Comal ISD
Course Syllabus
Canyon Lake High School
Year 2013-2014

Grading guidelines and shared responsibilities, attendance and behavior expectations, and essential curriculum standards for the course

Course Title: ***Welding I – 1 hour Class***
Teacher: ***Gary W. Adams***
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Office Hours: 7:00 am – 8:00 am 8:30 am – 9:25 am
Mechanics Laboratory hours: 4:00 pm – 6:30 pm on Wednesday afternoons and all class times.

Grading Guideline:

Six-Weeks Grades are determined in the following manner:

1. 20% Daily Grades
    a. Homework papers
    b. Online assignments
    c. Daily Work
2. 35% Quizzes and CAs
    a. Quizzes
    b. Warm-ups
3. Major Grades
    a. Exam or test
    b. Welding Skill Grades
    c. Projects assigned.

Semester Grades:

1st Six Weeks Average = 30%
2nd Six Weeks Average = 30%
3rd Six Weeks Average = 30%
Semester/Final Exam = 10%

Students will get a grade for every day they are in the shop/laboratory

a. Doing your work and cleaning up will result in a deduction.
b. Failing to clean up is 30-point deduction minimum.
c. Horse play is a zero for the day
d. Not being on time to the lab is a deduction of 10 points
e. Inappropriate clothing for shop class will result in a **zero for the day.**
    i. Examples: Sandals, shorts, T-shirts, Low neck shirts, dresses and skirts.

Late Work

The table below represents the **maximum** penalty that may be imposed for turning in late work:

Days Late	**Percent of Grade Received by Student**	**Example(s)**
1 Day	80%	100 records as 80 (100 x 0.80 = 80) 80 records as 64 (80 x 0.80 = 64) 60 records as 48 (60 x 0.80 = 48)
2 Days	60%	100 records as 60 (100 x 0.60 = 60) 80 records as 48 (80 x 0.60 = 48) 60 records as 36 (60 x 0.60 = 36)
3 or more Days	0%	No credit given—grade of zero (0)

****Calendar days do not include Saturdays and Sundays***

- More than three late assignments during any one six-week grading period may result in additional consequences.
- Extenuating circumstances may occur that are out of the control of the student and which prevent him/her from completing and returning homework assignments. The student is to inform the teacher of any such circumstances that prevented the completion of the homework. Teachers may grant exceptions to this policy, as necessary.
- The late work policy may not apply to projects and term papers that are scheduled in advance and can be turned in prior to an absence.

Makeup Work

In order to provide the total assessment "picture" of a student's academic progress for a course, any student missing classroom instruction should be given the opportunity to make up the missing assigned work. This will ensure instructional continuity and place importance upon consistent attendance and daily study. Students shall be permitted to make up assignments and tests following any absence.

Makeup Work Guidelines

- Makeup work is available to all students. **Students are responsible for asking teachers** for the makeup work upon returning to class. Students shall receive credit for satisfactory makeup work after an absence**, but may receive a zero for any test not made up within the allotted time**. Any assignment not turned in within the allotted time falls within the late work guidelines.
- **The number of class days allowed for makeup work to be completed for full credit will be equal to the number of times a class was missed.** Extra time may be given at the teacher's discretion.
- A student should not, on the day of returning to school, be required to take a quiz or test that was announced during his/her absence.
- Makeup work, including tests, may be an alternate version to assess what the student has learned.
- Teachers may assign additional work to ensure that students who have been absent have sufficient opportunity to master the TEKS or to meet subject or course requirements. The assignments shall be based on the instructional objectives for the subject or course and may provide greater depth of subject matter than routine makeup work.

Suspension

A student suspended from his/her regular classes is to request makeup work when he/she returns to school. The student is expected to satisfactorily complete the assignments for the period of suspension within the time designated by the makeup work policy.

Exam Exemptions

Beginning with the 2013-2014 school year, no exemptions will be allowed at the middle or high school.

CLASSROOM EXPECTATIONS

1. BE PREPARED
    a. Be here on time.
    b. Read the board.
    c. Bring ALL materials to class EVERYDAY.
    d. Turn in assignments on time.
2. ACT APPROPIATELY
    a. Follow directions.
    b. Stay on task.
    c. Show respect for others.
    d. Participate.
    e. Obey all school rules.

Materials and Class Actives Common to all Agriculture classes:

1. Note Book
2. Dividers for Six Weeks
3. Pens and Pencils
4. Daily Log of what happens in class – This paper will be provided
5. Keeping a Record Book electronically (provided & can be access from home.

CONDUCT POLICY IN THE CLASSROOM:

1. No food or drinks will be consumed in the class room after the bell.
2. Use of inappropriate language or gestures will result in a referral.
3. Tardiness will result in a 5 point deduction from the daily grade.
4. Students will be in their seats and not in the shops, labs or in the bathrooms at the time of the tardy bell.
5. Students should request permission to go to the bath room or to get a drink during the class time.
6. Do not leave books, clothing or any other items on desk, tables without permission.
    a. Items will be placed in lost and found at school.

Classroom disruptions or other infringements on the class will be dealt with individually.

Consequences can include: Verbal warning, Detention, Parental Contact, and Administrative Referral

Course Description of
Welding I – One Hour Course

(Fall Semester Only)

This course connects scientific principles with mechanical skills. The course will develop understanding and skills in the area of Welding. Students reaching this point will finished any Level I skills they did not finish in Introduction to Ag. Mechanics and Metals and begin their Advance welding skills in 2G and 2F welding, 3G and 3F welding, and Pipe Welding, with the process of SMAW(Stick), GMAW(MIG) and TMAW(TIG) processes. Supervised experience and FFA will be integrated, as appropriate throughout.

2G = horizontal Groove Welding
2F = Horizontal Fillet Welding
3G = Vertical up and Down Groove welding
3F = Vertical Fillet welding

Topic A - 1: Supervised Agricultural Experience Programs

The student shall be provided the opportunity to discuss the importance of supervised agricultural experience programs.

Topic Objectives:

After completing the topic(s), the student shall be able to:

1. Identify types of supervised agricultural experience activities;
2. Describe characteristics of successful supervised agricultural experience programs;
3. Select, plan, and conduct supervised agricultural experience activities; and
4. All students will keep and maintain a daily log book on what happens in class each day and what they accomplished.
5. If raising animal will keep a log of expenses, income and inventory for the year.

Topic A – 2 FFA

The student shall be provided the opportunity to become a member of the FFA club and earn their degrees.

Topic Objective.

1. Identify what FFA is.
2. Identify the Degrees in FFA
3. Earn a Degree if they wish

UNIT B: SAFE USE OF TOOLS AND EQUIPMENT (Recap)

Topic B-1: Identifying and Using Hand Tools

1. Identification of all hand tool in both shops – Power point presentation, Hand on and exam on Power point

Topic B-2: Identifying and Using Power Tools (Recap)

1. Identification of safe practices on each power tool used in the shop for wood working. – Power point on each tool plus a written exam for each with a score of 90 or better. Taking on School Testing systems.
    a. Table Saw
    b. Band saw
    c. Miter Box saw
    d. Drill press
    e. Radial Arm Saw
    f. Spiral Saw
    g. Saber Saw
    h. Scroll Saw
    i. Wood Lathe
    j. Drum Sander
    k. Horizontal Drum Sander
    l. Belt Sander
    m. Pedestal Grinder
    n. Planner
    o. Jointer

Topic C – Advance Welding Skill and Techniques in SMAW for Horizontal and Vertical Methods.

1. The methods welding ¼ plate plants steel in horizontal positions
    a. Beads
    b. Butt joint
    c. V-Joint
    d. Lap joint
    e. T-Joint
2. The methods of welding ¼ plate steel in the Vertical Positions
    a. Beads
    b. Butt Joint
    c. V-Joint
    d. Lap Joint
    e. T-Joint

Topic D – Advance Oxy Fuel

Topic D – Reading Blue Prints

Topic E – Understanding Welding Symbols

Topic F – Drawing Plans for Projects

Topic G – Welding Certifications

Topic H – Lab Portion of Class listed Below

Shop Rules and Policies		
Grading Policies		
Oxy Fuel Skills - (*This set of skills must be preformed in order of 11 – 19*)		
Lab Assignment	1	Cutting Pipe square
Lab Assignment	2	Cut and Weld a saddle with 2 inch pipe
Lab Assignment	3	Cut Angle Iron Square
Lab Assignment	4	Cut Angle Iron at 45 degree Angle
Arc Welding Skills – (*This set of skills must be preformed in order of 11 – 19*)		
Lab Assignment	5	Run 3 Horizontal Beads with 6011 polarity of Choice – 2 position
Lab Assignment	6	Run 3 Horizontal Bead with 7014 polarity of choice – 2 position
Lab Assignment	7	Run 3 Horizontal Beads with 7018 Polarity of Choice 2 position
Lab Assignment	8	Run 3 Vertical up or Down Beads with 6011 Polarity of Choice 2 position
Lab Assignment	9	Run 3 Vertical Beads with up or down 7014 Polarity of Choice 2 position
Lab Assignment	10	Run 3 Vertical Beads with 7018 up or down Polarity of Choice 2 position
Lab Assignment	11	Lap Joint in the 2F position – 6011
Lab Assignment	12	Lap Joint in 2F position -7018
Lab Assignment	13	T-Joint 3F position 7018
Lab Assignment	14	Single V-Joint in 2G position – 6011 root and 7018 cover
Lab Assignment	15	Single V- Joint 3G position – 6011 Root and 7018 Cover
Pipe Welding Skill SMAW or Stick Welding		
Lab Assignment	16	Butt Joint – 1G position - 2 inch pipe
Lab Assignment	17	Butt Joint – 2G position – 2 inch pipe
Lab Assignment	18	Saddle Joint or T-Joint Pipe 2 inch
Lab Assignment	19	45 degree angle joint Pipe 1G
MIG Skills – GMAW -		
Lab Assignment	15	3 Horizontal Beads - 2 position
Lab Assignment	16	Single V Joint with backer .035 wire and gas in a 2G position
Lab Assignment	17	3 Vertical up or down MIG Beads in the 3 position
Lab Assignment	18	Single V Joint with backer in 3G position

TIG Skills – Mild Steel		
Lab Assignment	19	3 beads on mild steel 1/8 plate with 1/16 tungsten in the Horizontal positions
Lab Assignment	20	3 beads on mild Steel 1/8 with a 1/16 tungsten electrode in Vertical Position
Lab Assignment	21	Butt joint on Mild steel with 1/16 tungsten in the Horizontal positions 2G
Lab Assignment	22	Butt joint on Mild steel with 1/16 tungsten in the Vertical positions 3G
Lab Assignment	23	Lap joint on Mild Steel on 1/16 tungsten in the Horizontal positions 2F
Lab Assignment	24	Lap joint on Mild Steel on 1/16 tungsten in the Vertical position 3F
Lab Assignment	25	T-Joint on Mild Steel on 1/8 mild steel with a 1/16 Tungsten Electrode in the Horizontal position or 2F
Lab Assignment	26	T-Joint on Mild Steel on 1/8 mild steel with a 1/16 Tungsten Electrode in the Vertical position or 3F
TIG SKILLS – Stainless Steel		
1 position welding or Flat position		
	27	3 Beads on 1/8 Stainless Steel with 1/16 electrode in the 1 position
	28	Lap joint on 1/8 Stainless Steel with 1/16 electrode in the 1 position
	29	T-joint on 1/8 Stainless Steel plate with 1/16 electrode in 1 position
	30	Butt Joint on 1/8 Stainless Steel Plate with 1/16 electrode in 1 position
2 Position Welding or horizontal		
Lab Assignment	25	3 beads on 1/8 Stainless steel Plate with 1/16 Tungsten Electrode in the Horizontal Position (2 position)
Lab Assignment	26	Butt Joint on 1/8 inch Stainless steel with 1/16 tungsten electrode in 2G position
Lab Assignment	27	Lap Joint on 1/8 Stainless Steel with 1/16 tungsten electrode 2F position
3 Position Welding or Vertical		
Lab Assignment	28	3 beads on 1/8 Stainless steel Plate with 1/16 Tungsten Electrode in the Vertical Position (3 position)
Lab Assignment	29	Butt Joint on 1/8 inch Stainless steel with 1/16 tungsten electrode in 3G position
Lab Assignment	30	Lap Joint on 1/8 Stainless Steel with 1/16 tungsten electrode 3F position
TIG Skills – Aluminum		
Lab Assignment	31	3 beads on 1/8 Aluminum plate with 1/16 Electrode
Lab Assignment	32	Butt Joint on 1/8 Aluminum Plate with 1/16 Electrode 1G

Lab Assignment	33	Lap Joint on 1/8 Aluminum Plate with 1/16 Electrode 1F
TIG Skills – Aluminum		
Lab Assignment	34	Lap Joint on 1/8 Aluminum Plate with 1/16 Electrode 1F
2 position		
Lab Assignment	35	3 beads on 1/8 Aluminum plate with 1/16 Electrode in 2 position
Lab Assignment	36	Butt Joint on 1/8 Aluminum Plate with 1/16 Electrode 2G
Lab Assignment	37	Lap Joint on 1/8 Aluminum Plate with 1/16 Electrode 2F
Lab Assignment		Lap Joint on 1/8 Aluminum Plate with 1/16 Electrode 2F
3 position		
Lab Assignment	38	3 beads on 1/8 Aluminum plate with 1/16 Electrode in 3 position
Lab Assignment	39	Butt Joint on 1/8 Aluminum Plate with 1/16 Electrode 3G
Lab Assignment	40	Lap Joint on 1/8 Aluminum Plate with 1/16 Electrode 3F
Lab Assignment	41	Lap Joint on 1/8 Aluminum Plate with 1/16 Electrode 3F
Lab Assignment	42	Weld 2 Aluminum Soft Drink Cans bottom ends in a 1G position