

GSM - GUNSMITHING (GSM)

GSM 101 Gunsmithing I 4 SHC

This course introduces hand tools, blueprints and basic machine tools used in gunsmithing. Emphasis is placed on safety and completion of projects from blueprints using hand and machine tools. Students learn to read and work from blueprints.

Lecture Hours: 1

Lab/Clinical Hours: 9

GSM 102 Gunsmithing II 4 SHC

This course covers sophisticated machine tool operations, basic oxygen-acetylene welding, and basic metal polishing. Emphasis is placed on completing projects from blueprints using advanced machine operations, oxygen-acetylene welding, and metal refinishing.

Prerequisites: GSM 101

Lecture Hours: 1

Lab/Clinical Hours: 9

GSM 103 Gunsmithing III 4 SHC

Course is the study of chamber work, stock work, and basic repair work. Topics include threading, chambering, head spacing, simple repair work, & basic one-piece stock layout and building. Upon completion, students should be able to do various types of basic chambering, stock work, and repair work.

Prerequisites: GSM 102

Lecture Hours: 3

Lab/Clinical Hours: 3

GSM 104 Advanced Gunmetal Finishing 4 SHC

This course covers advanced gun-metal finishing. Topics include caustic and rust blueing, polishing, anodizing, parkorizing, and color case hardening gun-metal. Upon completion students should be able to do various types of metal finishing and polishing.

Lecture Hours: 4

Lab/Clinical Hours: 0

GSM 105 Gunsmithing Welding 2 SHC

This course introduces the basics of brazing, oxyacetylene cutting, silver soldering, and TIG welding. Welding safety is also emphasized.

Lecture Hours: 2

Lab/Clinical Hours: 0

GSM 106 Gunsmith Safety 1 SHC

This course emphasizes basic rifle, shotgun, and handgun safety.

Lecture Hours: 0

Lab/Clinical Hours: 3

GSM 107 Gunsmith Machine Tool Technology 4 SHC

This course introduces students to machine tool technology including machine tool theory, precision measurements, blueprint reading and projects using hand tools, drill press, bench grinder and the lathe.

Lecture Hours: 4

Lab/Clinical Hours: 0

GSM 120 Basic Stockmaking 3 SHC

This course introduces design, layout, & proper wood selection for stocks. Topics include building stocks by hand, one-butt stocks, and fore-ends for a two-piece shotgun. Students learn to choose a suitable piece of wood, lay out a stock, and produce a butt stock and fore-end for a firearm.

Lecture Hours: 2

Lab/Clinical Hours: 3

GSM 121 Barrel Fitting/ Alteration 3 SHC

This course introduces custom barrel fitting, chambering and action alterations. Emphasis is placed on safety and completion of custom-barreled actions using hand and machine tools and welding equipment.

This course is a combined project with GSM 220.

Lecture Hours: 1

Lab/Clinical Hours: 6

GSM 122 General Repair 3 SHC

This course introduces the design and function of firearms, sight mounting, and basic reloading of ammunition. Emphasis is placed on safety and completion of repair projects using hand and machine tools and the furnace.

Lecture Hours: 1

Lab/Clinical Hours: 6

GSM 220 Rifle Stockmaking 4 SHC

This course introduces inletting, shaping, and finishing of custom rifle stocks. Emphasis is placed on design and completion of a custom rifle stock using hand and machine tools. Upon completion, students should be able to lay out a rifle stock, inlet the barrel action, and shape and finish a custom rifle stock (combined project with GSM 121).

Lecture Hours: 2

Lab/Clinical Hours: 6

GSM 221 Advanced Repair Technology 3 SHC

This course is the study of advanced repair techniques and trigger designs on rifles and shotguns. Emphasis is placed on repairing various firearms and adjusting trigger pulls to safe industry standards using fixtures and hand and machine tools. Students learn to safely adjust and repair various firearms.

Corequisites: GSM 103.

Lecture Hours: 1

Lab/Clinical Hours: 6

GSM 222 Handgun Technology 3 SHC

This course covers the design, function, and customizing of handguns. Emphasis is placed on repairs and custom alterations. Upon completion, students should be able to perform repairs on revolvers and semi-automatic pistols and customize handguns.

Lecture Hours: 1

Lab/Clinical Hours: 6

GSM 223 Gunsmithing Techniques 3 SHC

This course introduces materials and gunsmithing techniques. Emphasis is placed on material characteristics, applications, and tooling requirements. Upon completion, students should be able to demonstrate competence in gunsmithing techniques such as composite stockmaking and synthetic bedding.

Lecture Hours: 1

Lab/Clinical Hours: 6



GSM 225 Checkering 3 SHC

This course is an introduction to the history, tooling, layout, and design of Checkering.

Lecture Hours: 3

Lab/Clinical Hours: 0

GSM 230 Business for Gunsmiths 3 SHC

This course is the study of basic business practices for gunsmiths.

Topics include business basics, marketing, website design, photography, pricing, business plans, as well as federal and state laws regarding firearms businesses.

Lecture Hours: 3

Lab/Clinical Hours: 0