WINDOW ROCK HIGH SCHOOL
CAREER AND TECHNICAL EDUCATION

Phone: (928) 729-7002 ext. 2761

COURSE SYLLABUS

COURSE IDENTIFICATION:

Course Title:	Fundamentals of Welding, Welding I, Welding II
Grades:	10th 11TH 12TH
Teacher:	Darren Wauneka
CTE Program:	Welding Technology
Room Number:	D04

COURSE DESCRIPTION:

All disciplines of welding will be covered in this class. Shielded Metal Arc Welding (SMAW), Oxy Fuel (Torch Cutting), Gas Metal Arc Welding (GMAW), Gas Tungsten Arc Welding (GTAW), Flux Core Arc Welding(FCAW), Plasma Arc Cutting, and Blue print reading will be covered in this class. This is a great class for the beginner in welding. Other basic principles of welding will be covered in this class including safety procedures of the equipment and PPE (Personal Protective Equipment).

PREREQUISITE:

Fundamentals of Welding Technology, Welding I, and Welding II.

TEXTBOOKS:

Jeffus, Larry (2008). *Welding Principles and Applications*. Sixth Edition. Thompson/Delmar Learning/ Clifton Park, NY 2008

Bennet, A.E., Sly, Louise J (2005). *Blueprint Reading for Welders*. Seventh Edition. Thompson/Delmar Learning/Clifton Park, NY 2005

COURSE OUTCOMES/STANDARDS (as required by ADE)
ADE CTE Welding Technology Standards 1-9.

1. Layout and fit up project from Blueprints.
2. Set up and use Cutting Equipment
3. Set up and use Shielded Metal Arc Welding (SMAW) Equipment.
4. Set up and use Gas Metal Arc Welding (GMAW) Equipment.
5. Set up and use Oxyfuel Equipment.
6. Set up and use Gas Tungsten Arc Welding (GTAW) Equipment (TIG).
7. Set up and use Flux Cored Arc Welding (FCAW) Equipment.

8. Use Auxiliary Equipment and Tools.
9. Perform Weldment Testing.

INSTUCTIONAL METHODS:

1. **Lecture**
2. **Audio-Visual Aids**
3. **Examples and Demonstration**
4. **Lab practice**
5. **Class discussions**
6. **Field Tips and Guest Speakers**
7. **Tests**
8. **Skills Tests (performance-based)**

STUDENT REQUIREMENTS AND METHOD OF EVALUATION:

Evaluation of student performance is determined primarily from results of written and performance tests to validate mastery of course competencies. Due to nature of the class, student participation, teamwork, courtesy, honesty, and adherence to safety policies are required.

GRADING SCALE:

On objective materials, the following scale is used:

90-100%	**A**
80-89%	**B**
70-79%	**C**
60-69%	**D**
0-59%	**F**

American Welding Society (AWS) Standards will be applied when assessing lab work. Students must meet AWS levels of competence to pass the course.

ASSESSMENT OF STUDENT GAIN:

1. Student will be assessed through written testing.
2. Student will be assessed through their oral presentations that explain knowledge of welding content.
3. Practical application will be assessed on the first attempt at the skill and again at the conclusion of the course.
4. Students will be assessed on specific projects that will allow the instructor to visually inspect Progress of welding skills.
5. Comparisons will determine the extent of student gain.

ATTENDANCE POLICY:

Attendance in the Welding Class is critical for serious students as shop time and class time plan an important role in student progress, especially in this lab-oriented class. This policy is good training for life. Potential employers are also looking for students with good attendance records.

- Students are expected to attend class daily unless ill.
- Appointments should be made after school hours if at all possible.
- Excessive absenteeism may affect the Students progression in the program.

DISCIPLINE POLICY:

Refer to school handbook for disciplinary policy.

HEALTH AND SAFETY POLICY:

Will be in accordance to Window Rock High School, OSHA and CTE Shop Safety rules/policies.

CLASSROOM RULES/POLICIES:

1. Window Rock High School student handbook rules.
2. Be on time, No Tardiness allowed.
3. No talking during lectures.
4. Be Respectful to others.
5. Follow all Safety Rules.
6. NO Profanity.
7. Follow all directions with utmost care, especially in the shop area.
8. Take pride in our Welding Shop as it has a great deal of opportunity for all students.

LAB RULES/POLICIES:

1. Safety first.
2. Wear safety glasses at all times during lab activities.
3. Zero tolerance of the above rule!!
4. Study the safety manual rules.
5. Obey the safety manual rules.
6. Take care of shop equipment.

REQUIRED SIGNATURE AND FORMS:

Students, parents, and instructor signatures are required on the Shop Safety form.
Students, parents, and instructor signatures are required on the Course Syllabus.

NOTE:

1. Information and statements in this document are subject to change at the discretion of Window Rock High School CTE Department. Changes will be published and made available to the Students.
2. If you are a student with a disability who may need accommodation(s) under the Americans with Disabilities Act (ADA), please notify the Dean of Instruction, as soon as possible. You will need to bring your documentation for review in order t determine reasonable accommodations, and we can assist you in arranging any necessary accommodations.

I have read and acknowledge the requirements of the CTE Welding Program.

SIGNATURES:

STUDENT:_____ DATE:_____

PARENT:_____ DATE:_____

INSTRUCTOR:_____ DATE:_____