Discussion on a lab performed at Kettering University for an Instrumental Analysis course. The primary purpose of this particular lab is teaching students in the matter of oscilloscopes. Aside from teaching general use, Fourier transformations, and Nyquist frequency, the students perform some more spectroscopic activities. These include observing the Bluetooth signal from their cell phones, discovering the importance of synchronizing devices, and tuning a Fabry–Pérot cavity resonator constructed from Coke cans, which works surprisingly well.