NORTHERN NEW MEXICO COLLEGE

ELEC 1143L SYLLABUS

Course Number Course Name	ELEC 1143L Electrical Industrial Applications Lab I
Credit Value (Breakdown of theory and lab credits)	3 (3 Lab)
Catalog Course Description	In this course, students will learn practical applications and operations in wiring techniques and codes for industrial projects; tools safety, hardware use and installation. Pre-requisites: None
Student Learning Outcomes/Objectives /Competencies of the Course	Outcomes • Learn and explain proper installation techniques • Learn and explain conduit techniques Topics • How to work with fractions • Using basic trigonometric functions • Introduction to conduit bending • Conduit types • Hand fabrication of 90° stubs • Hand fabrication of back-to-back bends • Hand bending offset and kicks • Hand bending -three & four-bend saddles • Splicing conductors • Installing a duplex receptable • Installing a single pole switch • Installing a switched duplex receptable • Proper device installation techniques, GFCI rough-in • Using a hacksaw • Lifting and carrying conduit • Hand bending a 90 ° stub-up • Hand bending a box offset • Threading conduit (tapered thread) • Conduit threading techniques • Push-through bending: 90° bends • Bending kicks, offsets and saddles using the push-through methods • Segmented bends
College-Wide Student Learning Outcomes	*College Wide Student Learning Outcomes:* Communication Critical Thought