

PHOTOVOLTAIC SYSTEMS

You have probably also been hearing about the "solar revolution" for the last 20 years -- the idea that one day we will all use free electricity from the sun. This is a seductive promise: On a bright, sunny day, the sun shines approximately 1,000 watts of energy per square meter of the planet's surface, and if we could collect all of that energy we could easily power our homes and offices for free.



In this class, we will examine solar cells to learn how they convert the sun's energy directly into electricity. In the process, you will learn why we are getting closer to using the sun's energy on a daily basis, and why we still have more research to do before the process becomes cost effective.

Using our own facility as a demo point, we will show the proper installation methods involved in implementing a solar system as well.

Textbook for this course:

Dunlop, James P. *Photovoltaic Systems*. Second ed. Orland Park: American Technical, Illinois. Print.

This book can be purchased at the JATC office for \$61.00