SAN JUAN COLLEGE
Success Matters

MECH-2630 MECHANICAL DRIVES II 4 CREDITS

SYLLABUS

CATALOG DESCRIPTION

In this class students will learn the types of bearings used in mechanical transmission systems, bearing identification, installation, removal, and lubrication. This course will also cover gear systems, brakes and clutches. In addition, students will learn to set up, operate and apply the use of dial indicators and laser shaft alignment tools.

Prerequisites: MECH 2710

Semester Offered: SPRING, ON DEMAND

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…

1. Upon completion of this course, the Student will be able to:
   Identify, select, install and remove sliding surface and anti-friction type bearings.
   Student will also be able to lubricate and set bearings to manufacturer's specifications.

2. Student will be able to select and install various gears in a mechanical drive systems.
   Student will gain knowledge on brakes and clutches to include operation, identification, application and selection.
   Student will gain knowledge on linear ball bushings and linear screw drives to include; identification, application and selection.

3. Student will demonstrate proficiency in selection, installation and fabrication of o-rings, gaskets and mechanical seals.

4. Students will be able to identify laser alignment components, as well as, demonstrate the use in an alignment application.

5. Students will be able to set up and use dial indicators in a variety of applications.
   Students will become familiar with terms and practices relating to maintenance methods and vibration analysis

A copy of this approved syllabus is on file in the dean's office.
Updated 12/14/18