

# Certified HydroSeeding Professionals - Course Outline

## I. Hydroseeding – 40% (16 hrs)

### **Purpose:**

To provide an organized presentation of Hydroseeding with regard to:

- The Basics
- Different Types and Tactics
- Designing and Pricing a Job
- Current and New Technology
- Regional Practices
- Common Problems and Solutions

### **A. The Basics**

#### 1. What is Hydroseeding?

Hydroseeding, is a seed planting process. The process is fast, efficient, and economical. This planting process is usually more effective than conventional seeding and, in the case of grasses, is certainly more economical than conventional sodding.

The process begins by mixing mulch, seed, fertilizer, tackifier, dye and water in the tank of a hydro-mulching machine. The mixed material is then pumped from the tank and sprayed evenly onto the ground over a wide area. The material is often referred to as a slurry, much like a soupy batch of green papier-mâché. Once applied to the soil, the material enhances initial growth by providing a micro-environment beneficial to seed germination.

- Water is the carrier for the mixture and also provides moisture to the soil. In hot and dry areas, a contractor might spray water over the ground before the hydroseeding process starts. The extra water lowers the soil temperature and provides a good base for the hydromixture.
- The seed varies by the area and the wishes of the client, varying from lawn seed to native seeds with wildflowers added in. In many areas, government contracts call for native seed, and even homeowners are requesting natives.
- Fertilizers can be added to enhance growth. Other products, such as inoculants, soil amendments or chemicals to improve the pH of the soil, can be added to the mix as needed.
- Mulch helps protect the seed and seals in moisture. Either paper or wood or a mixture of the two can be used.

- Tackifiers, to anchor the mixture to slopes and help seal in moisture, are a common addition.
- A dye is often added for aesthetic purposes and so the operator can easily see what area has been covered and how well it is covered.

## 2. When is Hydroseeding Performed?

Hydroseeding is performed for various reasons:

- For new golf course construction
- New home lawns
- New highway construction
- For reclamation of mine sites
- To temporarily protect exposed soils from erosion by water and wind

## 3. What are the Advantages of Hydroseeding?

- Faster germination
- Increased plant survival
- The ability to cover large, inaccessible areas
- The cost is less than that of sod even over flat areas,
- It's a more viable option in areas that are too steep to apply sod
- Seed applied in a hydroseed mix will generally show growth and develop turf faster than broadcast seed.

## 4. Equipment and Supplies

- Equipment Types Used
- Types of Mulch
  - When/where to use Mulch
  - When/Where to go with little or no mulch

- Types of Tackifier
- Other additives
  - Fertilizer
  - Inoculants
  - Soil amendments
- Mulch Application Rates
  - The Mix in the Tank / The Application on the Ground
- Evaluating Site Conditions
  - Soil conditions
  - Topography
  - Season and Climate
  - Water Availability
  - Vegetation Types
  - Sensitive Adjacent Areas
- Inspection and Maintenance
- Problems/ Experience
  - War Stories
  - What to watch for
  - Solutions for Standard problems
- Ways to Develop the Business (Marketing?)

## **Hydroseeding Info Sources**

<http://www.cabmphandbooks.com/Documents/Construction/EC-4.pdf>

[http://www.igin.com/Landscaping/hydro\\_seeding.html](http://www.igin.com/Landscaping/hydro_seeding.html)

[http://www.forester.net/ec\\_0109\\_hydroseeding.html](http://www.forester.net/ec_0109_hydroseeding.html)

## II. Business Topics – 20% (8 hours)

### A. Getting Started

1. Which business entity is right for you?
  - a. Sole proprietorship
  - b. Limited Liability Company
  - c. Corporation
    - S corporation
2. Registering with your state and local governments
  - a. What is required?
  - b. Can you do it yourself?
  - c. Business advisors – do you need one?
    - Accountant
    - Attorney
    - Other alternatives
3. Insurance
  - a. Liability
  - b. Vehicle and equipment
  - c. Bonding
  - d. Worker's compensation
4. Financial records and statements
  - a. Checking account
  - b. Debit and credit cards

- c. Loans
- d. Record keeping
- e. Budgets

## 5. Employees

- a. Hiring
- b. Training
- c. Payroll
- d. State and federal labor laws
- e. Discipline/ firing

## 6. Marketing

- a. Product – what are you really selling?
- b. Price – designing and pricing a job
- c. Place – what/ who is your target market?
- d. Promotion
  - Advertising
  - Business cards
  - Signs
  - Other methods
- e. The marketing budget
- f. The marketing plan

## 7. Taxes

- a. Income taxes
- b. Payroll taxes

- c. Sales taxes
- d. Property/ real estate taxes

## B. Moving Forward

### 1. Establishing supplier relationships

- a. What is your optimum inventory level?
- b. What is the required lead time?

### 2. Securing a loan

- a. Lender relationships
- b. Writing a business plan
- c. Financial statements

### 3. When to expand

III. Soil and Fertility Basics – 15% (6 hours)

IV. Turfgrass Science – 15% (6 hours)

V. Erosion Control – 10 % (4 hours)