

MECH-2610 PUMPS & PIPING 4 CREDITS

SYLLABUS

CATALOG DESCRIPTION

In this course students will learn and demonstrate how to select, operate, install, maintain, troubleshoot and repair the pumps used in industry, to include: centrifugal and positive displacement pumps.

Students will also learn and demonstrate the planning, installation, maintenance and troubleshooting of fluid systems to include: metal and plastic pipe, various pipe fittings, and valves, as well as, different methods of joining piping.

Prerequisites: MECH 2410

Semester Offered: Fall

GENERAL EDUCATION STUDENT LEARNING OUTCOMES

In the New Mexico General Education Curriculum students take courses in a variety of content areas, which may include Communications, Mathematics, Science, Social and Behavioral Sciences, Humanities, and the Creative and Fine Arts. Specific course requirements depend on your program. All general education courses focus on at least three of these skills. Other courses may also develop these skills.

Through these courses, students develop five essential skills:

COMMUNICATION

QUANTITATIVE REASONING

CRITICAL THINKING

PERSONAL AND SOCIAL RESPONSIBILITY

INFORMATION AND DIGITAL LITERACY

Student work from this class may be randomly selected and used anonymously for assessment of course, program, and/or general education learning outcomes. For more information, please refer to the Dean of the appropriate School.

COURSE LEARNING OUTCOMES

Upon successful completion of the course, students will be able to...

Students will be introduced to pumps, both, positive displacement and centrifugal.

Selection, operation, maintenance, troubleshooting and repair will be covered.

Students will learn about net positive suction head, pump flow head measurements, pressure head conversions and cavitation.

Mechanical seals and packing will also be addressed.

Students will learn and be able to plan and install various types of piping systems, to include reading and interpreting piping schematics.

Students will learn and put in use various types of pipe fittings.

Students will cut, thread, glue and sweat various types of piping

REV. 01/09/20