

# Multi-State Advanced Manufacturing Consortium

US DOL SPONSORED TAACCCT GRANT: TC23767
PRIMARY DEVELOPER: Jim Blair – Henry Ford College

 VERSION
 v 001

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## **Basic Electricity – Unit One: Safety**

Study Guide

In order to successfully complete this unit, complete the following tasks:

1. Review the course structure.

2. Watch: https://www.youtube.com/watch?v=YbO2wLLwrPM

**Title**: High Voltage Arc Safety **Author**: EdisonTechCenter

3. Watch: <a href="https://www.youtube.com/watch?v=8xONZcBJh5A">https://www.youtube.com/watch?v=8xONZcBJh5A</a>

Title: It's not the volts that kill you, it's the amps

Author: Afrotechmods

4. Review the images of electrical safety equipment by following the link below, or by entering "Electrical safety equipment" into an image web search.

https://www.google.com/search?q=Electrical+safety+equipment&rlz=1C1GIGM\_enUS564US567&es\_sm=93&tb m=isch&tbo=u&source=univ&sa=X&ved=0CEoQsARqFQoTCP6okK7778cCFQoWPgod9eQCkQ&biw=1164&bih=5 81

- 5. Read the Electrical Safety PPT from OSHA by copying and pasting the link below into your browser: <a href="https://www.oshainfo.gatech.edu/ppt/ElecSafety-Gen.ppt">www.oshainfo.gatech.edu/ppt/ElecSafety-Gen.ppt</a>
- 6. Review the OSHA Electrical Safety Standards at: https://www.nonprofitrisk.org/tools/workplace-safety/public-sector/topics/el/OSHAchk-ps.htm

7. Watch: <a href="https://www.youtube.com/watch?v=hp97GjuULX8">https://www.youtube.com/watch?v=hp97GjuULX8</a>

**Title**: The Pain of Electricity (AC versus DC)

Author: ElectroBOOM

8. Watch: https://www.youtube.com/watch?v=MMzU66IHe-k

Title: Electricity Pain versus Frequency

Author: ElectroBOOM

9. Watch: <a href="https://www.youtube.com/watch?v=XDf2nhfxVzg">https://www.youtube.com/watch?v=XDf2nhfxVzg</a>

Title: Which is the Killer, Current or Voltage?

Author: ElectroBOOM

10. Watch: https://www.youtube.com/watch?v=snk3C4m44SY

Title: High Voltage AC/DC Effect on Human Body

Author: ElectroBOOM

11. Complete Safety Worksheets 1-3 (pdf) and submit to lab instructor.







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