

SOUTHEAST COMMUNITY COLLEGE

COURSE SYLLABUS

ADVANCED TECHNOLOGIES & SKILLED TRADES DIVISION

Revision Date: August 13, 2026

I. CATALOG DESCRIPTION

Course Number: UTIL 1260

Course Title Ropes and Riggings

Prerequisite(s): None

Catalog Description: Proper use and handling of ropes and related hardware in line construction. Includes care of ropes, determination of strengths, types, and knots.

Credit Hours: 1.0

Class Hours: 15

Lab Hours: 0.0

Total Contact Hours: 15

II. COURSE OBJECTIVES: *Course will:*

- A. Introduce the principles and practices of safe rope and rigging use in line construction.
- B. Provide knowledge of rope types, materials, construction, and their proper applications.
- C. Emphasize correct handling, inspection, and care of ropes and related hardware to ensure safety and longevity.
- D. Develop students' ability to calculate and apply working loads, safety factors, and mechanical advantages.
- E. Build practical skills in selecting, tying, and applying appropriate knots, splices, and rigging techniques for field situations.

III. STUDENT LEARNING OUTCOMES AND GENERAL EDUCATION LEARNING OUTCOMES:

A. STUDENT LEARNING OUTCOMES: *Student will be able to:*

- 1. Identify different types of ropes, their materials, and construction characteristics.
- 2. Explain factors that affect rope strength, safety factors, and load-handling capacity.
- 3. Demonstrate proper care, storage, inspection, and maintenance procedures for ropes and rigging hardware.
- 4. Select appropriate ropes, blocks, and rigging equipment for specific line construction tasks.
- 5. Tie and apply commonly used knots, bends, and splices used in the utility industry.
- 6. Calculate safe working loads and determine mechanical advantages in basic rigging systems.
- 7. Apply correct safety procedures while performing rigging and hoisting operations.
- 8. Demonstrate teamwork and communication when performing rigging tasks in a field environment.

B. GENERAL EDUCATION LEARNING OUTCOMES

1. GELO #3: Critical Thinking and Problem Solving

- a. Outcome #1: Collect, identify, interpret, and analyze data.

IV. CONTENT/TOPICAL OUTLINE (*course outline may provide more detailed information*)

A. TBD

V. INSTRUCTIONAL MATERIALS

A. **Required Text(s):** TBD

B. **Other Resources:**

VI. METHODS OF PRESENTATION/INSTRUCTION

A. Methods of presentation typically include a combination of the following:

1. TBD

VII. METHODS OF EVALUATION

A. Methods of evaluation typically include a combination of the following:

1. TBD

SCC STANDARD GRADING SCALE POLICY:

A+ 95-100	C+ 75-79
A 90-94	C 70-74
B+ 85-89	D+ 65-69
B 80-84	D 60-64
	F Below 60

VIII. SPECIFIC COURSE REQUIREMENTS: