

NS543 Session 6 (At-home Session) – Checklist

- ____ 1. Complete the worksheets, on circuits, that are posted under session 6 at <http://physics.bu.edu/~duffy/NS543.html>. There is some reading material posted there, too.
- ____ 2. Complete Assignment 3 on WebAssign. (<http://www.webassign.net>)
- ____ 3. Read the conceptual history reading for this week:
- *The Electrical Writings of Benjamin Franklin* collected by Robert A. Morse. Sections 1 through 18 (pp. 36 – 43) and Sections 33 – 36 (pp. 51 – 53). (***N.B.: Not Ben Franklin as my Lab Partner Part III***). (<http://itop.pbworks.com>).
 - Chapter 2 from *Structure of Scientific Revolutions* by Thomas Kuhn. (<http://itop.pbworks.com>).
- ____ 4. Bring in a homemade Leyden jar for session 7.
- ____ 5. Attend our on-line meeting on Monday from 8:30-9:30 pm. We will use this link for the whole course:
<http://bu.adobeconnect.com/ns543athome>
- ____ 6. Try using the Phet simulation (Circuit Construction Kit) to simulate the circuit with 5 bulbs and 4 switches that is shown in the diagram on the “Problem 2” worksheet. If, in that circuit, switches A, B, and D are closed, predict what will happen to the brightness of each bulb when switch C is then closed.

Bulb A	[] gets brighter	[] gets dimmer	[] is unchanged
Bulb B	[] gets brighter	[] gets dimmer	[] is unchanged
Bulb C	[] gets brighter	[] gets dimmer	[] is unchanged
Bulb D	[] gets brighter	[] gets dimmer	[] is unchanged
Bulb E	[] gets brighter	[] gets dimmer	[] is unchanged

Verify your predictions using the Phet simulation.

If you have questions about the material, or you’d like to comment on any aspect of the process, please use the discussion board that is on the NS543 wiki site. We will try to monitor the discussion board and post replies in a timely manner. Please feel free to reply to other people’s questions and comments, though.

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