

LRNS-111 College Success Strategies 3 cr.

Provides an in depth opportunity for students to learn and adopt methods that promote success in college and in life. Course may be applied towards an elective for an AA degree or certificate. Offered: All.

LRNS-112 College Success for Health Careers 3 cr.

Provides an opportunity for students to learn and adopt methods that promote success in college and in life, specifically within the health science certificate and degree programs. Learning will focus on developing skills in communication, health management, diversity and relationships, test taking, time management, research techniques, basic computer skills, and basic reading skills will be covered. Career exploration within the health sciences will be covered. Students will complete 12 hours of job shadowing in the health career of their choice. Offered: Fall & Spring.

LRNS-113 Freshman Seminar 3 cr.

The Freshman Seminar is a unique transition course designed to facilitate the students' integration into the learning community of the college. The course provides an opportunity to enhance the students' skills for success in college, in life, and within this discipline. Students will explore careers within this discipline and develop academic skills and an understanding of college culture. This course fosters the students' meaningful educational engagement.

LRNS-221 Contrasting Western/Trad. Healthcare 1 cr.

Students will learn to maximize Native American history, values and culture to transition into science and healthcare courses based on western educational models. Offered: Fall & Spring.

LRNS-222 Healthcare Practices in Native Cultures 1 cr.

This course will assist students in preparing to work in Native American communities and on reservations. Students will learn how to incorporate Native American traditional beliefs and values into their practice.

LEASE OPERATOR**LSOP-111 Production Field Tech 2 cr.**

Students will study producing natural resources (oil and gas), from newly drilled and existing well locations to include: minimum surface equipment operations, wellhead design, common field terminologies, pressure gauges, location and fluid flow layout, proper use of hand tools, and equipment safety devices. Safety will be strictly enforced. Prerequisites: MATH-095, ENGL-095 OR CPT EQUIVALENT. Offered: Fall. Faculty Permission Required.

LSOP-113 Surface Equipment P & M 2 cr.

Students will learn skills, techniques and procedures to properly perform routine preventative maintenance on surface production equipment. Safety will be strictly enforced. Prerequisites: Completion of ENGL-095 and MATH-095 or appropriate English and Math Accuplacer scores. Offered: Fall. Faculty Permission Required.

LSOP-114 Wellhead Operation & Design 1 cr.

To provide students with techniques and procedures to correctly identify different wellhead designs and preventative maintenance routines. Safety will be strictly enforced. Prerequisites:

Completion of Math-095 and ENGL-095 or appropriate Math and English Accuplacer scores. Offered: All.

LSOP-180 Cooperative Work Exp I 5 cr.

The students will be employed by a company in the lease operator field which will provide relevant learning experiences that are directly related to the student's most recent classroom/laboratory experiences. The student will be supervised and evaluated jointly by his/her employer and San Juan College personnel. Prerequisites: LSOP-111, LSOP-112, LSOP-113, SAFE-114, SAFE-139, and COSC-125. Offered: Fall. Faculty Permission Required.

LSOP-181 Cooperative Work Experience I 7 cr.

Students will be temporarily employed by a company in the oil and gas industry which will provide relevant learning experiences that are directly related to the student's most recent classroom/laboratory experiences. Students will be supervised and evaluated jointly by his/her employer and San Juan College School of Energy personnel. Prerequisites: LSOP-111, LSOP-112, LSOP-113, SAFE-114, SAFE-139, COSC-125 OR COSC-137. Offered: Fall. Faculty Permission Required.

LSOP-201 Basic Oil Measurement & Gauging 1 cr.

Students will study Basic methods for gauging and correctly documenting Hydrocarbon or oil tanks, inclusive of State and Federal regulatory requirements. This will include producing natural resources (oil) from newly drilled and existing well locations. Safety will be strictly enforced. Prerequisites: Completion of MATH-095 and ENGL-095 or appropriate Math and English Accuplacer scores. Offered: Spring. Faculty Permission Required.

LSOP-202 Basic Field Gas Measurement 2 cr.

Students will be introduced to the fundamentals of gas measurement. Includes dry flow meters and remote telecommunication units (RTU's). Safety will be strictly enforced. Prerequisites: Completion of MATH-095 and ENGL-095 or appropriate Math and English Accuplacer scores. Offered: Spring. Faculty Permission Required.

LSOP-203 Intro to Wireline & Swab Techniques 1 cr.

Students will be introduced to wireline benefits and experience an introduction to swabbing techniques. Safety will be strictly enforced. Prerequisites: Completion of MATH-095 and ENGL-095 or appropriate Math and English Accuplacer scores. Offered: Spring. Faculty Permission Required.

LSOP-205 Beam Lift & Chemical Pump 2 cr.

An introduction to beam lift systems design and operation. Operation and usage of chemical injection pump. Safety will be strictly enforced. Prerequisites: Completion of MATH-095 and ENGL-095 or appropriate Math and English Accuplacer scores. Offered: Spring. Faculty Permission Required.

LSOP-206 Reduced Production Rates 1 cr.

Introduce the student to the causes and prevention of unexpected reduced production rates. Safety will be strictly enforced. Prerequisites: Completion of MATH-095 and ENGL-095 or appropriate Math and English Accuplacer scores. Offered: Spring. Faculty Permission Required.

LSOP-207 Intro Plunger Lift 2 cr.

An introduction of plunger lift systems and operation. Safety will be strictly enforced. Prerequisites: Completion of MATH-095 and ENGL-095 or appropriate Math and English Accuplacer scores. Offered: Spring. Faculty Permission Required.

LSOP-226 Adv Separator Valve Training II 1 cr.

Students will receive comprehensive training involving the repairing and operation of separator and other common surface equipment valves and used in the oil and gas industry. Safety will be strictly enforced. Prerequisites: Completion of MATH-095 and ENGL-095 or appropriate Math and English Accuplacer scores. Offered: All.

LSOP-230 Theory of Line Locating 0.50000

Students will receive basic theory training in theory of line locating inclusive of buried utility lines and well location flow lines in partnership with industry. PowerPoint presentation, lecture and minimal equipment training. Students will be required to understand and retain information provided by Lecture and PowerPoint presentation and be able to walk long distances inclusive of steep inclines. Also must be able to perform basic math functions. Safety will be strictly enforced. Offered: On Demand. Faculty Permission Required.

LSOP-281 Cooperative Work Experience II 9 cr.

Students will be employed either by using a temporary employment agency or a sponsoring company in the oil and gas industry which will provide relevant learning experiences that are directly related to the student's most recent classroom/laboratory experiences. The student will be supervised and evaluated by his/her industry supervisor. Safety will be strictly enforced. Offered: All. Faculty Permission Required.

MACHINE SHOP**MASH-115 Machine Shop Blueprint Reading 3 cr.**

Introduction to language of lines, sketching, print reading, and interpreting detailed working drawings. Offered: Fall & Spring.

MASH-116 Basic Machine Shop 4 cr.

The course is an introduction to the machine shop environment. Operations of the drill press, band saw, lathe, layout operations, and tool identification will be covered. Will also include basic lathe and general machining operations. Corequisites: MASH-117, MASH-118, MASH-119. Offered: Fall & Spring.

MASH-117 Machinist Measurements 3 cr.

Course will cover measurement methods used in the machining industry. All measuring devices and methods used in the machining industry will be covered. Corequisites: MASH-116. Offered: Fall & Spring.

MASH-118 Basic Lathe Operations 4 cr.

Course will cover basic tooling and lathe operations. Carbide and HSS turning tool uses are focused on. Feeds and spindle speeds are emphasized throughout the course. Prerequisites: MASH-117. Offered: Fall & Spring.

MASH-119 Single Point Threading 3 cr.

The study and application of single point threading on engine

lathe. Tool grinding, fundamentals of threading, thread nomenclature, machine setup, spindle speeds, tool geometry, HSS, braised carbide and insert threading tools will be covered. Corequisites: MASH-118. Offered: Fall & Spring.

MASH-122 Basic Milling Operations 4 cr.

Course covers basic milling operation, milling machine nomenclature, controls and applications of face milling, side milling, shoulder milling, vise indication, head indication, speeds, feeds and depth of cuts. Prerequisites: MASH-119. Offered: Fall & Spring.

MASH-123 Machining Calculations 3 cr.

Course demonstrates the fundamentals of feeds and speeds to machine operators. Feeds and speeds for HSS, solid carbide, and insert tooling are covered and applied for both lathes and mills. Corequisites: MASH-122. Offered: Fall & Spring.

MASH-124 Precision Surface Grinding 4 cr.

Course is the introduction to precision grinding fundamentals and operation of equipment. Machine safety, setup, basic grinding operations, coolants, stone dressing, and proper wheel selection are covered in the course. Prerequisites: MASH-123. Offered: Fall & Spring.

MASH-129 Tool Grinding 3 cr.

Course pays close attention to the grinding, sharpening, and dressing of a variety of different cutting tools. Different tool geometries are examined and used for the corresponding materials being machined. Corequisites: MASH-124, MASH-122, MASH-123. Offered: Fall & Spring.

MASH-206 Advanced Lathe Operations 4 cr.

Course develops increased accuracy on the lathe for more challenging operations. This will include external and internal turning, precision boring, indication of odd shaped objects in 4-jaw chuck, and precision thread cutting. Prerequisites: MASH-129. Offered: Fall & Spring.

MASH-207 Specialized Machining Operations 3 cr.

Students will apply turning, milling, and precision surface grinding knowledge to manufacture larger and more complex projects. New machining practices will be covered throughout the course that will apply to real world jobs. Corequisites: MASH-206. Offered: Fall & Spring.

MASH-208 Advanced Milling Operations 4 cr.

Course covers the study of applications of advanced milling operations on vertical and horizontal milling machines. Includes key way cutting, gear cutting, index head use, precision boring, and precision milling. Prerequisites: MASH-207. Offered: Fall & Spring.

MASH-209 Machine Shop Maintenance 3 cr.

Course covers maintenance and repair of manual lathes and milling machines. Students will be in charge of all maintenance items and repairs in the Machine Shop. Other topics will include jigs and fixtures on both milling machines and lathes. Corequisites: MASH-208. Offered: Fall & Spring.

MASH-212 Advanced Machining Techniques 4 cr.

Course is a collaboration of previously learned machining