

Virginia's Fertilizer Applicator Certification Training (FACT) Program.

Rationale:

2 VAC 5-405, *Regulations for the Application of Fertilizer to Nonagricultural Lands* require training for all licensees and contractor-applicators, state agencies, localities, or other governmental entities engaged in the commercial application of fertilizers to nonagricultural lands.

Applicability

The regulations require that all licensees and contractor-applicators engaged in the commercial application of fertilizers to nonagricultural lands, and all state agencies, localities, or other governmental entities that apply fertilizer to nonagricultural lands shall:

- Employ or retain the services of a certified fertilizer applicator (CFA).
- Apply fertilizer at rates, times, and methods that are consistent with standards and criteria for nutrient management promulgated pursuant to § 10.1-104.2 of the Code of Virginia.
- Ensure that fertilizer applications are conducted as prescribed by board-approved training or individual applicator training.
- Comply with all applicable recordkeeping and reporting requirements in this regulation.
- Anyone desiring certification as a CFA must successfully complete approved training and submit an online application to the Virginia Department of Agriculture and Consumer Services (VDACS). The application must include proof of satisfactory completion of the approved training.

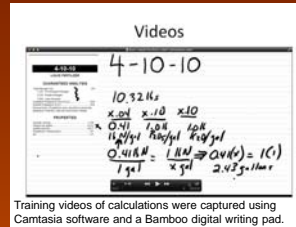
J.M. Goatley, M. Sumner, P. Hipkins, Virginia Tech and Virginia Cooperative Extension (VCE); T. Sexton, Va Dept. of Conservation and Recreation (VDCR); A. Alvarez, L. Nichols, E. Williams, and D. DeLorme, Va Dept. of Ag. and Consumer Services (VDACS)

Upon successful completion of each of the 10 modules the participant e-mails VDACS through a link on the FACT site requesting confirmation by VDACS officials of the successful completion of the exam. VDACS responds to these e-mails one day per week and administers certificates typically within 14 days of the successful completion of all testing components.



Fertilizer Applicator Certification Training (FACT)

- 10 online, self-paced modules
 - Adobe Presenter Presentations
 - PDFs
 - Videos
 - Online testing
- Passing the exams meets knowledge requirements to receive certification from VDACS.



Videos

Training videos of calculations were captured using Camtasia software and a Bamboo digital writing pad.



The site currently (10/30/13) has 367 fully registered participants in the system, with 144 completing certification requirements and certified by VDACS.



www.ext.vt.edu/fact

FACT is a free on-line training and testing resource developed in cooperation between VCE, VDCR, and VDACS. It is hosted through VCE but the program is administered through VDACS.



Scholar is Virginia Tech's university supported Learning Management System, maintained by Learning Technologies, a division of Information Technology at VT. It is based upon the Sakai open source program and serves more than 30,000 students, faculty, and staff each semester.

Modules

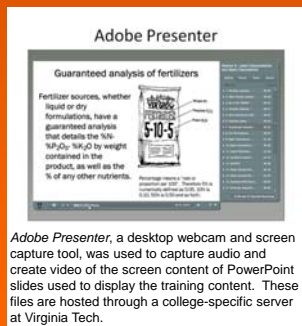
1. Fertilizer Applicator Regulations
2. Safety and Health Requirements in Fertilizer Application
3. Principles in Turfgrass Nutrition
4. Fertilizer Programming and Selection
5. Label Interpretation and Basic Fertilizer Calculations
6. Soil and Tissue Testing
7. Rotary Spreader Calibration
8. Drop Spreader Calibration
9. Sprayer Calibration
10. Management Strategies that Optimize the Environmental Benefits of Turfgrass

Online Testing



Each exam is comprised of 10 questions selected randomly from a question pool. Each question is worth 10 points. Passing the exams for all modules meets the knowledge requirements to receive certification from VDACS. Exams are graded automatically and participants receive immediate feedback.

Adobe Presenter



Adobe Presenter, a desktop webcam and screen capture tool, was used to capture audio and create video of the screen content of PowerPoint slides used to display the training content. These files are hosted through a college-specific server at Virginia Tech.



Question pools were developed for each module and the questions for exams are randomly generated by Scholar each time a section is accessed. 10 questions are offered in each module exam and a passing grade is 70%

Conclusions

- The program has generally been free of any significant function or content issues, with most questions primarily raised by participants asking to know when they will receive their certification.
- The regulatory agencies (VDACS and DCR) are very pleased with site performance and initial use of the site.
- User feedback has been very positive and a common theme is that this training is not 'easy' and is 'worthwhile' even in an open book format.
- The FACT program offers a no-cost, readily available means of training, testing and certifying Virginia's turfgrass professionals that are applying fertilizer to turfgrass systems and is a viable and successful alternative to in-person training and testing programs being offered by other agencies and individuals.

