



**Alabama
Department of
Postsecondary Education**

Representing Alabama's Public Two-Year College System

REID STATE TECHNICAL COLLEGE

I. COURSE PREFIX, NUMBER, TITLE

WDT 122 – SMAW Fillet/OFC Lab

II. COURSE HOURS

- 3 Credit hour
- 0 Theory credit hours
- 3 Lab credit hours
- 0 Clinical credit hour
- 9 Contact Hours

III. CLASS MEETING DATES/TIMES/LOCATION

Spring Semester 2018

Evergreen Career Tech Center

HHSA, M – F, 8:05A-10:10A

HHSB, M - F, 10:15A – 11:55A

HHSC, M – F, 12:30 – 2:15P

IV. CLINICAL DATES/TIMES/LOCATION (None)

V. INSTRUCTOR, CONTACT INFORMATION, CONTACT POLICY, OFFICE HOURS/LOCATION

Derrick Lett, Instructor

Office: Evergreen Career Tech Center

Phone: (334)318-1533

Office Hours: Monday through Friday 7:30A – 8:00A, 2:15P – 3:15P

VI. COURSE DESCRIPTION:

This course is designed to introduce the student to the proper set-up and operation of the shielded metal arc welding equipment. Emphasis is placed on striking and controlling the arc, and proper fit up of fillet joints. This course is also designed to instruct students in the safe operation of oxy-fuel cutting. Upon completion, students should be able to make fillet welds in all positions using electrodes in the F-3 groups in accordance with applicable welding code and be able to safely operate oxy-fuel equipment and perform those operations as per the applicable welding code.

VII. PREREQUISITE(S)/CO-REQUISITE(S)

Prerequisites: As required by college

Co-requisites: As required by college

VIII. TEXTBOOK(S) AND OTHER LEARNING RESOURCES

Welding – Level One

IX. PROFESSIONAL COMPETENCIES/OBJECTIVES

Perform SMAW fillet welds.
Perform oxy-fuel welding and cutting.

X. OUTLINE OF MODULES

Strike and maintain a welding arc.
Produce acceptable weave beads.
Produce acceptable stringer beads.
Weld beads on plate in the flat position using E6010 electrodes.
Make fillet welds in the horizontal position (2F) using E6010 electrodes.
Make fillet welds in the vertical position (3F) using E6010 electrodes.
Make fillet welds in the overhead position (4F) using E6010 electrodes.
Select the correct electrode, current and polarity to use while performing SMAW in a given welding position.
Set up oxy-fuel equipment.
Light and adjust an oxy-fuel torch.
Shut down oxy-fuel cutting equipment.

XI. EVALUATION AND ASSESSMENT

Performance Evaluation: 70%	90 – 100 = A
Work Ethics: 30%	80 – 89 = B
	70 – 79 = C
	60 – 69 = D
	Below 60 = F

Work ethics may include any or all of the following: absences, attitudes, and constructive participation in class. It will be the decision of the instructor to award or deduct these points from the final grade. A work ethics grade sheet will be completed twice a semester. Other grades which may be assigned in special circumstances are W, I, and AU.

XII. ATTENDANCE

- a. Students are expected to attend all classes for which they are registered. Students who are unable to attend class regularly, regardless of the reason or circumstance, should withdraw from that class before poor attendance interferes with the student's ability to achieve the objectives required in the course. Withdrawal from class can affect eligibility for federal financial aid. Withdrawal from class can prohibit progression in nursing and allied health programs.
- b. Students are expected to attend **all** clinical rotations required for each course. Only excused absences will be considered for make up. However, due to limited clinical space and time, clinical make up days cannot be guaranteed. Failure to complete clinical rotations will prohibit progression in nursing and allied health programs.

XII. STATEMENT ON DISCRIMINATION/HARASSMENT

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XIII. AMERICANS WITH DISABILITIES

The Rehabilitation Act of 1973 (Section 504) and the American with Disabilities Act of 1990 state that qualified students with disabilities who meet the essential functions and academic requirements are entitled to reasonable accommodations. It is the student's responsibility to provide appropriate disability documentation to the College. **Please contact the ADA representative.**

XIV. COURSE CALENDAR**SPRING SEMESTER 2108: January 1, 2108 – May 18, 2018**

Jan. 1	HOLIDAY – New Year’s Day (College Closed)
Jan. 2	Faculty Duty Day (College open, no class)
Jan. 3	Late Registration (FDD)
Jan. 4 & 5	Faculty Duty Day (College open, no class)
Jan. 8	Classes Begin
Jan. 12	Drop/Add period ends
Jan. 15	Holiday – M L King/Robert E. Lee; (College closed)
Feb. 12-13	FDD (College closed; no class)
Mar. 6	Mid-term
Mar. 19-23	Spring Break (College closed; no classes)
Mar. 26	Classes Resume
Mar. 30	HOLIDAY – (College closed)
Apr. 6 & 20	ONTRAC – new student orientation and registration
Apr 10-12	Early Registration – returning students
May 2&4, 7&8	Final Exams, end of classes for Spring semester
May 9 – 11	FDD, (College open, no classes)
May 11	GRADUATION – FDD
May 14	FDD (College open, no classes)
May 15 – 18	Duty Day for Non-Instructional Personnel (College open, no classes)

XV. STUDENT ACKNOWLEDGEMENT FORM

I hereby acknowledge that I have received the syllabus for Spring Semester 2018, WDT 122 and I agree to comply with the requirements as stated within.

Student's Signature

Date



**Alabama
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REID STATE TECHNICAL COLLEGE

I. COURSE PREFIX, NUMBER, TITLE

WDT 217 E– SMAW Carbon Pipe Theory

II. COURSE HOURS

- 3 Credit hour
- 0 Theory credit hours
- 3 Lab credit hours
- 0 Clinical credit hour
- 9 Contact Hours

III. CLASS MEETING DATES/TIMES/LOCATION

Spring Semester 2018

Wednesday, 4:30P – 5:20P

Monday, Tuesday; 4:30P – 6:15P

Building 300, Room 302

IV. CLINICAL DATES/TIMES/LOCATION (None)

V. INSTRUCTOR, CONTACT INFORMATION, CONTACT POLICY, OFFICE HOURS/LOCATION

Derrick Lett, Instructor

Office: Building 300

Phone: (251) 578-1313 ext. 121

Office Hours: Monday – Wednesday 3:30 – 4:15

VI. COURSE DESCRIPTION:

This course is designed to provide the student with the practices and procedures of welding carbon pipe using the shielded metal arc weld (SMAW) process. Emphasis is placed on pipe positions; filler metal selection, joint geometry joint preparation and fit-up. Upon completion, students should be able to identify pipe positions, filler metals, proper joint geometry, joint preparation and fit-up to the applicable codes. This course supports CIP code 48.0508.

VII. PREREQUISITE(S)/CO-REQUISITE(S)

Prerequisites: As required by college

Co-requisites: As required by college

VIII. TEXTBOOK(S) AND OTHER LEARNING RESOURCES

Welding – Level One, NCCER

IX. PROFESSIONAL COMPETENCIES/OBJECTIVES

- Set up and operate equipment for SMAW welding on carbon pipe
- Set up and prepare pipe for various welding positions
- Perform fillet and groove welds on pipe using various positions
- Perform visual inspection on completed weld metals

X. OUTLINE OF MODULES**MODULE A – SET UP AND EQUIPMENT**

- Set up and operation
- Safe operation
- Types of equipment
- Electrical components
- Electrode holder and ground leads
- Electrode classification
- Welding parameter setting

MODULE B – SET UP AND PIPE PREPARATION

- ASTM Base Metal Classification
- Pipe diameters
- Pipe schedules
- Joint preparation
- Welding positions

MODULE C – WELDING POSITIONS

- Fillet weld identification
- Groove weld identification

MODULE D – VISUAL INSPECTION

- Acceptance/rejection criteria
- Method of repair
- Re-inspection

XI. EVALUATION AND ASSESSMENT

Performance Evaluation: 70%	90 – 100 = A
Work Ethics: 30%	80 – 89 = B
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- 9 Contact Hours

III. CLASS MEETING DATES/TIMES/LOCATION

Spring Semester 2018

Wednesday 5:25P – 8:05P

Monday, Tuesday 6:20P – 9:00P

Building 300, Room 302

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Derrick Lett, Instructor

Office: Building 300

Phone: (251) 578-1313 ext. 121

Office Hours: Monday – Wednesday 3:30P – 4:15P

VI. COURSE DESCRIPTION:

This course is designed to provide the student with the skills in welding carbon steel pipe with shielded metal arc welding techniques in various pipe welding positions. Upon completion, students should be able to perform shielded metal arc welding on carbon steel pipe with the prescribed electrodes in various positions in accordance with the applicable codes. This course supports CIP code 48.0508.

VII. PREREQUISITE(S)/CO-REQUISITE(S)

Prerequisites: WDT 217 and/or as required by college

Co-requisites: As required by college

VIII. TEXTBOOK(S) AND OTHER LEARNING RESOURCES

Welding – Level One NCCER Edition 5

IX. PROFESSIONAL COMPETENCIES/OBJECTIVES

- Set up and operate equipment for SMAW welding on carbon pipe
- Set up and prepare pipe for various welding positions
- Perform fillet and groove welds on pipe in various positions
- Perform visual inspection on completed pipe welds

X. OUTLINE OF MODULES**MODULE A – SET UP AND EQUIPMENT**

- Set up and operation
- Safe operation
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