



ARROYO VALLEY HIGH SCHOOL

**HAWKS**

## **Photovoltaics**

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### **Course Description**

This course is designed for students that have taken at least two years of the CORE academy CTE sequence. The fundamental principles and functions of photovoltaic industry will be introduced along with the planning, installation and maintenance of all necessary components for a photovoltaic system. The transmission and distribution of electric power will be reviewed and basic concepts of electricity, identification, functions and operations of components will be surveyed. Students will be required to obtain OSHA-10, CPR and 1<sup>st</sup> aid to further prepare them for college or career upon graduation.

**COURSE OBJECTIVES FOR STUDENTS:** Upon successful completion of the course the student should be able to:

1. Explain how a solar cell converts sunlight into electrical power
2. List and identify the primary components of a photo voltaic (PV) system and describe their purposes and principles of operation
3. Apply the typical maintenance requirements for PV arrays and other system components, including inverters and batteries
4. Use solar terminology appropriately when discussing the fundamentals of solar energy
5. Obtain industry-recognized certificates and function at a job site in a professional manner.

## Procedures

Many of our concepts will be taken outside and applied in the field. Your participation in these activities will have a great effect on your final grade. There are two main parts to this class; formal classroom instruction and practical field experience through an internship.

## Class Rules

There are some very basic rules that must be followed at all times in and out of the classroom to ensure the safety of all.

1. Follow all directions
2. Be on time
3. Be prepared
4. Be respectful to all
5. Demonstrate professionalism in and out of the classroom

## Grades

Parents will have access to the Aeries portal that allows students and parents to monitor grades and attendance records. If a student would like to make up an assignment, then they must complete the assignment within a two week period for a 10% late penalty. If the student still wants to make up an assignment, for partial credit. The grading scale is as follows: 100-90% = A, 89.9-80%=B, 79.9-65%=C, 64.9-55%=D, below a 55%=F.

Homework/Classwork.....	10%
Tests and Quizzes.....	10%
Work Ethic.....	15%
Industry Certificates.....	25%
Field Experience.....	40%

## Distractions in the Classroom

Students practice bell-to-bell instruction. All students must be in their seat and working on the starter before the bell has rung. If the student is late, there must be a pass. If the student is not in their seat working by the bell they will be marked tardy, **regardless if they are in the classroom or not.**

Cell phones, iPods, MP3, make-up, food, gum or another distraction named by the teacher will be instructor will be taken away so that the focus in the classroom is learning. Some may feel that listening to music while you complete assignments is beneficial and I agree. So as a compromise I have a playlist that will be played.

If your distraction is taken away, then you will have the opportunity to earn back your distraction after school, or at two lunch periods. You will be able to get your device back after you have earned it back outside of school. If your distraction is continuously reoccurring, then I will keep it until a parent conference is held. If after that, we still have a problem, then your distraction will be returned on the final day of school.

## Assignments

Assignments that are turned in late will receive a 10% deduction. All due dates are posted on the assignment and should be taken seriously. Some assignments, because of their nature (i.e. community work, reports, oral presentations) cannot be made up and a zero will be given. If the student would like to make up the assignment, then the student must make arrangements with the instructor. Please remember to turn in your work on time to avoid mishaps.

### DO NOT CREATE EXCUSES THROUGH PROCRASTINATION

## Internet and Technology

Although I will try my very best to provide technology to students it is not possible to always provide all students with all of their technology needs during class time. If students do not have access to a computer or Internet at home they will need to make time to come in after school or during lunch. There are many computers that are available to students, but arrangements must be made to use after school hours.

**\*\*Note: All personal property that is confiscated on campus is not the responsibility of the school if it is lost or damaged (refer to your Student Handbook).**

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By signing below I have reviewed the following policies with my child and understand the expectations that will be consistently upheld in this classroom. As a student I fully understand the above statements and agree to follow and respect all procedures in the classroom in order to uphold the standards that are expected from me, and my fellow classmates in the 2015-2016 school year.

Student Name (print) \_\_\_\_\_ Student Signature \_\_\_\_\_

Parent Signature \_\_\_\_\_ Date \_\_\_\_\_

Parent Contact Information \_\_\_\_\_ Best Time to Call \_\_\_\_\_

Parent Email address \_\_\_\_\_