Course Description: Principles of instrumentation applicable to industrial applications; fundamentals of measurement and control devices; currently used ISA (Instrument Society of America) symbology; basic flow sheet layout and drafting practices.

Semester Hours: 4

Lecture/Lab Hours: This course consists of (3) lecture hours and (3) lab hours per week. Each student is expected to spend 3 hours per week preparing for class. Attendance is crucial for success in this course. Three (3) consecutive unexcused absences may result in the student being dropped from the course.

Prerequisite: Intermediate course


Student Learning Outcomes: Upon completion of this course the student will be able to;

1. Identify ISA symbols
2. Interpret basic flow sheet layout principles
3. Interpret instrumentation/flow diagram relationships and flow/sheet/plot plan/piping/interrelationship
4. Prepare flow sheet (process and mechanical) diagrams

Evaluation Methods:

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
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</thead>
<tbody>
<tr>
<td>Drawings &amp; Assignments</td>
<td>50%</td>
</tr>
<tr>
<td>Tests</td>
<td>15%</td>
</tr>
<tr>
<td>Attendance and Participation</td>
<td>10%</td>
</tr>
<tr>
<td>Final Exam</td>
<td>25%</td>
</tr>
<tr>
<td>SEMESTER GRADE</td>
<td>100%</td>
</tr>
</tbody>
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A 100-90 Points, B 89-80 Points, C 79-70 Points, D 69-60, F 59 & below

Teaching Methods:

1. Lecture
2. Lab Problems
3. Video/Powerpoint
4. Demonstrations

ADA Statement: No qualified individual with a disability shall, by reason of such disability, be excluded from participation in or be denied the benefits of the services, programs, or activities of the College District, or be subjected to discrimination by the College District. Nor shall the College District exclude or otherwise deny equal services, programs, or activities to an individual because of the known disability of an individual with whom the individual is known to have a relationship or association. 42 U.S.C. 12132; 28 CFR 35.130(g)

Academic Dishonesty: Each student is charged with notice and knowledge of the contents and provisions of Coastal Bend College’s rules and regulations concerning student conduct. All students shall obey the law, show respect for properly constituted authority, and observe correct standards of conduct. Scholastic dishonesty shall constitute a violation of these rules and regulations and is punishable as prescribed by Board policies. Scholastic dishonesty shall include, but not be limited to, cheating on a test, plagiarism, and collusion. (See the Student Handbook for further explanation of Scholastic Dishonesty.)

Coastal Bend College does not discriminate on the basis of race, creed, color, national origin, gender, age, or disability.