



COURSE SYLLABUS: PGC PRECISION RIFLE COURSE

The course is a three day course. The rough agenda for each day is contained below.

Each student will receive a loose leaf binder, note pad and handouts. Students will bring an unloaded rifle, a calculator, and pen or pencil, seat cushion, lunch and drinks (non-alcoholic, of course) to the classroom. At the range, students will need a rifle, about 100 rounds of ammo, front rest or bi-pod, sand sock (rear rest), eye protection, ear protection, shooting mat if shooting prone, calculator, note pad, pen/pencil, and a spotting scope with tripod or monopod support.

Normally the class is limited to 8 students per session. Students pair up into spotter/shooter teams of two, taking turns spotting and shooting at the range. Students must ensure their equipment can shoot long range. They need a fairly accurate scoped rifle (no iron sights in this class) and match grade ammunition (hand loads or match factory about 100 rounds). Almost any caliber center fire rifle cartridge can be used, but the fast 6mm and above cartridges are best, although a .223 or 22-250 will do. A 308 Win (7.62 NATO) is a great choice. Students are discouraged from bringing big magnums unless they can shoot them well and stand the recoil of many, many rounds! To shoot at 600 and 800 yards, students' scopes MUST have target turrets or ballistic compensating reticles with both drop and wind compensations. 20 minute bases and steel rings are recommended for scopes to ensure enough vertical elevation adjustment to compensate for drop at 800 yards. If a student's rifle cannot accommodate enough elevation adjustment out to 800 yards, we'll take him or her as far as we can with the equipment..... If students need to by a scope or bases/rings for this course, they are encouraged to call the instructor to discuss options.

Class Agenda:

Day one: Saturday, 0800-1700

- Welcome
- Introductions
- Rules & Safety
- Shooting Fundamentals
- Selecting Shooting Systems
- Target Ranging and Shot Compensation
- Moa Practice
- Internal & Terminal Ballistics
- Chronograph loads
- 100 yard zero
- Turret or Compensating reticle test shots

Day two: Sunday, 0800 - 1700

- External Ballistics
- Stability and Flight
- Gravity and Drag
- Atmospheric Effects
- Wind Drift
- Cold bore shot #1
- 200 yard zero

Day three: Sunday, 0800-1700

- Long Range Test
- Coriolis Effects (Horizontal & Vertical)
- Spin Drift
- Inclined Shots
- Shot Placement
- Moving Targets
- Introduction to Dangerous Game
- Rifle Data Book
- Cold Bore shot #2
- 600 yard shots
- 800 yards shots
- Review and awards

For further information and to register for the class, please contact:

Chip Stehmeyer
120 Sparrow Drive
Isle of Palms, SC 29431
Chip.stehmeyer@comcast.net
843-242-8149 (home)
843-860-1406 (cell)

EQUIPMENT SUGGESTIONS FOR LONG RANGE SHOOTING:

Your selected rifle must be accurate enough to shoot 1MOA groups (approximately 1" at 100 yards). Most modern CNC machined rifles are capable of this, although results will vary with each rifle. The Remington Model 700, Winchester Model 70, FN SPR, Savage Model 12 series are all great choices, and you should be able to purchase one for around \$1000. A custom long range rifle can cost \$3000 to \$5000.

For a quality optic, look at something in the \$800- \$1200 range or more. Trijicon, Vortex, Leupold, Meopta, Nikon, and Zeiss all have excellent reputations for lens clarity and quality. Go with something with an upper range magnification power of at least 14X. 16-20 X is better. Anything over 24X is really not necessary unless you're into bench rest competition. To accurately shoot long range, the scope is the most critical part of the system, so spend your \$\$ there.

<http://www.midwayusa.com/product/149028/vortex-viper-rifle-scope-30mm-tube-65-20x-50mm-side-focus-dead-hold-bdc-reticle-matte>

<http://www.midwayusa.com/product/863511/trijicon-accupoint-tr23-rifle-scope-30mm-tube-5-20x-50mm-dual-illuminated-mil-dot-with-green-dot-reticle-matte> (Incorrect reticle shown on the graphic, but this is the correct model)

<http://www.midwayusa.com/product/126832/leupold-mark-4-long-range-tactical-m1-rifle-scope-30mm-tube-65-20x-50mm-side-focus-mil-dot-reticle-matte>

<http://www.midwayusa.com/product/772915/leupold-mark-4-extended-range-tactical-m5-rifle-scope-30mm-tube-65-20x-50mm-side-focus-1-10-mil-adjustments-first-focal-tmr-reticle-matte>

<http://www.midwayusa.com/product/329392/zeiss-mc-conquest-rifle-scope-65-20x-50mm-side-focus-target-turrets-mil-dot-reticle-matte>

<http://www.midwayusa.com/product/368129/zeiss-mc-conquest-rifle-scope-65-20x-50mm-side-focus-target-turrets-rapid-z-1000-reticle-matte>

The "Gold standard" is Nightforce, but expensive!

<http://www.midwayusa.com/product/651827/nightforce-nxs-rifle-scope-30mm-tube-55-22x-50mm-hi-speed-zero-stop-side-focus-illuminated-np-r1-reticle-matte>

<http://www.midwayusa.com/product/814754/nightforce-nxs-rifle-scope-30mm-tube-55-22x-50mm-hi-speed-zero-stop-side-focus-1-10-mil-adjustments-illuminated-mlr-reticle-matte>

For a quality scope mount, get a 20MOA Picatinny base and Picatinny tactical rings, probably medium height. EGW and TPS bases and rings are great value for the quality.

<http://www.midwayusa.com/product/862734/egw-1-piece-heavy-duty-picatinny-style-20-moa-elevated-base-remington-700-long-action>

<http://www.midwayusa.com/product/747653/tps-1-piece-xp-tactical-picatinny-style-20-moa-elevated-base-remington-700-long-action-matte-steel>

<http://www.midwayusa.com/product/626901/egw-30mm-picatinny-style-rings-matte-medium> (need to change to 1" rings for 1" scope tubes)

<http://www.midwayusa.com/product/845031/tps-30mm-tsr-picatinny-style-steel-rings-matte-medium> (need to change to 1" rings for 1" scope tubes)

The TPS products are steel Vs aluminum, however the EGW HEAVY DUTY aluminum bases and rings will do well also.