

# Optics Surface Inspection Workshop

## Syllabus

### **Description:**

Understanding the correct way to inspect optical surfaces is one the most important skills anyone working with or around optics can have, including technicians, material handlers, engineers, managers, and buyers. While understanding the specifications is the first step, learning how to actually perform the inspection is just as important. This hands-on workshop will allow attendees to learn the “Best Practice” for cleaning and inspecting optical surfaces. The course has many demonstrations and labs and gives attendees lots of practice handling and inspecting optics to a high level of proficiency.

### **Learning Outcomes:**

This course was designed to bring photonics personnel up to an immediate working knowledge on the correct methods to conduct a surface inspection in accordance with MIL, ANSI, and ISO standards.

This course will enable you to:

- perform a visual review of the surface
- create a surface map
- safely clean the surface for inspection
- understand when magnification or high-intensity light is allowed or required
- conduct a visual inspection according to MIL-PRF-13830B
- conduct a visual inspection according to ANSI OP1.002
- conduct a visual inspection according to ISO 10110-7 and ISO 14997 standards
- understand the tools available for microscope-based inspection to ANSI and ISO standards
- evaluate a surface and determine if a surface passes or fails

### **Target audience:**

This course is designed for all optical practitioners who need to handle and evaluate optics or optical assemblies. Other suggested attendees include mechanical engineers, purchasing agents, quality assurance personnel and other persons working around optical components.

**Course level:** Intermediate

**Prerequisite:** SC700 Understanding Scratch and Dig

**Course Length:** Half day (4 hours)

### **Instructor:**

Dave Aikens, aka “the Scratch Guy” is President and founder of Savvy Optics Corp., and has been involved in surface imperfections, optics drawings and specifications for over 20 years. He is the head of the American delegation to ISO TC 172 SC1, and is chairman of the American Standards Committee for Optics, ASC/OP.

### **Notes:**

The course price includes a handout of the presentation material.