



IPOP 2450 Maintenance Overview for Operators Section Name Section Credit Hours Credits Syllabus

Course Information

Meeting times and location: section meeting_times section location

Catalog description: Introduces the maintenance of equipment that utilizes mechanical, electrical and instrumentation concepts. Topics include: hand tools, bearing fundamentals, equipment lubrication, material handling, electrical safety, battery systems, diagrams, electrical production and distribution, transformers, breakers, switches, AC and DC motors, motor controllers and operations, and introduction to automation and instrumentation.

Terms offered: Fall and Spring

Section-specific Course Description:

Course Level Objectives

- 1.Explain basic safety practices and tools used when involved in maintenance activities
- 2.Explain the importance of preventive maintenance and identify and explain basic PM practices.
- 3.Define terms associated with the input side of a control system
4. Discuss basic mechanical equipment and concepts such as hand tools, bearings, lubricants, lubrication applications, packings and mechanical seals
5. Identify and describe basic components as well as procedures in lifting maneuvers
6. Identify and discuss basic electrical terms, and equipment
7. Explain various sources of electricity, the equipment used to produce it and how the electricity gets to the end user

Required Texts and/or Materials

No Textbook Required

Required Technology and Software

- Canvas
- Chrome, Safari, or Firefox

Course Requirements

Students will do the following activities:

Course Requirements

1. Class Attendance - 25%

Much of the learning occurs in the process lab setting and is reinforced with the on-line program. Therefore, class attendance and participation are essential to your learning and attendance will be taken. IF YOU HAVE MORE THAN 4 ABSENCES, YOU MAY AUTOMATICALLY FAIL THE CLASS. Class attendance is 25% of the grade, included in this is punctuality and class participation. Points will be taken off for tardiness, leaving early and not participating in class activities.

2. Plant and Lab – 25%

Your grade will come from your participation in the Plant/Lab portion of the class. This portion of your grade is determined by:

Completion of the Group work in the Process Plant on Modules

Active participation by each member of the group

How well the Module was operated

How well the skill check was completed

3. CBT Post Tests (CBTs) On-Line – 15%

After viewing the associated CBT (Computer Based Training) video and or handbook located in CANVAS, you will take a CBT Post Test. These tests are usually multiple choice, true-false, matching or fill in the blank questions.

4. Review Quizzes – 10%

There are several Powerpoints and a reading assignment in the course material. These assignments are found on the Module page of Canvas. After each of these assignments, students will be required to complete some review questions.

5. Sectional Exams – 15%

After a certain amount of material is covered, a written exam will be administered through CANVAS. These tests cover material in that section of the Module page in Canvas. They will cover material in Review quizzes, CBT Post Tests, Power Points and possibly Plant & Lab exercises you've completed.

6. Final Exam – 10%

The final exam will be comprehensive covering all the material presented in this class.

7. Make-Up Test Policy

A penalty can be assessed for taking tests late if the instructor wasn't given prior notification.

8. Students must wear safety glasses and steel-toed shoes when working in the Process and Water Labs and proper clothing.

9. Portfolio

Students will be required to maintain a portfolio throughout the IPOP program. The portfolio will consist of a notebook containing key lessons or skills completed while going through the program. These lessons or skills include: PFD drawings of each of the modules, hands-on competencies requiring you to start-up, shut-down and take a set of readings for each module, hands-on

performance of certain analytical test done in the water lab and other key assignments. In order to progress to the next semester, you must successfully pass the items required for the present semester based on the competencies of each item. Students are required to maintain the portfolio, turning them in at the end of each semester for review and given back to you at the start of the next semester.

Other Classroom Policies and Expectations

Students will abide by all SJC Rules and Regulations, Safety, Health & Environmental practices used at this facility.

Cell phones, computers and other electronic devices off unless used in part of the Hands-On Training.

No foul language, obscene clothing or unsafe acts, or class disruptions.

Students must complete this course with 76% or higher to progress to the next class.

Grading

A93 - 100 %

B	85–92
C	76–84
D	69–75
F	68 or below

To determine final grades use the calculations above along with the table below...

Catagory

Weight

Attendance	25
Plant & Lab Skill Checks	25
CBT Post Tests	15

Quizzes, Written Assignments	10
Sectional Exams	15
Final Exam	10

Example of grade calculation

CategoryCurrent AverageWeightPoints

Chapter quizzes	95 x	.25	23.75
CBT Post Tests	89 x	.25	22.25
Sectional Exams	85 x	.25	21.25
Final Exam	100 (assumed) x	.25	25
Your Grade			92.25

Course Time Commitment

9-12 hours outside of class each week.

Canvas Participation and Expectations

Instructor to determine.

Participation and Attendance Policy

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Instructor Response Times & Regular Interaction Expectations

Usually instructor will respond within 24 hours.

Key Dates to Remember

[Full Academic Calendar](#)

Course Schedule

Instructor will post each semester.

Program Handbook

Not applicable.

Technical Support

Technical support is available through the San Juan College Help Desk 24/7/365. The help desk can be reached at 505-566-3266 or by creating a ticket at [San Juan College Help Desk](#).

For password reset and Canvas support, visit the [Student Technology Guide](#) website.

Accessibility/Privacy Policies for all Technology Tools Used

[Accessibility/Privacy Policies for all Technology Tools Used](#)

Student Support

At San Juan College, we are committed to supporting your academic success and overall well-being. We recognize that college life can be challenging and stressful, impacting both learning and personal health. We are here to help you succeed.

Academic Support and Resources

We provide a range of academic support services to help you stay on track on your educational journey. Free resources include tutoring, computer loans, life skills workshops, and so much more. Visit the [Academic Support and Resources](#) webpage to learn more about support and resources available through Academic Advising, the Tutoring Center, the Student Resource Center (formerly Student Achievement Center) and the Testing Center.

Student Support and Resources

If you or someone you know could benefit from counseling, accessibility services, career exploration, veteran transitional assistance, or any of our other support services, visit the [Student Support and Resources](#) webpage where you'll find detailed information about various resources available to you as an SJC student.

We encourage you to take advantage of these free resources to enhance your college experience and ensure your success.

College Policies and Resources for Current Students

The [Student Handbook](#) provides information on student support, student organizations, and student conduct policies at San Juan College.

The San Juan College catalog outlines the [Academic Policies](#) students need to know.

Healthy and Safe Practices for Being on Campus

We want a healthy and safe campus for students, faculty, staff, and guests.

Contagious diseases and your responsibility:

If you have COVID-19 symptoms, fever, flu or even the common cold, you should stay home. Do not come to campus if you are feeling sick. Contact your instructor about missing class (and review your instructor's policies on missed or late work). Being sick does not necessarily excuse you from completing your work on time.

Safety on campus and your responsibility:

If you are on campus and experience or witness an emergency, call 9-1-1 first and then the Department of Public Safety at 505-566-3333 (or just 3333 if calling from a campus phone).

When you are on campus, be aware of your surroundings. If you need an escort to your vehicle, call 505-566-4444 (DPS non-emergency line) or 505-215-3091 (officer on duty line).

The College will send information for campus emergencies through SJC AlertAware, email and the webpage. Stay informed and stay safe.

Inclement Weather Information

Students will receive notification of class delays and cancellations due to inclement weather via the SJC AlertAware and SJC student email. Face-to-face classes will not meet in person; however, students are advised to check with instructors about alternative meeting options, as some may choose to meet via zoom. Hybrid classes will meet as scheduled via zoom. For questions regarding your class delay or cancelation, please contact your instructor.

Online Course Fee

Online Courses - San Juan College requires all online courses to include some form of assessment to demonstrate the mastery of course objectives. This could include exams, capstone projects, e-portfolios, presentations, final papers or other appropriate assessments. The use of a proctoring platform, plagiarism detection software or other method to ensure that assessments are completed by the enrolled student is required.

A course fee of \$5.00 is assessed for all online courses at San Juan College to cover the cost of the above services. Students who are required to take a proctored exam and choose to use a physical

testing center outside the SJC Testing Center or SJC Disability Services will be responsible for the cost of using that center.