

ECEE Expo

Solar power competition

Date and times:

April 30, 2009

Tuesday section: 9 - 10 am

Wednesday section: 10 - 11 am

Thursday section: 11 am - noon

You may make arrangements with Prof. Erickson to deal with time conflicts (i.e., ECE capstone lab)

Each section will have a separate competition

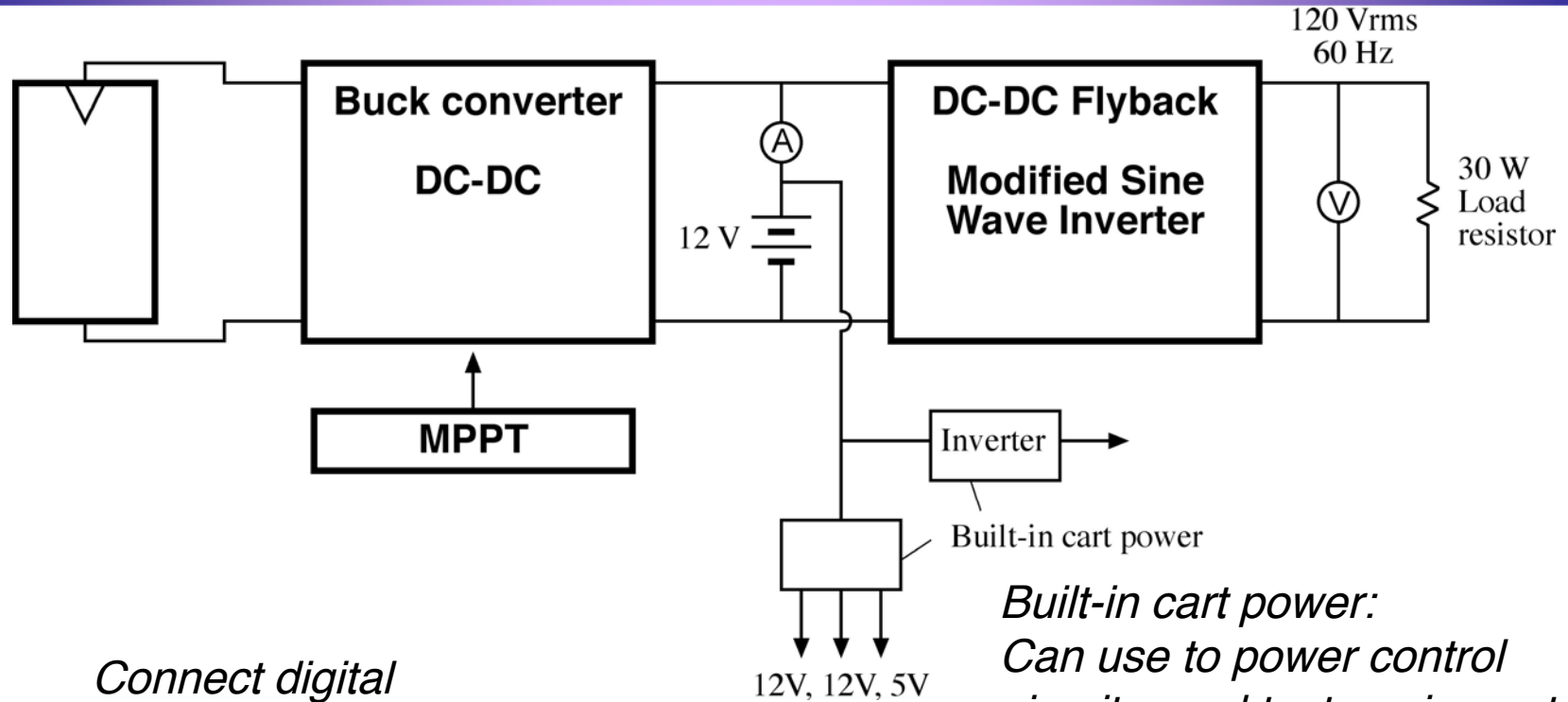
To be held in Herbst Plaza

Weather permitting

Expo and solar power competition

- Each group should prepare a posterboard to be used in explaining your system to Expo attendees. This posterboard should fit on an easel outside, next to your PV cart.
- This posterboard should include:
 - Names of all group members,
 - A high-level statement of the functionality and objectives of the converter system and its blocks
 - A block diagram/schematic
 - Some measured results
- Each system will be demonstrated to the course instructors
 - All members of the group must be present at that time and available to answer questions
 - Measure ac output power and battery current

ECCE Expo



*Connect digital
ammeter and
voltmeter as shown*

*Built-in cart power:
Can use to power control
circuitry and test equipment,
without penalty*

Competition

Make your complete system work outside on PV cart

Must supply 30 W at 60 Hz, 120 V rms, to a resistive load

- Verify with voltmeter
- Groups that are unable to demonstrate ac output at required voltage and power will be disqualified

Measure dc battery current

- The group that is able to charge with battery at the highest current wins

Exciting prizes!