

## West Virginia Wetland Rapid Assessment Model Syllabus

**Duration:** On demand, 160 days to complete

**Personal Development Hours:** 36 Hours

### General Information

The Swamp School’s West Virginia Wetland Rapid Assessment Model Techniques is an online program that presents the latest state-of-the-science protocols for monitoring and managing wetland communities. Our training is accepted for several professional continuing education and certification programs including the Professional Wetland Scientist (PWS) program.

Students must complete the fieldwork at their own wetland (with permission). Students can use a local wetland site for their field assignments so there is no need to travel far to complete this training. **You must choose a site that is easily accessible to complete multiple visits to the site. Equipment requirements are listed in the User Manual. See below.**

SAMPLING ACTIVITY	SUPPLIES & EQUIPMENT
Decontamination	Pump sprayer (1 or 2-gallon) for water rinse
Decontamination	Mister or small sprayer (about a quart) for 10% bleach solution
Decontamination	Stiff brush
Decontamination	Bleach
General	Air photo packet (wetland boundary, 50m (164 ft) buffer, 300m (984 ft) buffer, attributed NWI polygons, soil overlay)
General	Clipboard, Pencils, Markers
General	Field forms on Rite-in-Rain paper
General	WVWRAM User Manual, Field reference sheets (NWI codes, water regime definitions, soil definitions and keys), laminated or on Rite-in-Rain
General	GPS unit with target points loaded
General	Digital camera (may be on GPS or phone); note that date/time stamp on photos is recommended
General	Measuring tape, minimum 20 meters (66 feet) length
General	First aid kit, sunscreen, insect repellent, water bottle, hat, lunch, appropriate footwear (e.g., knee/hip boots, waders), cell phone (at least one per team for safety)
Soils	Munsell color chart
Soils	Shovel and/or soil auger
Soils	Soil pH kit (Lovibond Soil pH Test Kit)
Vegetation	Aquatic bed sampler (mini grappling hook attached to throwing rope)
Vegetation	dbh tape, or Biltmore scale on clipboard
Vegetation	Flora references; Flora of Virginia AND FloraQuest (for WV filter) mobile apps, plus DEP’s Guide to Common Wetland Plants are highly recommended
Vegetation	Hand lens
Vegetation	Plant press and pressing supplies: collection bags, labels, soil knife, newspaper, blotting paper, cardboard spacers, waxed paper (aquatics)

## **Course Description**

Subjects covered during training include: Overview of the WWRAM, including the regulatory context, Key botanical, soil, and hydrology characteristics of WV wetlands, Field mapping and assigning National Wetlands Inventory attributes, Identification of wetland stressors, Distinguishing organic soil and mucky modified mineral from mineral soil, Proper completion of data forms, Equipment decontamination procedure, Quality assurance skills for maintaining precision, accuracy, and comparability in data collection, and Data entry and calculation of final wetland function scores.

## **Course Requirements**

Students are expected to present original work for all assignments. ALL information for course assignments must be current and completed within the period of your published course start and end dates unless a specific exception to this policy is granted by the staff of the Swamp School.

Submissions completed for an employer's work-related project will be accepted if they meet the time restrictions mentioned above. Class assignments include the preparation of a submission that may include an essay, pictures, maps, or other course-related material.

**Instructor Contact** - Directly within the class via Moodle e-mail

**Time Limits** The course is offered in an on-demand format. You can log in any time within the course time limit and watch the presentations and work on the assignments. There is not a specific time you need to start the class, and it is available anytime day or night. The class will remain active in your account for 160 days (about 6 months) after you register for the class.

## **Plagiarism and Writing Standards**

The Swamp School's expectation is that all student work will be original. A detailed description of our policy on proper submission of an assignment is outlined in our Plagiarism Statement and Writing Standards.

## **Grading\***

Discussions 10%

Presentations 10%

Quizzes 10%

Assignments 30%

Reading Assignments 15%

Final Exam 25%

\*A minimum overall grade of 80% is required to pass this class.