Course Content

- Plant taxonomy and in particular the binomial system in plant identification.
- The usage of botanical Latin and how it may relate to a plant's origin, shape, form colour and smell.
- The identification of plants based on a knowledge of the system of plant identification keys, appearance and characteristics.
- The original plant hunters and the emergence of the designed landscape.
- The landscape use of conifers, evergreen trees and shrubs and other plants known for autumn foliage and winter interest.

Schedule-Duration

This module runs for 12 weeks in Semester 1.

- Semester 1: September – December, Tuesdays 9-1 am.

Plant Identification – Use and Management (HTSC H1025)

Application Details

- **Closing date for applications:** 3rd January 2025
- **Teaching commences:** January 2025
- **Module fee:** €600

Module Details

- **TU Code:** BN_EHORT_SS (BN995) / **Level:** NFQ Level 6 / **Location:** Blanchardstown Campus
- **Award:** Certificate in Plant Identification-Use and Management (TU Dublin)
- **Course type:** Undergraduate / **Mode of Study:** Part time / **Method of Delivery:** Blended
- **Contact:** email Rachel.freeman@tudublin.ie

Overview

This module builds on the knowledge and skills developed on the course (HTSC 1013). A range of landscape sites are presented, each with specific attributes and the student will develop the skills to select the right range of plants suitable while also determining the appropriate maintenance regime necessary to establish the plant choices successfully.

Minimum Entry Requirements

LC Min grade (Maths 06/H7; English or Irish 06/H7) **OR** A full level 5/6 award **OR** Meeting TU Dublin assessment criteria for mature entry.

Course Content

- Selecting the right plant for a range of sites and locations.
- Growing requirements of plants, such as mulching, pruning, sunlight, soil type, plant nutrition and drainage.
- The use of non-native or exotic plants in Ireland.
- The causes and symptoms of common non-pathogenic plant problems and how to reduce or eliminate them.
- The identification of plants based on a knowledge of the system of plant identification keys, appearance and characteristics.
- The use of spring and summer flowering trees and shrubs, spring bulbs, alpines and herbaceous plants.

Schedule

This module runs for 12 weeks in Semester 2.

- Semester 2: January- May, Tuesdays 9-1 am.

Ecology and Biodiversity (HTSC H2028)

Application Details

Closing date for applications: 1 September 2024 / **Teaching commences:** September 2024

- **Module fee:** €600

Module Details

- **TU Code:** BN_EHORT_SS (BN995) / **Level:** NFQ Level 6 / **Location:** Blanchardstown Campus
- **Award:** Certificate in Ecology and Biodiversity (TU Dublin)
- **Course type:** Undergraduate / **Mode of Study:** Part time / **Method of Delivery:** Blended
- **Contact:** email ciarnad.ryan@tudublin.ie

Overview

This module introduces the principles of ecology, how animal and plant species live and the interactions between species and their habitats. Concepts of biodiversity are also explored which includes descriptions of the variety of

life, encompassing all living organisms and their adaptations within ecosystems. Environmental issues relevant to the Irish landscape, including the impact of economic development on habitats and biodiversity indices and the ecological impacts of climate change and sustainable strategies for mitigation and adaptation are presented as part of a wider understanding of the importance of habitat protection and restoration.

Minimum Entry Requirements

LC Min grade (Maths 06/H7; English or Irish 06/H7) **OR** A full level 5/6 award **OR** Meeting TU Dublin assessment criteria for mature entry.

Course Content

- The principles of ecology, biodiversity and its relevance to environmental sustainability.
- Climate change and its relevance to the impact of Irish conservation measures, including carbon reduction.
- Surveys and classification of habitats for their ecological value and developing a biodiversity index.
- Environmental protection measures by Irish government at national and local levels for environmental protection, including the National Biodiversity Plan.
- Carbon, nitrogen and other cycles in ecology and the effects of their disruption.
- Special Areas of Conservation (SAC) in Ireland, the reasons why they are so designated and the implication for local authority development plans.

Schedule

This module runs for 12 weeks in Semester 1.

- Semester 1: September – December, Wednesdays 9-1 am.

Trees and Woodlands (HTSC H3018)

Application Details

- **Closing date for applications:** 3rd January 2025 / **Teaching commences:** January 2025
- **Module fee:** €600

Module Details

- **TU Code:** BN_EHORT_SS (BN995) / **Level:** NFQ Level 7 / **Location:** Blanchardstown Campus
- **Award:** Certificate in Trees and Woodlands (TU Dublin)
- **Course type:** Undergraduate / **Mode of Study:** Part time / **Method of Delivery:** Blended
- **Contact:** email Rachel.freeman@tudublin.ie

Overview

This module introduces the learner to the role and importance of trees and woodlands in urban and rural environments. The successful learner will be able to identify, appraise, protect and maintain trees.

Minimum Entry Requirements

LC Min grade (Maths 06/H7; English or Irish 06/H7) **OR** A full level 5/6 award **OR** Meeting TU Dublin assessment criteria for mature entry.

Course Content

- Identify a wide range of tree and shrub species, cultivars and varieties (native and introduced), growing in parks and urban areas as well as woodlands in other areas and be familiar with their cultural requirements.
- Demonstrate the principles of pruning trees and shrubs, recognise when pruning may be required and have a knowledge of the techniques to be applied in pruning.
- Identify hazards in relation to trees.
- Conduct a trees survey. State the information to be included in a tree survey report, know how this information should be collected, including by what recognised practitioners.
- Define the process of Compartmentalisation of Decay in Trees.

Schedule-Duration

This module runs for 12 weeks in Semester 2.

- Semester 2: January- May, Thursdays 9-1 am.

Organic and Sustainable Horticulture (HTSC H3021)

Application Details

- **Closing date for applications:** 3rd January 2025 / **Teaching commences:** January 2025
- **Module fee:** €600

Module Details

- **TU Code:** BN_EHORT_SS (BN995) / **Level:** NFQ Level 7 / **Location:** Blanchardstown Campus
- **Award:** Certificate in Organic and Sustainable Horticulture (TU Dublin)
- **Course type:** Undergraduate / **Mode of Study:** Part time / **Method of Delivery:** Blended
- **Contact:** email ciarnad.ryan@tudublin.ie

Overview

The module explores the principles of organic growing, with a particular emphasis the production methods employed both in the field and within protected structures, when growing organic fruit, vegetables and herbs. Concepts such as integrated pest management, managing soil health for intensive cropping, plant nutrition, crop rotation, permaculture, biodynamic growing and marketing the farm produce are also explored. Spotting market trends and responding to consumer demand as well as being an expert grower are essential skills for the organic grower and the module explores the supports offered by the Department of Agriculture Food and the Marine.

Minimum Entry Requirements

LC Min grade (Maths 06/H7; English or Irish 06/H7) **OR** A full level 5/6 award **OR** Meeting TU Dublin assessment criteria for mature entry.

Course Content

- Principles of organic growing to general horticultural practices, including their applications to domestic gardens
  and commercial cropping arrangements, including a variety of production methods such as field, protected cropping arrangements and general ornamental garden growing techniques and practices.
- The implications of organic practice for species choice including vegetable and fruit crops, herbs and ornamental plants, and the full production cycle, including extended season crops.
- The conversion process to an organic system.
- Good soil management in an organic production context and its relationship to plant nutrition; identify preventative and control methods for a range of common plant pest and diseases.
- Relevant EU and Irish legislation and the organic certification procedures.
- Design and implement organic crop production plans, year-round production systems including out of season/extended season crops and crops produced under protection.
- Getting the produce to market, business supports for the organic grower.

Schedule-Duration

This module runs for 12 weeks in Semester 2.

- Semester 2: January- May, Tuesdays 9-1 am.

Environmental Management (HTSC H4027)

Application Details

- **Closing date for applications:** 12th September 2024 / **Teaching commences:** September 2024
- **Module fee:** €600

Module Details

- **TU Code:** BN_EHORT_SS (BN995) / **Level:** NFQ Level 8 / **Location:** Blanchardstown Campus
- **Award:** Certificate in Environmental Management (TU Dublin)
- **Course type:** Undergraduate / **Mode of Study:** Part time / **Method of Delivery:** Blended
- **Contact:** email ciarnad.ryan@tudublin.ie

Overview

The module introduces the student to current environmental policy and legalisation, principles of water quality control, the planning process, waste water treatment and energy use in Ireland. Environmental management systems which include the prevention of air pollution, waste management plus health and safety in the workplace will be also examined with discussion of national and global environmental and sustainability issues.

Minimum Entry Requirements

LC Min grade (Maths 06/H7; English or Irish 06/H7) **OR** A full level 5/6 award **OR** Meeting TU Dublin assessment criteria for mature entry.

Course Content

- The causes of physical, biological and chemical degradation of soil.
- The state of water quality in Ireland, the major pollution sources and their impacts on river basin districts and describe the methods applied in the measurement of water quality.

- The role of environmental legislation and government agencies, particularly the Environmental Protection Agency and local authorities with responsibility for the collection and analysis of environmental indicators and waste management.
- The Irish planning process and its role in environmental protection, the role of county development plans and the preparation of an environmental impact statement.
- The expansion of "green" business practices, using environmental indicators and life cycle product assessment to evaluate the impact of business on the environment.

Schedule-Duration

This module runs for 12 weeks in Semester 1.

- Semester 1: Tues 10-12 and Thursday 1-3, September – December.