

Homework Assignment #10, “Methods” Section

Write the experimental methods/procedures section for your senior thesis. This section, which describes the techniques, procedures, and apparatus or theoretical method used in your research project.

This section should describe *how* you obtained your results in sufficient detail that the validity of the method can be assessed, but it **should not** include any actual results.

In addition to the narrative text, this section **must include at least one figure** that illustrates the apparatus, methods, or techniques used in your project. The figure must be properly called out in the text, and a descriptive figure caption must be provided. Of course, more figures may be (and probably should be) included.

Write most of this section in the past tense to make clear what you’ve actually done; write time-independent facts in the present tense. Here’s an example:

“A schematic of the $1/f$ noise-producing circuit that we **designed** and **built** is shown in Figure 2-1. Components of the circuit **were chosen** to minimize ambient noise. Metal film (MF) resistors **were specifically chosen** for R1 and R2, as MF resistors **produce** only Johnson–Nyquist (thermal) noise [9]. This Johnson–Nyquist, or white, noise **is** flat across the frequency spectrum; i.e., it **does not produce** $1/f$ noise.” (“Measurement of $1/f$ Noise in Carbon Composition and Thick Film Resistors,” Patrick Barry and Steven M. Errede, Department of Physics, University of Illinois at Urbana-Champaign, December 2014)

Due: **Friday, November 6, 9:00 PM**. Assignments submitted after the deadline will be ineligible for rewrite points and will be subject to a 5-points/day late penalty. To qualify for rewrite points, all revisions must be submitted by November 20 for regrading.

Total—50 points

Notes/Questions to Ask: