



*Alabama*  
*Department of*  
*Postsecondary Education*

***Representing Alabama's Public Two-Year College System***

**REID STATE TECHNICAL COLLEGE**

**I. COURSE PREFIX, NUMBER, TITLE**

**WDT 108 – SMAW Fillet/OFC**

**II. COURSE HOURS**

- 3 Credit hour
- 2 Theory credit hours
- 1 Lab credit hours
- 0 Clinical credit hour
- 5 Contact Hours

**III. CLASS MEETING DATES/TIMES/LOCATION**

**Summer Semester 2016**

**Tuesday, Wednesday, Thursday 6:35A-7:50A**

**Monday 6:35A-9:50A**

**IV. CLINICAL DATES/TIMES/LOCATION**

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

**Derrick Lett**

Office: Building 300

Phone: (251) 578-1313 ext. 121

## VI. COURSE DESCRIPTION:

This course provides the student with instruction on safety practices and terminology in the Shielded Metal Arc Welding (SMAW) and oxy-fuel welding process. Emphasis is placed on safety, welding terminology, equipment identification, set-up and operation, and related information in the SMAW and oxy-fuel processes. At the conclusion of this course students will be able to perform SMAW welds from various positions using various types of electrodes and perform oxy-fuel manual and automatic welding and cutting. This is a **CORE** course.

## 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

Wheels of Learning Standardized Craft Training, NCCER

## IX. PROFESSIONAL COMPETENCIES/OBJECTIVES

Explain safety considerations associated with SMAW welding.

Explain general concepts related to SMAW welding.

Describe various types and properties of metals.

Explain the safe use of equipment used to perform SMAW welding.

Perform SMAW fillet welds.

Use oxy-fuel equipment

## X. OUTLINE OF MODULES

### MODULE A

Safety

Housecleaning

PPE

OSHA requirements

Hazardous materials

MSDS

Welding concepts

Terms

Code requirements

Test requirements

Structural welding code

Basic welding positions

Filler metals  
 Classification  
 Storage  
 Controlling  
 Traceability requirements

### **MODULE B**

Equipment  
 SMAW Equipment  
 Set-up of SMAW Equipment  
 Operation of SMAW Equipment  
 Electrode Selection and use  
 Striking an arc  
 Beads  
 Weave  
 Stringer

### **MODULE C**

Oxy-fuel safety  
 Oxy-fuel equipment  
 Components  
 Set-up and shutdown of Oxy-fuel Equipment  
 Operation of Oxy-fuel Equipment  
 Use of torch  
 Flames  
 Oxy-fuel cutting  
 Manual  
 Automatic

## **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.
- c. Students will not be allowed to use cell phones in class unless there are mitigating circumstances. Devices will be placed in a drop box upon entering class and will be retrieved when exiting. Failure to comply may result in suspension from class.

## **XII. STATEMENT ON DISCRIMINATION/HARASSMENT**

The College and the Alabama Board of Education are committed to providing both employment and educational environments free of harassment or discrimination related to an individual's race, color, gender, religion, national origin, age, or disability. Such harassment is a violation of State Board of Education policy. Any practice or behavior that constitutes harassment is a violation of State Board of Education policy. Any practice or behavior that constitutes harassment or discrimination will not be tolerated.

## **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**

## **XV. EQUIPMENT**

Students that are enrolled in this course will need the following tools in order to meet course requirements;

Welding Hood	Steel Toe Boots
Leather Cape or Fire Retardant Jacket	Soap Stone Holder
Welding Cap	16' Tape Measure
Tote Bag	
Leather Gloves	

Safety Glasses  
Chipping Hammer  
Rod Pouch or Canister  
Wire Brush

## **XVI. STUDENT ACKNOWLEDGEMENT FORM**

**I hereby acknowledge that I have received the syllabus for WDT 108 and I agree to comply with the requirements as stated within.**

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**Student's Signature**

**Date**



*Alabama  
Department of  
Postsecondary Education*

***Representing Alabama's Public Two-Year College System***

REID STATE TECHNICAL COLLEGE

**I. COURSE PREFIX, NUMBER, TITLE**

**WDT 109 – SMAW FILLET/PAC/CAC**

**II. COURSE HOURS**

- 3   Credit hour
- 2   Theory credit hours
- 1   Lab credit hours
- 0   Clinical credit hour
- 4   Contact Hours

**III. CLASS MEETING DATES/TIMES/LOCATION**

**Summer Semester 2016  
Wednesday, Thursday 7:50A-9:05A  
Tuesday 7:50A-10:20A  
Monday 9:05A-10:20A**

**IV. CLINICAL DATES/TIMES/LOCATION (None)**

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

**Derrick Lett**  
Office: Building 300  
Phone: (251) 578-1313 ext. 121

**VI. COURSE DESCRIPTION:**

This course provides the student with instruction on safety practices and terminology in the Shielded Metal Arc Welding (SMAW) process. Emphasis is placed on safety, welding terminology, equipment identification, set-up and operation, and related information in the SMAW process. This course also covers the rules of basic safety and identification of shop equipment and provides the student with the skills and knowledge necessary for the safe operation of carbon arc cutting and plasma arc cutting. This is a CORE course.

**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

Wheels of Learning Standardized Craft Training, NCCR

**IX. PROFESSIONAL COMPETENCIES/OBJECTIVES**

Explain safety considerations associated with SMAW welding.

Explain general concepts related to SMAW welding.

Describe various types and properties of metals.

Explain the safe use of equipment used to perform SMAW welding.

Perform SMAW fillet welds.

Perform carbon arc washing and gouging.

Use plasma arc equipment to perform cutting activities.

**X. OUTLINE OF MODULES****MODULE A**

## Safety

- Housecleaning

- PPE

- OSHA requirements

- Hazardous materials

- MSDS

## Welding concepts

- Terms

- Code requirements

- Test requirements

- Structural welding code

- Basic welding positions
- Filler metals
  - Classification
  - Storage
  - Controlling
  - Traceability requirements

**MODULE B**

- Equipment
  - SMAW Equipment
  - Set-up of SMAW Equipment
  - Operation of SMAW Equipment
- Electrode Selection and use
- Striking an arc
- Beads
  - Weave
  - Stringer

**MODULE C**

- Air carbon arc equipment
  - Set-up
  - Operation

**MODULE D**

- Plasma arc safety
- Plasma arc Equipment
  - Set-up
  - Shutdown
  - Operation
    - Cutting
    - Piercing
    - Beveling

**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.
- c. Students will not be allowed to use cell phones in class unless there are mitigating circumstances. Devices will be placed in a drop box upon entering class and will be retrieved when exiting. Failure to comply may result in suspension from class.

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**XIV. 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.**

**XV. EQUIPMENT**

Students that are enrolled in this course will need the following tools in order to meet course requirements;

Welding Hood	Steel Toe Boots
Leather Cape or Fire Retardant Jacket	Soap Stone Holder
Welding Cap	16' Tape Measure

Tote Bag  
Leather Gloves  
Safety Glasses  
Chipping Hammer  
Rod Pouch or Canister  
Wire Brush

## **XVI. COURSE CALENDAR**

**XVII. STUDENT ACKNOWLEDGEMENT FORM**

**I hereby acknowledge that I have received the syllabus for WDT 109 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 115 – GTAW Carbon Pipe Theory**

**II. COURSE HOURS**

- 3   Credit hour
- 1   Theory credit hours
- 2   Lab credit hours
- 0   Clinical credit hour
- 7   Contact Hours

**III. CLASS MEETING DATES/TIMES/LOCATION**

**Monday, Tuesday, Wednesday 4:30P-7:00P  
Thursday 4:30P-5:45P**

**IV. CLINICAL DATES/TIMES/LOCATION (None)**

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

**Derrick Lett**

Office: Building 300

Phone: (251) 578-1313 ext. 121

## VI. COURSE DESCRIPTION:

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

## IX. PROFESSIONAL COMPETENCIES/OBJECTIVES

- Set up and operate equipment for GTAW welding on carbon pipe
- Set up and prepare pipe for various welding positions
- Perform 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
- Filler metal 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
	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**



**XV. STUDENT ACKNOWLEDGEMENT FORM**

**I hereby acknowledge that I have received the syllabus for WDT 115 and I agree to comply with the requirements as stated within.**

\_\_\_\_\_  
**Student's Signature**

\_\_\_\_\_  
**Date**



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**REID STATE TECHNICAL COLLEGE**

**I. COURSE PREFIX, NUMBER, TITLE**

**WDT 122 D– 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**

**Summer Semester 2016**

**9:05A-10:20A Wednesday**

**10:20A-11:35A Monday Tuesday**

**12:05P-3:05P Monday, Tuesday**

**IV. CLINICAL DATES/TIMES/LOCATION (None)**

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

Office: Building 300

Phone: (251) 578-1313 ext. 121

**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 – NCCER Level One

**IX. PROFESSIONAL COMPETENCIES/OBJECTIVES**

Perform SMAW fillet welds in accordance with AWS D1.1 visual acceptance criteria.

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**

**XV. STUDENT ACKNOWLEDGEMENT FORM**

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

\_\_\_\_\_

**Student's Signature**

\_\_\_\_\_

**Date**



*Alabama  
Department of  
Postsecondary Education*

***Representing Alabama's Public Two-Year College System***

**REID STATE TECHNICAL COLLEGE**

**I. COURSE PREFIX, NUMBER, TITLE**

**WDT123 – Fillet/PAC/CAC 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**

**Wednesday, Thursday 10:20A-11:35A  
Wednesday, Thursday 12:05P-3:05P**

**IV. CLINICAL DATES/TIMES/LOCATION (None)**

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

(251) 578-1313 ext. 121  
Office Location: Building 300

**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 operations of plasma arc and carbon arc cutting. Upon completion, students should be able to make fillet welds in all positions using electrodes in the F-4 groups in accordance with applicable welding code and be able to safely operate plasma arc and carbon arc equipment and perform those operations as per applicable welding code. This is a CORE course.

**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 carbon arc washing and gouging.

Use plasma arc equipment to perform cutting activities.

**X. OUTLINE OF MODULES**

Air carbon arc equipment

Set-up

Operation

Plasma arc safety

Plasma arc Equipment

Set-up

Shutdown

Operation

Cutting

Piercing

Beveling



## 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.

### ATTENDANCE

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- 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

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## **XIV. COURSE CALENDAR**

**XV. STUDENT ACKNOWLEDGEMENT FORM**

**I hereby acknowledge that I have received the syllabus for WDT 123 and I agree to comply with the requirements as stated within.**

\_\_\_\_\_  
**Student's Signature**

\_\_\_\_\_  
**Date**



*Alabama  
Department of  
Postsecondary Education*

***Representing Alabama's Public Two-Year College System***

**REID STATE TECHNICAL COLLEGE**

**I. COURSE PREFIX, NUMBER, TITLE**

**WDT 155 – GTAW Carbon Pipe 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**

**Monday, Tuesday, Wednesday 7:00P-9:30P  
Thursday 5:45P-9:30P**

**IV. CLINICAL DATES/TIMES/LOCATION (None)**

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

**Derrick Lett**

Office: Building 300

Phone: (251) 578-1313 ext. 121

**VI. COURSE DESCRIPTION:**

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

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

**Prerequisites:** WDT116 and/or as required by college

**Co-requisites:** As required by college

**VIII. TEXTBOOK(S) AND OTHER LEARNING RESOURCES**

Welding – Level One

Wheels of Learning Standardized Craft Training, NCCER

**IX. PROFESSIONAL COMPETENCIES/OBJECTIVES**

- Set up and operate equipment for GTAW 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
- Filler metal 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
	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.

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- 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.

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**XIV. COURSE CALENDAR**

**XV. STUDENT ACKNOWLEDGEMENT FORM**

**I hereby acknowledge that I have received the syllabus for WDT 155 and I agree to comply with the requirements as stated within.**

\_\_\_\_\_  
**Student's Signature**

\_\_\_\_\_  
**Date**





*Alabama  
Department of  
Postsecondary Education*

***Representing Alabama's Public Two-Year College System***

**REID STATE TECHNICAL COLLEGE**

**I. COURSE PREFIX, NUMBER, TITLE**

**WDT 257 – SMAW Carbon Pipe 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**

**Wednesday, Thursday 10:20A-11:35A**

**Wednesday, Thursday 12:05P-3:50P**

**IV. CLINICAL DATES/TIMES/LOCATION (None)**

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

**Derrick Lett**

Office: Building 300

Phone: (251) 578-1313 ext. 121

**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

Wheels of Learning Standardized Craft Training, 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 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
- 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
	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**

The College and the Alabama Board of Education are committed to providing both employment and educational environments free of harassment or discrimination related to an individual's race, color, gender, religion, national origin, age, or disability. Such harassment is a violation of State Board of Education policy. Any practice or behavior that constitutes harassment is a violation of State Board of Education policy. Any practice or behavior that constitutes harassment or discrimination will not be tolerated.

**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**

**XV. STUDENT ACKNOWLEDGEMENT FORM**

**I hereby acknowledge that I have received the syllabus for WDT 257 and I agree to comply with the requirements as stated within.**

\_\_\_\_\_  
**Student's Signature**

\_\_\_\_\_  
**Date**