HORT 1001: Applied Horticulture: Food Sustainability with Environmental Stewardship

Graduates of this program obtain a Professional Development Certificate in *Applied Horticulture: Food Sustainability with Environmental Stewardship* from Carleton University. The program is offered to adults with high school equivalency. We cover theoretical and practical aspects of sustainable food production in both traditional agricultural and urban environments. Emphasis is placed on ecological principles that underpin sustainable food production. Our integrated approach promotes deeper understanding, skill development, and industry readiness by bridging the gap between theory and practice. The program runs from May to July (120 hours total over 10 weeks) within the Carleton greenhouses and the Biology Teaching and Research Garden, and comprises 3 modules:

1) Sustainable Food Production – Mondays, 9 AM – 1:15 PM. This module covers sustainable food production systems. We will explore the environmental, economic, and social aspects of food production while developing practical skills in crop cultivation, urban farming, season extension, soil management, food security, and emerging production technologies.

2) Environmental Principles in Horticulture – Tuesdays, 9 AM – 1:15 PM. An introduction to ecological principles that underpin sustainable horticultural systems, emphasizing the philosophy of "working with nature rather than against it". Topics include how biodiversity, soil health, nutrient cycling, and water conservation influence horticulture, food production, landscaping, and environmental stewardship.

3) Invasive Plant Management – Wednesdays, 9 AM – 1:15 PM. This module covers the science and management of invasive plant species. We will examine the biological characteristics that contribute to invasiveness, and the ecological consequences of invasions. Practical skills gained include monitoring, assessment, prevention, and control of invasive plants.

For more information, please visit the Biology Department website at Carleton University https://carleton.ca/biology/

Cost: $2,000 +HST

Monday – Wednesday, from 9 AM – 1:15 PM*, May 3, 2027 – July 7, 2027

*All the displayed times are in the America/Toronto EST -05:00 time zone