2006 Core Course Calendar

Course Number/Title	April	May	June	July	August	September	October	November	December
ESR 221 — Intro to River Science & Management	April 18-20 $350					Sept. 12-14 $350			
ESR 222 — Stream Ecology							Oct. 11-13 $425		
ESR 223 — Stream Reconnaissance & Assessment Tools							Oct 24-27 $550		
ESR 224 — Restoration Design								Nov. 13-17 $750	
ESR 225 — Teambuilding, Communications & Project Management									Dec. 5-7 $350
ESR 226 — River Restoration Field Institute				July 10-August 4 $2,850					

- Stream classification
- Air photo interpretation
- Remote sensing
- Data collection and management
- Useful models
- Monitoring parameters, design, and funding
- Integrating regulations and permits

Dates: October 24-27, 2006

CEUs: 2.8 **Opt. Graduate Credit:** 2

Facilitator: Willis McConnaha, PhD, Sr Fisheries Biologist, Jones & Stokes Associates, Portland, Oregon.

ESR 224: Restoration Design

In this course, participants will learn about a variety of design approaches and steps for alternative analysis of stream restoration projects. A design process will be demonstrated that integrates landscape scale considerations of geology, soils, and hydrology, with stream processes of hydraulics, sediment transport and geomorphology. Alternative analysis will focus on providing resiliency to stream systems in light of dominant stream processes overlain with biologic goals and human values.

The overall focus will be on understanding and design of best management practices in the river restoration context, and on use of process-based design approaches. Classroom and field case examples will be used to demonstrate implementation of a variety of design approaches and techniques. This 4.5-day course will teach you the basics of:

- Obtaining input and scientific information
- Placing alternatives in context
  - Geomorphology in restoration design
  - Regional and local hydrology
  - Channel geometry and river morphology
  - Sediment budget, transport and management
- Gathering and analyzing basic data
- Design process, products and practice
  - The practice of design
  - Standards, specifications and design notes
  - Design drawings - conveying information
  - Operation, maintenance and monitoring plans
- Best management practices
- Construction sequencing
- Environmental change and building resilience

Dates: November 13-17, 2006

CEUs: 3.4 **Opt. Graduate Credit**: 2

Facilitator: Rob Sampson, PE, State Conservation Engineer, USDA Natural Resources Conservation Service, Boise, Idaho.

ESR 225: Teambuilding, Communications, and Project Management

This course will lead participants through the process of building multi-agency and interdisciplinary teams, setting up administrative systems, and creating internal and public communication plans. Case examples will be provided for various restoration project types and scales. Facilitated by Bruce Henderson, speakers will include representatives from state and federal agencies, and design, construction, and watershed council sectors. This 2.5-day course will teach you the basics of:

- Project management principles and goals management
- Building the project: choosing and managing interdisciplinary teams
- Communications and information management
- Defining the internal capacity to do the job
- Project scheduling
- Marketing and public relations
- Stakeholder assessment, management, and compliance
- Administration: coordinating MOAs and contracts
- Project levels, structures, schedule, and fiscal management
- Managing designers, construction crews, contractors, and volunteers
- Designer-contractor interactions and responsibilities
- Restoration politics

Dates: December 5-7, 2006

CEUs: 2.1 **Opt. Graduate Credit:** 1

Facilitator: Bruce Henderson, President, Henderson Land Services, LLC, Lake Oswego, Oregon.