Transformers and Rotating Machines by Stephan L. Herman. Delmar Publishers

ISBN-13: 978-1305494817

ISBN-10: 1305494814

Ugly's Electrical Reference by George V. Hart

ISBN: 0-9623229-7-0

<http://www.coursesmart.com/IR/1837982/9781111039134>

## Calculator with scientific functions.

Grading Policy/Procedure: Grades will be determined by averaging scores from three categories.

- \*Major Exams
- \*\*Daily Attendance
- \*\*\*Final Examination

\*Make-up tests may be administered at the discretion of the instructor; students are expected to be present and prepared for all announced examinations.

\*\*Attendance is taken daily and accrues points per class attendance. A total of 100 points is possible.

\*\*\* Final Examination is required for all students.

Special Requirements: Safety Policy. Students should adhere to safety standards established in the SPC Student Handbook. Electrical energy can be potentially lethal. **Students will adhere to the safety policies set forth by the instructor to avoid any electrical contact.** Further, chemical hazards and appropriate MSDS safety practices will be covered by the instructor during the first class session if potential for exposure exists.

Technology: Students in need of computers for SPC classwork may check out a laptop from the library on the Levelland campus. ELPT students may check these computers out and will be responsible for the care and return of these units.

Statements: Statements can be found at this site which include:

Disabilities statement

Non-discrimination statement

CARE (Campus Assessment, Response, and Evaluation) statement

Intellectual exchange statement

Concealed carry statement

<https://www.southplainscollege.edu/syllabusstatements/>