S.U.N.Y. DEGREE IN ARBORICULTURE[1]

by H. Dennis P. Ryan III

Abstract. The Ornamental Horticulture Department at the State University of New York at Farmingdale will begin offering an option in arboriculture commencing September 1978. The program was formulated by a steering committee of Farmingdale faculty and New York arborists. The desire of the committee was to design a program that would provide the student with the practical arboricultural skills that are required by the arborist industry as well as scientific, business, and technical training needed in sales or management positions in the commercial or municipal sector. This paper explores the reasons why the program is needed, how it was constructed and the philosophy of the Farmingdale arboriculture option.

The State University of New York at Farmingdale, located on Long Island, will begin offering a major option in arboriculture commencing September 1978. The new arboriculture option will be part of the ornamental horticulture program that presently exists at Farmingdale. The option will culminate in an Associate of Applied Science degree.

Arboricultural education is not new to Farmingdale. Professor Emeritus Daniel Dowd taught two courses in arboriculture starting in 1946. Both of these courses are still being taught to landscaping and nursery management students as electives. In addition, the university offers an arboriculture course to approximately fifty evening college students each year.

The new arboriculture program will provide the opportunity for students to major in arboriculture.

The demand for the arboriculture option was justified on November 15, 1976, when a meeting was held at the request of the Long Island Arborist and the New York Arborist Associations. During the meeting, concern was expressed that there exists a serious shortage of trained arborists in New York. At a later date Mr. Robert Felix, Executive Secretary of the National Arborist Association wrote that the shortage was nationwide and in many cases the lack of trained personnel was limiting the expansion of the arborist industry.

The development of this option began with a steering committee of the Farmingdale faculty and New York arborists. The desire of the committee was to develop a program that will provide the student with the practical arboricultural skills required by the arborist industry. The information and skills developed will be those needed in both the private and municipal sectors.

In consideration of the fact that most arborists holding positions in sales and supervision have worked their way up into management, it was agreed that the program should provide the scientific, business, and technical training required for these positions of responsibility.

The following courses are required for the completion of the arboriculture option:

Ornamental Horticulture Program—Arboriculture Option
Associate of Applied Science Degree

	Two Years
First Semester	Credits
Soil Science	3
Horticulture I	3
U.S. History	3
Botany	3
English	3
Physial Education	1
	16
Second Semester	Credits
Mycology and Plant Pathology	3
Horticulture II	3
Introductory Arboriculture	3
Entomology	3
Business Math	3
Chemistry	3
	18
Third Semester	Credits
Woody Plants I	3
Arboriculture I	3
Hort. and Turf. Equipment	3
Turfgrass Culture	3
OH elective	3
	15

[1]Presented at the annual convention of the International Society of Arboriculture in Toronto, Ontario in August 1978. (Photography by William Hoffer, N.Y.C.)

Fourth Semester	Credits
Social Science Elective	3
Arboriculture II	3
Landscape Construction	3
Woody Plant Diagnostic Techniques	3
Woody Plants II	3
English	3
	18
Total Credits	67

The Arboriculture courses that build on a strong horticulture foundation, Botany, Soils, Entomology, Pathology, etc., are the nucleus of the program. The Arboriculture option combines practical field experiences with arboricultural theories. The following is a brief description of the four Arboriculture courses.

Introductory Arboriculture — Classroom studies in landscape appreciation. The elements and principles of design with application in lettering, freehand, and perspective drawing. Arboricultural field experience will involve large tree transplanting, fertilization and spraying.

Arboriculture I — Theory and practice of ornamental shade tree care. Techniques of climbing, pruning, bracing, cabling, fertilization, bark repair, and cavity repair. Prefaced by an overview of the arborist industry. The student will receive 30 hours of tree climbing on large campus trees using ropes and saddles.

Arboriculture II — Advance theory, practice, and field studies of the private and municipal arboriculture (urban forestry) industry. Studies will include care and pruning of fruit trees, shade tree evaluation, power equipment and vegetation survey. Business practices and organization including management, record keeping, estimating, customer relations, ethics, and standards will be covered. An urban vegetation survey will be required utilizing local towns.

Woody Plant Diagnostic Techniques — The course will cover the correct techniques and procedure required for the proper identification of woody plant problems. The student will be required to draw upon the cumulative educational experiences of the first three semesters in identifying insect, disease, site and physiological problems affecting woody plants. The use of keys and integrated control measures will be stressed.

Students enrolled in the program will be encouraged to join the International Society of Arboriculture and the local arborist associations. The New York Arborists Association, at the July 1978 Board of Directors meeting, initiated a student

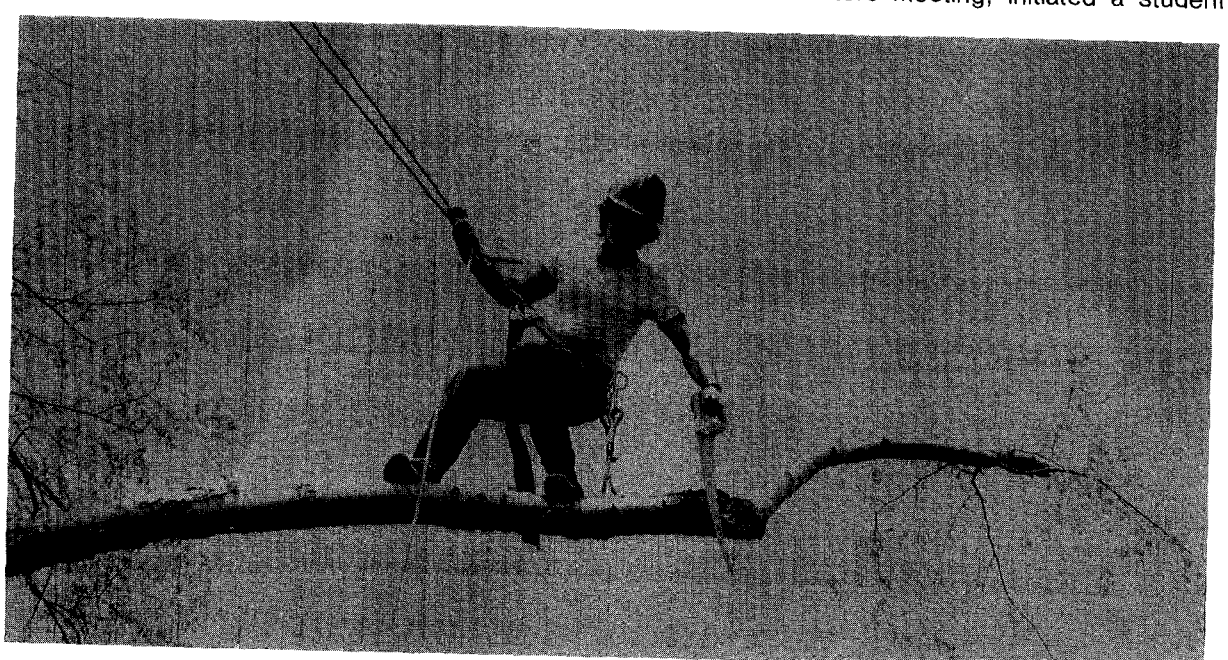

Figure 1. All Arboriculture students receive instruction and practical experience in basic Arboricultural skills; safety and modern methods are stressed at all times.

Figure 2. The students are introduced to the diagnosis of woody plant problems in advanced Arboricultural curriculum.

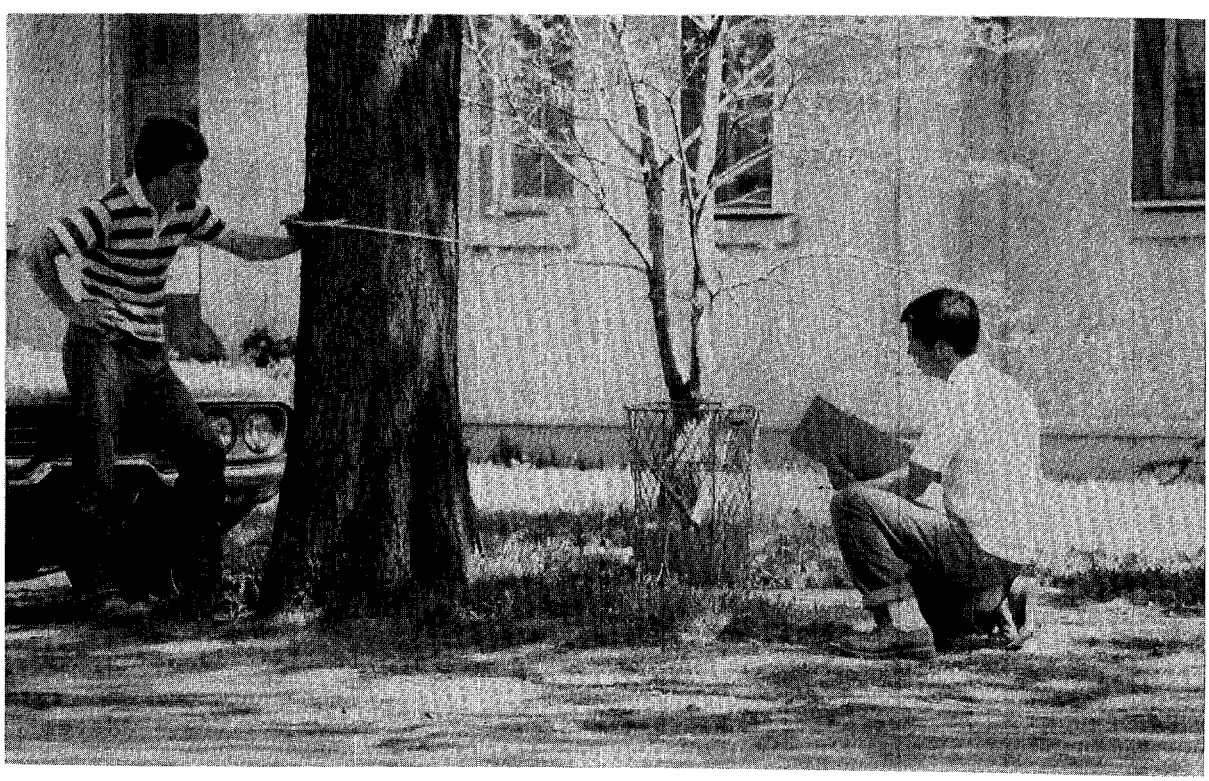

Figure 3. Due to increased emphasis on Municipal Arboriculture (Urban Forestry), Farmingdale students receive training in how to plan and implement urban vegetation surveys and management policies.

rate. The Long Island Arborist Association has a student classification already in existence. The school feels that a close relationship between the local arborist industry and the arboriculture students is a must for a viable program.

The students must have a New York or home state Commercial Pesticide Applicator License at graduation. Graduation requires 67 credits with a C average. Approximately 30% of the graduates have continued their education. The remainder are expected to be absorbed by private and municipal arborists.

Conclusion

The program is expected to attract primarily New York residents, but students from other states or countries are encouraged to apply and will be accepted as room permits. The admissions office is accepting applications for twenty-four students annually.

Anyone interested in the new Arboriculture option should write to: Director of Admissions, State University of New York, Agricultural and Technical College, Melville Road, Farmingdale, New York 11735. Phone: (516) 420-2200.

General entrance requirements for A.A.S. students include graduation from an approved high school or hold a high school equivalency diploma that indicates completion of at least 16 units of high school credit, which must include the following: Mathematics - 1 unit (Algebra required); Science - 2 units (Biology and Chemistry recommended).

The Ornamental Horticulture Department would like to thank all of the arborists, especially the Long Island Arborist Association, the New York Arborists Association and the National Arborist Association, for the support that has been given in the establishment of this new Arboriculture option.

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ABSTRACTS

Breece, J.R., T. Furuta, and H.Z. Hield. 1978. **Pinching azaleas chemically.** California Agriculture 32(5): 23.

Azaleas in pots require pinching — removing the terminal bud (shoot tip) to induce branching — for a uniform crown of flowers. Manual pinching had been required before a chemical pinching compound became available. To study the effectiveness of azalea-pinching chemicals, a trial was established at Lewis Gardens, Inc., Vista, California. Hand pinching was used as a control. Except for Fuzzy White variety, *Antrinal*-treated plants had more shoots developing following treatment than plants that were hand pinched or treated with *Off-Shoot-O.*

Pechnold, P.C. 1978. **Cytospora canker — its effect on spruce.** Am. Nurseryman 147(11): 11, 63.

This damaging stem disease is most commonly found on Norway and blue spruces. Cytospora canker is most always associated with older and/or weakened trees, trees whose lower branches or roots have been injured, and trees growing in restricted sites or in other poor growing situations. It is seldom a problem on young, vigorous trees. Cytospora canker is caused by the fungus *Cytospora kunzei.* Because older, weakened trees are most susceptible to Cytospora canker, it is important to maintain and/or improve tree vitality. An occasional topdressing of leaf mold or peat moss with compost mixed into it is beneficial to maintaining plant vigor.