Week	Gemmology Basics	Basics Lab
1	• Intro to program and role of Gemmologist • Formation of Minerals and gemstones • Crystallography	• Use tweezers, loupe • Briefkes • Crystallography
2	• Crystallography • Hardness, cleavage, Fracture, SG	• Crystallography and minerals ID lab • Hardness, cleavage, fracture, SG of hand specimens
3	• Nature of light – reflection, refraction, TIR SR DR Polariscope, refractometer • Nature of light – refraction, reflection dichroscope, Spectroscope	• Polariscope • Refractometer • Dichroscope
4	• Optical effects – internal and external • Fluorescence, other properties weights, measurements	• Sheens, lustre, eyes, stars • Instruments
5	• Gemstone Pipeline • How gems are finished	• Instruments
6	• Assembled and imitation stones • Synthetics intro -flame fusion	• Assembled and imitation • Synthetics