

AE-231: L'entretien de studio est l'électronique de base
AE-231: Studio Maintenance ≅ Basic Electronics

The Three Levels of Studio Maintenance

(HINT: ALL require basic troubleshooting skills)

- **System** (block diagram, device or board swap)
- **Daily** (Routine maintenance of computers and cables)
- **Component** (make repairs)

The fundamentals of Basic Electronics

- **Troubleshooting Skills**
- **Fine Motor Skills**
 - Ability to use tools
- **Ability to parse the language**
 - Read schematics
 - Draw schematics
 - Create schematics

How to Achieve the Goal?

- **Electronics 101**
- **Lab emphasis**
- **Repair your own gear (RYOG) and / or**
- **DIY project**
- **Ask lots of questions**

CLASS RESPONSIBILITIES

- **Reading Assignment**
- **Weekly Response to Assignment**
 - **On paper, by e-mail or blog, this is 25% of the grade.**
 - **What did you get? What did you not? How is the class going?**
- **The Weekly Assignment is 25% of the grade**
- **Class Participation (lab work, RYOG, DIY) is 25% of the grade.**
- **Tests and Exams constitute 25% of the grade.**
- **Ask lots of questions =**
 - **bonus points = very helpful to instructor and students**

WEEK-1 / DAY-1

- **Electrons, conductors, insulators, resistors, semiconductors**
- **Electricity: Current and Voltage**
- **Magnetism:**
- **Power, Volts and Amps**
- **AC and DC**
- **Measuring Devices**
- **Ohm's Law**
- **Schematic Symbols**