The class met at 10 AM.

The point of today was to understand and fiddle with active circuitry so that we can make a good active crossover for the subwoofer we are building. We also designed our enclosures. Unfortunately, our drivers have not arrived yet, so frequency response measurements for the passive filters will have to wait until next week.

## Active filters

- Active vs. passive crossovers summary
- Opamps, and their use as buffers
- Active LP and HP filter topologies
- How to calculate components; reasonable R and C values
- Power supplies
- Example: Kit281 crossover

## Activity: Design our subwoofer crossover.

Split into groups to do the highpass and lowpass separately.

## Enclosure calculations (Separately for satellites and subwoofer)

- Decide on sealed or vented
- Choose cool looking height and width
- Pick enclosure volume in liters
- Find depth dimension
- Pick an arrangement for bracing

## Activity: Draw out the dimensions of the MDF pieces.

Split into groups to do the satellites and subwoofer separately.

MIT OpenCourseWare http://ocw.mit.edu

Audio and Speaker Electronics Spring 2007

For information about citing these materials or our Terms of Use, visit: http://ocw.mit.edu/terms.