TURFGRASS MANAGEMENT (DTM)

DTM*1000  The Turf Industry  Fall Only (LEC: 1, LAB: 4) [0.50]
This course introduces the turfgrass industry and the many disciplines within the industry. Economic and social importance of turfgrass is emphasized as is the complicated interactions among the different industry sectors. The course emphasizes learning through field trips to various turfgrass operations and operations that supply the turfgrass industry.
Department(s): Department of Plant Agriculture
Location(s): Guelph

DTM*1010  The Identification and Care of Landscape Plants in Turf Environments I  Fall Only (LEC: 2, LAB: 2) [0.50]
This course studies the recognition, identification, naming, physical features and cultivar adaptation of woody and herbaceous plants found in cultivated landscapes combined with turf. The course also practices maintenance techniques of herbaceous and woody plants (trees specifically) in golf courses, parks, lawns and other urban landscapes where trees and turfgrasses are featured. The focus of this course is to study and review plant examples in outdoor environments.
Restriction(s): DTM*1400, DTM*2500
Department(s): Department of Plant Agriculture
Location(s): Guelph

DTM*1100  Plant Biology  Fall and Winter (LEC: 3, LAB: 2) [0.50]
This course covers the basic structure and function of plants and the major functions involved in growth and reproduction as they relate to the production of plants. Topics to be discussed will include: plant processes such as photosynthesis, respiration, transpiration, nutrient uptake and reproduction, basic genetic principles, basic chemistry and the relationship and importance of plant science to the agricultural, horticultural and turfgrass industries.
Offering(s): Also offered through Distance Education format.
Equate(s): DAGR*1200
Department(s): Department of Plant Agriculture
Location(s): Guelph

DTM*1200  Turf Equipment  Fall Only (LEC: 2, LAB: 2) [0.50]
This course covers the equipment used as part of a turfgrass maintenance operation. The course emphasizes safe, efficient operation of equipment along with selection of equipment in a maintenance operation. The course also introduces the maintenance of small engines, hydraulic and electrical systems common to turfgrass equipment.
Department(s): Department of Plant Agriculture
Location(s): Guelph

DTM*1300  Turf Soil Principles  Fall Only (LEC: 3, LAB: 2) [0.50]
This course covers the basic concepts of naturally occurring soils and constructed rootzones used for turfgrass and landscapes. Physical, chemical and hydrological properties of soils and rootzones are emphasized in how they interact with turfgrass management. In addition, the course introduces primary and secondary nutrients and how soils impact their availability. Specific understanding of rootzones used in golf and sports turf is emphasized.
Department(s): Department of Plant Agriculture
Location(s): Guelph

DTM*1500  Turf Communication Skills  Fall Only (LEC: 3) [0.50]
The course provides students with practical communication skills required for supervisory positions in the turfgrass industry. Regular reading, writing and presenting exercises will enable students to develop skills in executing practical business communication strategies. Course content and delivery will reflect current trends in the turfgrass industry. Students will be required to work independently as well as in groups and may be required to meet and complete assignments outside of scheduled class time.
Co-requisite(s): DTM*1000
Department(s): Department of Plant Agriculture
Location(s): Guelph

DTM*2000  Turf Management I  Winter Only (LEC: 2, LAB: 3) [0.50]
The course covers cultural management of turfgrasses used for different sectors of the turfgrass industry including: home lawns, industrial sites, roadsides, athletic fields, municipal sites, golf courses, and reclamation of land. Students in the course learn to properly identify cool season turfgrass species. Students are also introduced to the scientific method and will gain planning and organizational skills through the development of an independent experiment during the lab session.
Prerequisite(s): DTM*1100, DTM*1300
Department(s): Department of Plant Agriculture
Location(s): Guelph

DTM*2010  The Identification and Care of Landscape Plants in Turf Environments II  Winter Only (LEC: 2, LAB: 2) [0.50]
With a focus on teaching in classroom environments this course extends studies in the identification and understanding of biological and physical features of woody and herbaceous plants found in landscapes where healthy turf is a critical factor. Preferred growing requirements of such plants are also reviewed and evaluated. This course further explores the practice of, and the science behind, maintenance techniques for herbaceous and woody plants grown alongside turf.
Prerequisite(s): DTM*1010
Restriction(s): DTM*1400, DTM*2500
Department(s): Department of Plant Agriculture
Location(s): Guelph

DTM*2100  Turf Irrigation and Drainage  Winter Only (LEC: 2, LAB: 3) [0.50]
This course covers water management through irrigation and drainage at sites including golf, sports and lawn turf. Students learn principles of drainage including design and installation of drainage systems. Design and maintenance of irrigation systems to provide effective water delivery are also emphasized.
Prerequisite(s): DTM*1300
Department(s): Department of Plant Agriculture
Location(s): Guelph

DTM*2200  Computers and Math for Turf  Winter Only (LEC: 2, LAB: 3) [0.50]
This course requires students to become proficient in the mathematical skills necessary to properly apply fertilizers and chemicals. The course also requires students to understand how to calculate areas and other skills essential in calibration of turfgrass equipment. The course introduces students to the variety of computing skills and information technologies prevalent in the turfgrass industry today. In addition, emerging technologies that assist the turfgrass professional moving into the future are discussed.
Prerequisite(s): DTM*1000
Department(s): Department of Plant Agriculture
Location(s): Guelph
DTM*2400  Landscape Design Winter Only (LEC: 1, LAB: 3) [0.50]
This course covers the principles of landscape design and how different
designs, landscape materials, structures and plant materials are
integrated to create attractive and functional outdoor environments. The
course consists of an introduction to the theory of landscape design and
incorporates significant studio time in which students create designs.
Prerequisite(s): DTM*1400
Department(s): Department of Plant Agriculture
Location(s): Guelph

DTM*2600  Turf Environmental Management Winter Only (LEC: 2, LAB: 3) [0.50]
This course covers the many environmental issues encountered by
professional turfgrass managers in golf, sports and lawn turfgrass
operations. The course addresses regulatory issues, waste management,
environmental protection and monitoring, including both the turf and
non-turf elements of the landscape. The course is designed to prepare
students for landscape pesticide applicator licence exams in a number of
jurisdictions.
Prerequisite(s): DTM*1000, DTM*1300
Restriction(s): DTM*4100.
Department(s): Department of Plant Agriculture
Location(s): Guelph

DTM*3000  Turf Management II Fall Only (LEC: 3, LAB: 2) [0.50]
This course emphasizes interactions between turfgrass and its
environment and how management impacts turfgrass playability and
survival. This course addresses management of turfgrasses in highly
managed areas of golf courses, sports fields and lawns. Students learn
the principles of plant nutrition and the technologies and methods of
proper fertilization. This course specifically addresses rootzone
management and remediation of poor rootzones.
Prerequisite(s): DTM*2000, DTM*2100
Department(s): Department of Plant Agriculture
Location(s): Guelph

DTM*3100  Current Turf Practices Fall Only (LEC: 3) [0.50]
This course discusses and reflects on summer internship experiences
in the context of current trends in turf management including golf
course, sports field, parks and recreation, and home lawn care. This
course includes discussions and seminars presented by students to
cover these emerging trends in turfgrass management. This student
learning opportunity is taken and developed in consultation with the
Director of the DTM program. Details of the proposed activities with
learning outcomes will be outlined in a learning contract which must be
completed prior to Fall registration.
Prerequisite(s): DTM*1000, DTM*2000, 4.00 credits
Restriction(s): Instructor consent required.
Department(s): Department of Plant Agriculture
Location(s): Guelph

DTM*3200  Turf Diseases Fall Only (LEC: 2, LAB: 2) [0.50]
This course covers the ecology and management of turfgrass diseases
and disorders and cultural, biological and chemical means of control.
Identification and diagnosis of common turfgrass diseases and disorders
are emphasized along with the impact of control methods on the
environment and ecology of the turfgrass system.
Prerequisite(s): DTM*1100
Department(s): Department of Plant Agriculture
Location(s): Guelph

DTM*3300  Turf Insects and Weeds Fall Only (LEC: 2, LAB: 3) [0.50]
This course discusses the biology, ecology and management of turfgrass
insects and weeds, emphasizing cultural methods of management as
well as chemical and biological controls. Field recognition and diagnosis
of weeds and insect pests are taught and the impact of control methods
on the environment and the ecology of turfgrass systems are discussed.
Prerequisite(s): DTM*1100
Department(s): Department of Plant Agriculture
Location(s): Guelph

DTM*3400  Landscape Construction Fall Only (LEC: 2, LAB: 3) [0.50]
This course examines the physical properties and the appropriate uses
of landscape construction materials. The impact of design, construction
techniques and selection of materials are emphasized in relation to golf
and sports field settings.
Department(s): Department of Plant Agriculture
Location(s): Guelph

DTM*3800  Special Study Project I Summer, Fall, and Winter [0.50]
A self-directed student project focussing on a topic of academic and/or
practical interest to the student. The student will identify and propose
detailed course outline to be reviewed and approved by the faculty
supervisor prior to the commencement of the project. The project could
include a research assignment, a literature review, and/or a hands-on
assignment with specific learning objectives and milestones for
achieving these objectives.
Prerequisite(s): 4.00 credits
Equate(s): DHRT*3910
Restriction(s): Enrolment in the Associate Diploma in Turfgrass
Management program.
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Guelph

DTM*4000  Turf Management III Winter Only (LEC: 2, LAB: 3) [0.50]
This course examines the differences between abiotic and biotic
stressors and their management. The course emphasizes the principles
of integrated pest management and focuses on how environmental
conditions, management practices and turfgrass biology impact
playability and survival of turfgrasses.
Prerequisite(s): DTM*3000, DTM*3200, DTM*3300
Department(s): Department of Plant Agriculture
Location(s): Guelph

DTM*4200  Design and Construction of Golf Courses and Sports
Fields Winter Only (LEC: 1, LAB: 4) [0.50]
Students will examine design and construction techniques practiced in
golf course and sports field development. The course focuses on design
with the aesthetics, function and management of such facilities as
priorities. Designing to conserve and reduce water use for such facilities
is emphasized.
Prerequisite(s): DTM*2400, DTM*3400
Department(s): Department of Plant Agriculture
Location(s): Guelph
DTM*4300  Turf Case Studies  Winter Only  (LEC: 3)  [0.50]
This course uses case studies, debates and discussion to address
management, political and philosophical issues in the turfgrass industry.
The course integrates knowledge of current turfgrass management
practices and social awareness to solve problems and effectively
communicate solutions. Problem solving skills are introduced and
applied to case studies. Communication skills are emphasized including
formal writing and succinct presentation skills.
**Prerequisite(s):** DTM*3000, DTM*3200, DTM*3300
**Co-requisite(s):** DTM*4000
**Department(s):** Department of Plant Agriculture
**Location(s):** Guelph

DTM*4400  Human Resources Management  Winter Only  (LEC: 3)  [0.50]
The course introduces students to the principles of human resource
management including personnel planning, regulations, recruiting and
hiring of employees. Students develop supervisory and problem solvi
ging skills in employee relations. Proper employee training and regulatory
considerations of both private and municipal government operations is
covered.
**Prerequisite(s):** DTM*1500
**Department(s):** Department of Plant Agriculture
**Location(s):** Guelph

DTM*4500  Business and Finance for Turf  Winter Only  (LEC: 3)  [0.50]
This course covers the basic aspects of business management and
finance as they apply to turf-related enterprises. Case studies in capital
expenditures and operational budgeting will be used to help students
understand how business decisions affect operations. Examples from
earlier courses and the summer work experience will also be used.
Purchasing procedures in both private and municipal government
settings will be discussed.
**Prerequisite(s):** DTM*3000
**Restriction(s):** DTM*2300.
**Department(s):** Department of Plant Agriculture
**Location(s):** Guelph

DTM*4600  Computer Assisted Design  Winter Only  (LEC: 1, LAB: 4)  [0.50]
Landscape designs and visualizations will be prepared with computer
technology using landscape and turfgrass related projects. Drafting,
design, visualization or modeling software will be taught and used to
create plans, views, pictures and/or models.
**Prerequisite(s):** DTM*1400, DTM*2200, DTM*2400
**Equate(s):** DTM*4100
**Restriction(s):** Restricted to students in Associate Diploma in Turfgrass
Management program.
**Department(s):** Dean's Office, Ontario Agricultural College
**Location(s):** Guelph

DTM*4800  Special Study Project II  Winter Only  [0.50]
This is a self-directed student project focusing on a topic of academic
and/or practical interest to the students. The student will identify and
propose a detailed course outline to be reviewed and approved by the
faculty supervisor prior to the commencement of the project. The project
could include a research assignment, a literature review, and/or a hands-
on-assignment with specific learning objectives and milestones for
achieving these objectives.
**Prerequisite(s):** 6.00 credits
**Equate(s):** DHRT*3910
**Restriction(s):** Restricted to students in Associate Diploma in Turfgrass
Management program.
**Department(s):** Dean's Office, Ontario Agricultural College
**Location(s):** Guelph