

## **IPOP-2610-Process Technology 3-Operations**

## **SYLLABUS**

## CATALOG DESCRIPTION

This course will bring together all the concepts and knowledge students have acquired up to this point in the program. It will provide them with a good, general overview to complete their education as a process technician and is a final preparation before applying to industry with the knowledge and skills needed to make them a valuable asset to industry.

Prerequisites: IPOP 2450, 2460, 2470, 2480

Semester Offered: All

Common Student Learning Outcomes Upon successful completion of San Juan College programs and degrees, the student will demonstrate competency in... **BROAD AND SPECIALIZED LEARNING** Students will actively and independently acquire, apply, and adapt skills and knowledge with an awareness of global contexts. **CRITICAL THINKING** Students will think analytically and creatively to explore ideas, make connections, draw conclusions and solve problems. CULTURAL AND CIVIC ENGAGEMENT Students will act purposefully, reflectively, and ethically in diverse and complex environments. **EFFECTIVE COMMUNICATION** Students will exchange ideas and information with clarity in multiple contexts. INFORMATION LITERACY Students will be able to recognize when information is needed and have the ability to locate, evaluate, and use it effectively. INTEGRATING TECHNOLOGIES Students will demonstrate fluency in the application and use of technologies in multiple contexts.

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

## **Course Learning Outcomes**

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

 Student will be able to describe the technical skill and knowledge, the safety knowledge, economic saavy, quality consciousness, and effective communication required for a vital workforce that can apply to all technical professions.

- 2. Student will use process chemistry and physics to see how it is interrelated to safety and health, how one directly affects the other.
- 3. Explain how good or poor communication can directly affect productivity, safety, and quality.
- 4. Student will define duties of a process technician, from making rounds, sampling, and maintenance responsibilities.
- 5. Student will identify bulk liquid storage handling and its importance to public and plant safety.
- 6. Student will summarize the process, rationale, and duties during plant shutdowns, turnarounds, and startups.