Track 1: Basic Trail Maintenance (Courses 100 and 102)

Basic trail maintenance is an introductory level course for individuals new to trail work and will provide students with a basic understanding of a variety of introductory skills. This course will cover "what is trail work." This includes basic features of a trail and how to begin tread and drainage work. Students will have an opportunity to clear the trail corridor as well as improve trail tread and drainage and be exposed to a number of maintenance problems. This will be a two part course:

100. Intro to Trail Maintenance
Students will be introduced to a range of trail work tasks including safety protocols, brushing, hand-saw clearing, and drainage cleaning.

102. Tread and Drainage: Protecting Trails from Erosion
The basics of hillside hydrology and how trails work when they shed water properly will be focused on. This includes introduction of "trail eyes" for recognizing tread erosion patterns. Hands-on practice removing slough and berm, and effective cleaning and maintenance of existing water bars and drain dips.

Track 2: Tread and Drainage (Courses 201 and 203)

Prerequisite: Basic trail maintenance experience by volunteering on a trail crew or participation in Trail Skills College classes 100 and 102.

This track will focus on installing the proper drainage features and how to restore damaged areas. This will be an intermediate course for those who have done some trail work but want more experience troubleshooting and repairing existing tread and drainage issues. Students will spend the first day analyzing existing drainage structures and constructing drain dips. The second day will be spent learning to quarry and move rock and build water bars. This will be a two part course:

201. Drainage Design and Drain Dips
Intended for someone who has taken 102 (Intro to Tread & Drainage) and/or has experience doing drainage work. Learn how to design and locate effective drainage structures.

203. Waterbars and Checks

On the second day, participants will be introduced to waterbars.

Track 3: Waterbars and Checks (Course 203)

Prerequisite: 201 Drainage Design and Dips or equivalent experience.

This is an intermediate course that is more advanced than Track 2 and will provide participants to learn and focus fully on waterbars and checks for two-full days.

203. Waterbars and Checks
Intended for someone who has taken 201 Drainage Design and Drain Dips and/or has considerable experience doing drainage work. Where earthen rolling drain dips are not feasible, drainage features are sometimes armored using rock or log. Learn contemporary techniques to build water bars. The class will include a review of "old school" waterbars, and how to convert "old school" waterbars to a more effective design. Furthermore, learn how to install rock and log checks where tread is gullied and cannot be drained, or in other situations requiring tread armoring. Two days will be spent on this course so students have ample opportunity to practice moving and setting rocks.

Track 4: Tread Re-construction (Course 205)

Prerequisite: 201 Drainage Design and Dips and 203 Waterbars and Checks or equivalent experience.

This is an advanced course where students will focus on reconstructing a deeply rutted section of tread using checks and drainage structures. Students will have the opportunity to analyze a section of trail that is severely damaged from poor drainage and then construct a solution to improve the hillside hydrology and rehabilitate the trail tread.

205. Tread Re-construction

This course goes beyond a triage approach covered in Course 203 Waterbars and Checks because reconstruction indicates a more thorough restoration of damaged tread to ideal specifications. Review hillside hydrology and how trails should work. Practice systematic slough & berm removal, re-cutting sidehill tread. Learn to reconstruct tread after gullying, tread creep, nasty roots, and uprooted trees.