

**SEWARD COUNTY COMMUNITY COLLEGE
COURSE SYLLABUS**

I. TITLE OF COURSE: CT1103- Introduction to Corrosion

**II. COURSE DESCRIPTION: 3 credit hours
2 credit hours of lecture and 1 credit hours of lab per week.**

An introduction to internal, external, and atmospheric corrosion including terminology, causes of common corrosion problems in industry, and general remedies such as cathodic protection, protective coatings, material selection, and chemical treatments. Rationale: Corrosion costs in the U.S. exceed \$500 billion per year, which amounts to more than \$2,000 annually for each man, woman, and child. This course identifies the causes and common remedies for corrosion and prepares the student for a career in corrosion mitigation.

For each unit of credit, a minimum of three hours per week with one of the hours for class and two hours for studying/preparation outside of class is expected.

Pre-requisite: None

III. PROGRAM AND/OR DEPARTMENT MISSION STATEMENT:

The Corrosion Technology program at Seward County Community College provides students with the opportunity to develop and enhance their skills in the corrosion technology field through educational and technical instruction.

IV. TEXTBOOK AND MATERIALS:

1. Corrosion Basics by Roberge, ISBN 1-57590-198-0
2. Control of Pipeline Corrosion by Peabody, ISBN 978-1-57590-092-6

V. SCCC OUTCOMES

Students who successfully complete this course will demonstrate the ability to do the following SCCC Outcomes.

- 1: Read with comprehension, be critical of what they read, and apply knowledge gained to real life
- 2: Communicate ideas clearly and proficiently in writing, appropriately adjusting content and arrangement for varying audiences, purposes, and situations.
- 3: Communicate their ideas clearly and proficiently in speaking, appropriately adjusting content and arrangement for varying audiences, purposes, and situations.
- 4: Demonstrate mathematical skills using a variety of techniques and technologies.
- 5: Demonstrate the ability to think critically by gathering facts, generating insights, analyzing data, and evaluating information

VI. COURSE OUTCOMES:

1. Students will identify and define the various types of corrosion using the correct terminology.
2. Students will demonstrate knowledge of corrosion control methods that are appropriate for student circumstances.
3. Students will apply corrosion theory to assess at least one corrosion problem and recommend a suitable remedy.
4. Students will match corrosion processes to the appropriate materials which include metals, plastics, ceramics, bricks, stoneware, porcelain, clay, glass, concrete, graphite, wood, etc.

5. Students will identify the major job markets in corrosion technology and recall the types and levels of certification in each field.

VII. COURSE OUTLINE:

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VIII. INSTRUCTIONAL METHODS:

[Instr_Methods]

IX. INSTRUCTIONAL AND RESOURCE MATERIALS:

X. METHODS OF ASSESSMENT:

The student evaluation will be based upon class discussion, exams, class attendance, and student participation in the classroom and shop areas.

XI. ADA STATEMENT:

Under the Americans with Disabilities Act, Seward County Community College will make reasonable accommodations for students with documented disabilities. If you need support or assistance because of a disability, you may be eligible for academic accommodations. Students should identify themselves to the Dean of Students at 620-417-1106 or going to the Student Success Center in the Hobbie Academic building, room 149 A.