

Course Descriptions

advanced level in the processes of mediation and negotiation. Builds on the fundamentals learned in the basic course, improves knowledge of both processes, and sharpens practical skills and effectiveness as a mediator or negotiator. Uses an interactive-workshop format that blends theory with simulated class role-play.

LEGL 4130

Bankruptcy and Collections

3:3:0

Sp

• Prerequisite(s): LEGL 1000, ENGL 2010 or ENGL 2020

Covers collection of debts and the discharge of certain financial obligations in bankruptcy, including Chapter 7, 11, and 13 filings. Utilizes lecture and practical experience in the preparation of collection and bankruptcy documents. Teaches basic collections, bankruptcy law, drafting collections, bankruptcy pleadings, and schedules.

LEGL 4150

Probates and Estates

3:3:0

F

• Prerequisite(s): LEGL 1000, ENGL 2010 or ENGL 2020

Examines purpose and methods of estate planning and the function of the legal assistant in the probate of an estate. Includes lectures and out-of-class projects. Completers should be able to draft simple wills, prepare court documents and correspondence necessary for an estate administration, and prepare basic tax forms.

LEGL 4160

Contract Law

3:3:0

Sp

• Prerequisite(s): LEGL 3000 and ENGL 2010 or ENGL 2020 and Matriculation into the Bachelor's Degree Program

Provides a functional approach to the Law of Contracts. Teaches analyzing contract problems through a five-step paradigm.

LEGL 4200 (Cross-listed with: PSY 4200, SW 4200)

Domestic Mediation

3:3:0

F

• Prerequisite(s): LEGL 3410 or PSY 3410 or SW 3410 or instructor approval

Prepares students to understand and participate knowledgeably and effectively in the process of domestic mediation. Improves conceptual knowledge about and understanding of the domestic mediation process as well as improving practical negotiation and mediation skills. Utilizes a highly interactive workshop format that blends theory with practice in simulated class role plays.

LEGL 481R

Internship

1 to 8:0:5 to 40

F, Sp, Su

• Prerequisite(s): Approval from School of Business Career and Corporate Manager

Provides actual, on-the-job work experience in a non-paying (volunteer)

basis in a law office or other approved law-related situation. Emphasizes successful work experience, especially identifying and solving problems. Completers should be qualified to work in the Paralegal profession. May be repeated for a maximum of 8 credits.

LINE—LINEMAN TECHNOLOGY

LINE 1000

Survey of Lineman Technology

2:2:0

Not 07-08

An introductory course for those interested in the electrical field with an emphasis on the electrical utility trades. Gives a general overview of the lineman trade and its general course of study. Provides some hands-on experience in wiring procedures, pole framing, circuit testing procedures, and transformer connections.

LINE 1010

Lineman Apprentice 1A

6:6:0

F, Sp

• Prerequisite(s): Departmental written approval

For lineman training technology apprentices. Introduces transmission and distribution systems, transmission and distribution. Teaches safety, climbing, overhead distribution systems, tools and service installation.

LINE 1020

Lineman Apprentice 1B

6:6:0

F, Sp

• Prerequisite(s): Departmental written approval

For lineman training technology apprentices. Introduces metering, rigging, pole work, care and testing of equipment and distribution. Teaches safety, overhead maintenance, pole framing and guying.

LINE 1030

Lineman Apprentice 2A

6:6:0

F, Sp

• Prerequisite(s): Departmental written approval

For lineman training technology apprentices. Introduces line equipment, tree trimming, hydraulic derricks and digging equipment. Teaches DC fundamentals, pole top equipment and replacement.

LINE 1040

Lineman Apprentice 2B

6:6:0

F, Sp

• Prerequisite(s): Departmental written approval

For lineman training technology apprentices. Introduces line equipment, transformers, safety and distribution. Teaches underground, hydraulics systems, AC fundamentals, and hand tools.

LINE 1110

Lineman DC Theory and Lab

4:1:9

F

For students in Lineman Technology and as an elective for persons employed in the field as a lineman apprentice or journeymen wanting to update their skills.

Covers the basic concepts and theories of DC circuits. Includes components used in DC circuitry and also the tools and equipment used in setting up and checking circuits. Discusses use and care of tools. Emphasizes safety to individual using and testing the equipment. Includes setting up direct current circuits, using meters to check resistance, voltage and amperage. Covers the construction of overhead line, installing anchors, down guys, poles, and conductors.

LINE 1120

Residential Wiring

2:1:3

F

For students in Lineman Technology as well as apprentice linemen or journeymen wanting to update their skills. Covers house wiring procedures. Includes basic material, installation, and tools. Studies applicable national electric, state, and local electric code sections. Completers should be able to wire a simple building.

LINE 1130

Lineman Applied DC Math

3:3:0

F

For students in Lineman Technology as well as apprentice linemen presently working in the trade. Solving of direct current, series, parallel, and complex circuits using Kirchhoff's Law. Uses Ohm's Law with electrical resistance, amperage, and voltage. Emphasis will be placed on classroom lectures. Stresses proper sizes of conductors and understanding basic wire properties.

LINE 1140

Basic Skill Development and Safety

4:0:12

F

For students in Lineman Technology as well as apprentice linemen working in the trade. Covers basic instruction in care and proper use of climbing equipment. Introduces the use of equipment used in line construction, and safe working procedures. Includes demonstrations and hands-on lab projects.

LINE 1210

AC Theory and Transformer Applications

4:1:9

Sp

• Prerequisite(s): LINE 1110 or departmental approval

For Lineman Technology majors as well as apprentice linemen or journeymen wanting to update their skills. Covers basic construction and theory of inductance, capacitors, and resistance in dealing with AC circuits used in the electrical field. Emphasizes hands-on lab experience. Studies theory of transformers and transformer connection in single transformers and in three-phase bank of transformers.

Course Descriptions

LINE 1220

Commercial Wiring

2:2:0

Sp

- Prerequisite(s): LINE 1120 or departmental approval

For Lineman Technology majors and apprentice lineman currently working in the trade. Studies commercial building plans, specifications, and the applicable codes (national, state, and local) that apply. Addresses correct wiring procedures and identification of materials needed.

LINE 1230

Lineman Applied AC Math

3:3:0

Sp

- Prerequisite(s): LINE 1130 or departmental approval

For Lineman Technology majors and apprentice linemen presently working in the trade. Course covers alternating current circuitry, components, devices, and how they relate to the electrical industry. Studies basic alternating current, single and three-phase circuits and their components, and the right angle trigonometry used to solve related problems.

LINE 1240

Single/Three-Phase Lines and Safety

4:0:12

Sp

- Prerequisite(s): LINE 1140 or departmental approval

For Lineman Technology majors, as well as apprentice linemen working in the trade, and journeyman lineman wanting to update their skills. Covers the construction of three-phase distribution and transmission lines, connection of single-phase transformer; three-phase transformer banks; installation of cutout arrestor and safe working procedures. Includes demonstrations and hands-on lab projects. Completers should have a working knowledge of three-phase distribution lines, phase transmission lines, also equipment installed on three-phase lines.

LINE 1300

Line Clearance Apprentice IA

5:5:0

On Sufficient Demand

- Prerequisite(s): Departmental written approval
- Teaches electrical safety, hazard tree identification, ropes, knots and climbing. Covers chain saw use and safety, first aid/CPR certification, pesticide applications, pruning standards and how trees grow. Includes hot line school.

LINE 1310

Line Clearance Apprentice IB

5:5:0

On Sufficient Demand

- Prerequisite(s): Departmental written approval
- Teaches tree identification and biology, soil relations, water management, nutrition and fertilization, tree problem diagnosis, tree planting and establishment. Covers climbing safety and techniques, public relations, aerial bucket and tree rescue, electrical hazards, chipper and stump grinder safety, operations and maintenance. Includes ISA certification,

flagging and traffic control certification and CDL training.

LINE 1500

Lineman Substation Apprentice IA

6:6:0

On Sufficient Demand

- Prerequisite(s): Departmental written approval
- Teaches basic electricity, electrical safety, tool use, Ohm's law, and series circuits. Covers parallel, combination, and DC fundamentals.

LINE 1510

Lineman Substation Apprentice IB

6:6:0

On Sufficient Demand

- Prerequisite(s): Departmental written approval
- Teaches reading electrical symbol diagram 1, substations and switchyards, transmission and distribution, safety in transmission and distribution maintenance. Covers trigonometry for AC electricity, induction and transformers. Introduces T and D systems, and AC electricity fundamentals.

LINE 1520

Lineman Substation Apprentice 2A

6:6:0

On Sufficient Demand

- Prerequisite(s): Departmental written approval
- Teaches safety in substations and switchyards, electromagnetic induction, high voltage AC power 1 and 2, transformers 1, and reading electrical system diagram 2. Covers use of electrical test equipment and line test equipment, care and testing of tools and equipment, bucket truck 1, and system protection and monitoring.

LINE 1530

Lineman Substation Apprentice 2B

6:6:0

On Sufficient Demand

- Prerequisite(s): Departmental written approval
- Teaches distribution line safety, material handling bucket truck, power transformer insulation resistor testing, power transformer turns ration testing, power transformer oil test and power transformer pressure relay testing. Covers new power transformer inspection and tests, power transformer vacuum dry out and vacuum filling, temperature indicating and testing, and oil reconditioning.

LINE 1600

Meter Apprentice IA

6:6:0

On Sufficient Demand

- Prerequisite(s): Departmental written approval
- For meter apprentices. Teaches basic electrical principles, principles of magnetism AC concepts. Covers atomic structure, electrical qualities, Ohm's law, resistors, and parallel circuits. Teaches trigonometry and alternating current.

LINE 1610

Meter Apprentice IB

6:6:0

On Sufficient Demand

- Prerequisite(s): Departmental written approval
- For meter apprentices. Teaches math for metering, safety, watt hour meter principles and wire tables.

LINE 1620

Meter Apprentice 2A

6:6:0

On Sufficient Demand

- Prerequisite(s): Departmental written approval
- For meter apprentices. Teaches meter watt hour constants, register ratios and formulas. Covers principles of accuracy testing, meter testing and calibration.

LINE 1630

Meter Apprentice 2B

6:6:0

On Sufficient Demand

- Prerequisite(s): LINE 1620 or departmental written approval
- For meter apprentices. Teaches single phase meter application and installation, polyphase power systems, polyphase meter application, meter testing and calibration. Covers instrument transformers, testing single phase transformer rated meters and Blondel's theorem.

LINE 2010

Lineman Apprentice 3A

6:6:0

F, Sp

- Prerequisite(s): Departmental written approval
- For lineman training technology apprentices. Introduces compressors, transformer connections, underground conduit and street lighting systems. Teaches distribution repair with gloves and hot sticks, and cable installation.

LINE 2020

Lineman Apprentice 3B

6:6:0

F, Sp

- Prerequisite(s): Departmental written approval
- For lineman training technology apprentices. Introduces troubleshooting overhead and transformers, safety and power quality. Teaches high-voltage AC power, switchgear and URD transformers.

LINE 2030

Lineman Apprentice 4A

6:6:0

F, Sp

- Prerequisite(s): Departmental written approval
- For lineman training technology apprentices. Introduces reading electrical diagrams, transformers, splicing and meters. Teaches cable termination, troubleshooting, safety and fault location.

LINE 2040

Lineman Apprentice 4B

6:6:0

F, Sp

- Prerequisite(s): Departmental written approval
- For lineman training technology apprentices. Introduces voltage regulators, customer relations, cable fault locations, and transformers. Teaches troubleshooting, circuit breakers, capacitors and reactors.

LINE 2310

Powerline Technician and Safety Code I

4:2:6

F

- Prerequisite(s): LINE 1210 or departmental approval
- For Lineman Technology majors to give the trainee a basic knowledge of first aid, basic electricity, power line installation, and work methods. Includes lectures and lab

projects. Completers should be able to function on a line crew.

**LINE 2320
Industrial Wiring**

2:1:3 **F**
 • Prerequisite(s): LINE 1120 and LINE 1220 or departmental approval
 For Lineman Technology majors and apprentice linemen currently working in the trade. Studies industrial building sites, electrical materials, tools, equipment, and manpower needed to complete electrical installations. Uses lectures, demonstrations, lab projects, and field trips. Teaches how to read site plans, select proper materials for service equipment, list the substation components, identify various types of busways, determine the number and kind of electrical panels, describe signalling system component parts; be familiar with the machine layout in the industrial building. Completers should be able to assist qualified electrical workers install industrial wiring.

**LINE 2330
Single and Polyphase Metering**

2:1:3 **F**
 • Prerequisite(s): LINE 1110, LINE 1130, LINE 1210, and LINE 1230 or departmental approval
 For the Lineman Technology majors and apprentice linemen currently working in the trade. Studies single and three phase residential, commercial, and industrial building metering needs. Includes metering history, construction, principles, and parts of a meter. Teaches meter applications and installations, meter testing and inspection. Uses lecture, demonstration, and lab study. Stresses selection and installation of proper single and three-phase meters to meet customer needs.

**LINE 2340
Three-Phase Lines and Safety**

5:0:15 **F**
 • Prerequisite(s): LINE 1240 or departmental approval
 For Lineman Technology majors or apprentice linemen who are currently working in the trade. The skill development and safety phase will contain all facets of outside line work from digging holes, setting poles, stringing conductors, replacing old poles, and general line work. Develops skills through hands-on work, demonstrations, and application of methods learned in classroom experiences. Completers should have a good working knowledge of how to construct and maintain a power line, knowledge of transformers and their applications, and be able to effectively and safely work 4 KV circuits with rubber gloves.

**LINE 2410
Powerline Technician and Safety Code II**

4:1:9 **Sp**
 • Prerequisite(s): LINE 1210 and LINE 2310 or departmental approval
 For Lineman Technology majors and apprentice linemen currently working in the lineman trade. Includes basic knowledge of first aid, basic electricity, power line installation, and basic work methods. Studies the National Electrical Safety Code. Emphasizes field work, lectures, and demonstrations. Completers should be able to function as an apprentice on a line crew.

**LINE 2430
Substation Equipment**

4:2:6 **Sp**
 • Prerequisite(s): LINE 1110, LINE 1210, and LINE 2310 or departmental approval
 For Lineman Technology majors or apprentice linemen working in the lineman trade. Studies substation site selection, sizing according to existing load requirements, the equipment uses and purposes, and the different types of substation construction. Uses lecture and field trips to established substation sites, video tapes, and hands-on work at the outdoor lab.

**LINE 2440
High Voltage Substation and Safety**

4:0:12 **Sp**
 • Prerequisite(s): LINE 1240 and LINE 2340 or departmental approval
 For Lineman Technology majors or apprentice linemen working in the trade. Includes all kinds of dead work and applications of energized work with rubber gloves and hot sticks. Teaches almost exclusively by hands-on work methods. Completers should be able to work safely and effectively on all types of energized work with rubber gloves and a variety of energized work with hot sticks.

**LINE 2500
Lineman Substation Apprentice 3A**

6:6:0 **On Sufficient Demand**
 • Prerequisite(s): Departmental written approval
 Teaches safety in substations and switchyards continued, circuit breakers 1 and 2, contact resistance testing, new circuit breakers inspections and tests, circuit breaker time travel testing and analysis. Covers Hydraulic derricks and digging equipment rigging 1 and 2 and advanced rigging.

**LINE 2510
Lineman Substation Apprentice 3B**

6:6:0 **On Sufficient Demand**
 • Prerequisite(s): Departmental written approval
 Teaches bucket truck safety, capacitors and reactors, voltage regulators, relays 1 and 2, control equipment, and high voltage terminations. Covers substation battery, battery chargers, testing, cell and charger replacement.

**LINE 2520
Lineman Substation Apprentice 4A**

6:6:0 **On Sufficient Demand**
 • Prerequisite(s): Departmental written approval
 Teaches SF6 gas properties and handling, current transformer testing 1 and 2, vacuum bottle hi-pot testing, infrared conditioning monitoring, corona discharge testing. Covers multimeter operation and use, instrument transformers, reactive metering concepts, SCADA-system protection and monitoring (Provo), and cable terminations.

**LINE 2530
Lineman Substation Apprentice 4B**

6:6:0 **On Sufficient Demand**
 • Prerequisite(s): Departmental written approval
 Teaches safety in transmission and distribution maintenance, safety in substation and switchyards continued, transformers 1, use of electrical test equipment, distribution line safety, power transformer turns ratio testing, power transformer temperature indicating testing, oil reconditions. Covers relays 1 and 2 continued, capacitors and reactors continued, new circuit breakers inspections and tests continued.

**LINE 2600
Meter Apprentice 3A**

6:6:0 **On Sufficient Demand**
 • Prerequisite(s): LINE 1630 or departmental written approval
 For meter apprentices. Teaches self contained polyphase meter testing, polyphase transformer rated application. Covers demand metering concepts.

**LINE 2610
Meter Apprentice 3B**

6:6:0 **On Sufficient Demand**
 • Prerequisite(s): LINE 2600 or departmental written approval
 For meter apprentices. Teaches testing and calibrating demand meters, meter mounting devices and test switches. Covers reactive metering and reactive meter testing.

**LINE 2620
Meter Apprentice 4A**

6:6:0 **On Sufficient Demand**
 • Prerequisite(s): LINE 2610 or departmental written approval
 For meter apprentices. Teaches totalizing meters, installation checks and inspections. Covers solid state meters and associated devices. Teaches customer relations.

**LINE 2630
Meter Apprentice 4B**

6:6:0 **On Sufficient Demand**
 • Prerequisite(s): LINE 2620 or departmental written approval
 For meter apprentices. Teaches energy diversion, trouble shooting techniques, and pulse initiators and recorders. Covers electronic metering, register programming and computers.

Course Descriptions

LINE 281R

Cooperative Work Experience

1 to 8:0:5 to 40

Su, F, Sp

• Corequisite(s): LINE 285R

Provides paid, on-the-job work experience in the student's major. Work experience, the related class, and enrollment are coordinated by the Cooperative Coordinator. Includes student, employer and coordinator evaluations, on-site work visits, written assignments, and oral presentations. Provides experience in writing and completing individualized work objectives that improve present work performance.

LINE 285R

Cooperative Correlated Class

1:1:0

Su, F, Sp

• Corequisite(s): LINE 281R

Identifies on-the-job problems and provides remediation of those problems through in-class discussion and study. Includes the study of identifying and maximizing service opportunities. Students register for this class with the approval of the Cooperative Coordinator. Includes lecture, guest speakers, video tapes, role playing, case analysis, oral presentations and written assignments. Completers should be better able to perform in their field of work or study.

MAT—MATHEMATICS - DEVELOPMENTAL

MAT 0800

Math Fundamentals

3:3:0

Su, F, Sp

• Prerequisite(s): Appropriate test scores

Reviews whole number operations and covers fractions, prime factorization, greatest common factors, and least common multiples. Covers basic operations involving decimals, percents, ratios, and proportions. Includes the basic operations involving measurement and geometry. Introduces basic algebraic operations.

MAT 090R

Individualized Mathematics Review

1 to 3:1 to 3:0

On Sufficient Demand

• Prerequisite(s): Appropriate test scores

For students placing into MAT 0950 or MAT 0990. Includes diagnostic test of student's mathematical knowledge base. Develops individualized study plan, including number of credit hours recommended to complete. Course offered credit/no credit. May be repeated once for a maximum of 5 credits.

MAT 0950

Foundations for Algebra

5:5:0

Su, F, Sp; DE

• Prerequisite(s): One of the following: Appropriate test scores taken within the last two years or MAT 0800 with a grade of C- or better completed within the last two years.

Designed for students requiring basic math

and pre algebra instruction. Covers basic operations for number systems up to and including real numbers. Includes fractions, ratios, proportions, decimals, exponents, roots, linear equations, and polynomial expressions. A preparatory course for MAT 0990, Introductory Algebra.

MAT 0960

Special Topics in Math--Nursing

2:2:0

On Sufficient Demand

• Prerequisite(s): Completion of MAT 0800 (C- or better) or appropriate test scores

Recommended for students planning to enroll in NURS 1030. Prepares students to successfully perform calculations of dimensional analysis required in administering medications. Includes Properties of Real Numbers, Prime factorization, operations with whole numbers, fractions, and decimals, rounding, ratios, proportions, percents systems of measurements, reading and interpreting measurement data on labels and orders, problems-solving strategies, and dimensional analysis.

MAT 0980

Integrated Pre-Algebra and Beginning Algebra

5:5:0

Su, F, Sp; DE

• Prerequisite(s): Appropriate test scores that are no more than two (2) years old

An accelerated preparatory class for MAT 1010, Intermediate Algebra, covering Pre-Algebra and Beginning Algebra in one semester. Topics of study include real numbers, algebraic expressions, polynomials, solving and graphing linear equations and inequalities, factoring, quadratic equations, rational expressions and equations, ratios, percents, systems of linear equations, roots and radicals, and an introduction to complex numbers.

MAT 0990

Introductory Algebra

4:4:0

Su, F, Sp; DE

• Prerequisite(s): One of the following: MAT 0950 or MAT 0980 with a grade of C- or better and taken within the last two years; or appropriate math placement test scores that are no more than two (2) years old

For students who have completed a minimum of one year of high school algebra or who lack a thorough understanding of basic algebra principles. Teaches integers, solving equations, polynomial operations, factoring polynomials, systems of equations and graphs, rational expressions, roots, radicals, complex numbers, quadratic equations and the quadratic formula. Prepares students for MAT 1010, Intermediate Algebra.

MAT 1000

Integrated Beginning and Intermediate Algebra

5:5:0

Su, F, Sp; DE

• Prerequisite(s): One of the following: MAT 0950 with a grade of B or better and taken within the last two years or MAT 0980 with a C- or

better and taken within the last two years ; or appropriate math placement test scores that are no more than two (2) years old

Teaches Beginning and Intermediate Algebra in one semester. Includes linear, quadratic, and rational expressions, equations, and functions; systems of equations; logarithms; exponents; graphing; and problem solving. Prepares students for MATH 1030, 1040, and 1050.

MAT 1010

Intermediate Algebra

4:4:0

Su, F, Sp; DE

• Prerequisite(s): One of the following: MAT 0980 or MAT 0990 with a grade of C- or better and taken within the last two years; or appropriate math placement test scores that are no more than two (2) years old

Expands and covers in more depth basic algebra concepts introduced in Beginning Algebra. Topics of study include linear and quadratic equations and inequalities, polynomials and rational expressions, radical and exponential expressions and equations, complex numbers, systems of linear and nonlinear equations, functions, conic sections, and real world applications of algebra.

MATH—MATHEMATICS

MATH 1030

Quantitative Reasoning

3:3:0

Su, F, Sp

• Prerequisite(s): One of the following: MAT 1000 or MAT 1010 with a grade of C or better within the past two years; an ACT mathematics score of 23 (assuming the test has been taken within the last two years); recommended placement by the COMPASS test

Introduces major topics in the field of mathematics. Includes sets, algebra, geometry, and statistics. Emphasizes problem solving and critical thinking.

MATH 1040

Introduction to Statistics

3:3:0

Su, F, Sp

• Prerequisite(s): One of the following: MAT 1000 or MAT 1010 with a grade of C or better within the past two years; an ACT mathematics score of 23 (assuming the test has been taken within the last two years); recommended placement by the COMPASS test

An elementary statistics course. Includes descriptive statistics, sampling, and inferential methods. Emphasizes problem solving and critical thinking.

MATH 1050

College Algebra

4:4:0

Su, F, Sp; DE

• Prerequisite(s): One of the following: MAT 1000 or MAT 1010 with a grade of C or better within the past two years; an ACT mathematics score of 23 (assuming the test has been taken within the last two years); recommended placement by the COMPASS test

Includes inequalities, functions and their graphs, polynomial and rational functions, exponential and logarithmic functions, conic sections, systems of linear and nonlinear equations, matrices and