**Advanced Machine Shop (Core class for certificate)**

This class will provide further instruction and practice on machine tool operation. The students will be instructed in rifle barrel re-barrel techniques as well as some advanced machine shop operations. Projects will vary according to individual interests.

**PREREQUISITE:** Basic machine shop or consent of instructor.

**Bill Sturtevant** is a graduate of the Trinidad State Gunsmithing program, Bill joined the full-time Gunsmithing faculty in August 2014. Bill has owned and operated Bill’s Gun Shop in Pueblo, Colorado since 1990 and is known for producing quality custom and semi-custom firearms. The shop has a well-established reputation for completing complex repairs others were not able to do. He has completed several firearms that were used to gain world records in long distance accuracy. Bill has also performed contract machining for several large manufacturing companies in Colorado Springs, handling production runs of intricate parts.

**Advanced Machine Shop Tool List**

Barrel fitting requires that you provide one pre-contoured barrel, and an action that suits the class project. If you have more needs or would like to include something else, bring two. Call if you think you want other instruction.

**Required Tools:**
- #2 or #3 Center drill
- 1/2”, 4 Flute double end mill
- 5/16” - 3/8” HHS tool bits (and/or appropriate turning and facing carbide bits)
- 6” Dial caliper
- 6” Steel rule
- 60° Thread center gauge
- Assorted files (with handles)
- Carbide tip scribe
- Emery cloth: 80, 120, 240, 320, 400 grit
- Layout dye
- Safety glasses
Thread pitch gauge
While not required, assorted hand tools can provide a useful addition:
6" or 8" Adjustable wrench
Allen wrench set up to 3/8"
Center punch
Gunsmithing pin punch set
Gunsmithing screwdrivers
Hammer
Pliers
Tool box
Please note that this list is bare minimum. If you have other tools or supplies that may be useful, bring them. You can never have too many tools.
Contact your instructor to make sure your project will fit our facilities and time restraints

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