

**Theoretical Physics**  
**Prof. Ruiz, UNC Asheville**  
**Chapter D Homework. Relativity and Some Electricity & Magnetism**

**HW-D1.** Derivation of  $E = mc^2$  was skipped, but here is a compromise. For homework, watch this 11 minute <https://youtu.be/G9w95R2oFKQ> on your honor and you have completed this assignment. There is nothing to turn in.

**HW-D2.** The Magnetic Field. Watch this 12 minute video on your honor: [https://youtu.be/0H3\\_yOYYZdc](https://youtu.be/0H3_yOYYZdc) and you need not write anything down. There is nothing to turn in.

**HW-D3.** The Displacement Current. Watch this 7-minute video on your honor: <https://youtu.be/q0oejYO-PQ0> and you have completed this assignment. There is nothing to turn in.

**Honor Code:** I will assume you will watch the videos on your honor and you will receive 30 homework points for this assignment.