2018-2019 Diploma Program Calendar

The information published in this Diploma Calendar outlines the rules, regulations, curricula, programs and fees for the 2018-2019 academic year, including the Summer Semester 2018, the Fall Semester 2018 and the Winter Semester 2019.

For your convenience the Diploma Calendar is available in PDF format.

If you wish to link to the Diploma Calendar please refer to the Linking Guidelines.

Ridgetown Campus

Guelph Campus

The University is a full member of:

- Universities Canada

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Disclaimer

University of Guelph 2018

The information published in this Diploma Calendar outlines the rules, regulations, curricula, programs and fees for the 2018-2019 academic year, including the Summer Semester 2018, the Fall Semester 2018 and the Winter Semester 2019.

The University reserves the right to change without notice any information contained in this calendar, including fees, any rule or regulation pertaining to the standards for admission to, the requirements for the continuation of study in, and the requirements for the granting of diplomas in any or all of its programs. The publication of information in this calendar does not bind the University to the provision of courses, programs, schedules of studies, or facilities as listed herein.

The University will not be liable for any interruption in, or cancellation of, any academic activities as set forth in this calendar and related information where such interruption is caused by fire, strike, lock-out, inability to procure materials or trades, restrictive laws or governmental regulations, actions taken by faculty, staff or students of the University or by others, civil unrest or disobedience, or any other cause of any kind beyond the reasonable control of the University.

In the event of a discrepancy between a print version (downloaded) and the Web version, the Web version will apply,

Published by: Enrolment Services

Introduction

Collection, Use and Disclosure of Personal Information

Personal information is collected under the authority of the University of Guelph Act (1964), and in accordance with Ontario's Freedom of Information and Protection of Privacy Act (FIPPA) http://www.e-laws.gov.on.ca/index.html. This information is used by University officials in order to carry out their authorized academic and administrative responsibilities and also to establish a relationship for alumni and development purposes. Certain personal information is disclosed to external agencies, including the Ontario Universities Application Centre, the Ministry of Advanced Education and Skills Development, and Statistics Canada, for statistical and planning purposes, and is disclosed to other individuals or organizations in accordance with the Office of Registrarial Services Departmental Policy on the Release of Student Information. For details on the use and disclosure of this information call the Office of Registrarial Services at the University at (519) 824-4120 or see http://www.uoguelph.ca/registrar/registrar/index.cfm?index.

Disclosure of Personal Information to the Ontario Ministry of Advanced Education and Skills Development

The University of Guelph is required to disclose personal information such as characteristics and educational outcomes to the Minister of Advanced Education and Skills Development under s. 15 of the Ministry of Advanced Education and Skills Development Act, R.S.O. 1990, Chapter M.19, as amended. The Ministry collects this data for purposes including but not limited to planning, allocating and administering public funding to colleges, universities and other post-secondary educational and training institutions.

Amendments made to the Ministry of Advanced Education and Skills Development Act, authorizing the collection and use of personal information from colleges and universities by the Minister of Advanced Education and Skills Development, which were set out in Schedule 5 of the Childcare Modernization Act, 2014, came into force on March 31, 2015.

The amendments strengthen the ability of the Minister to directly or indirectly collect and use personal information about students as required to conduct research and analysis, including longitudinal studies, and statistical activities conducted by or on behalf of the Ministry for purposes that relate to post-secondary education and training, including,

i. understanding the transition of students from secondary school to post-secondary education and training,
ii. understanding student participation and progress, mobility and learning and employment outcomes,
iii. understanding linkages among universities, colleges, secondary schools and other educational and training institutions prescribed by regulation,
iv. understanding trends in post-secondary education or training program choices made by students,
v. understanding sources and patterns of student financial resources, including financial assistance and supports provided by government and post-secondary educational and training institutions,
vi. planning to enhance the affordability and accessibility of post-secondary education and training and the quality and effectiveness of the post-secondary sector,
vii. identifying conditions or barriers that inhibit student participation, progress, completion and transition to employment or future post-secondary educational or training opportunities, and
viii. developing key performance indicators.

Information that the University is required to provide includes but is not limited to: first, middle and last name, Ontario Educational Number, citizenship, date of birth, gender, first three digits of a student's postal code, mother tongue, degree program and major(s) in which the student is enrolled, year of study and whether the student has transferred from another institution.

Further information on the collection and use of student-level enrolment-related data can be obtained from the Ministry of Advanced Education and Skills Development website: https://www.ontario.ca/page/ministry-advanced-education-and-skills-development (English) or https://www.ontario.ca/fr/page/ministere-de-lenseignement-superieur-et-de-la-formation-professionnelle (French) or by writing to the Director, Postsecondary Finance and Information Management Branch, Postsecondary Education Division, 7th Floor, Mowat Block, 900 Bay Street, Toronto, ON M7A 1L2.

An update on Institutional and Ministry of Advanced Education and Skills Development Act Notice of Disclosure Activities is posted at https://www.ontario.ca/page/ministry-advanced-education-and-skills-development

Frequently Asked Questions related to the Ministry's enrolment and OEN data activities are also posted at: http://www.tcu.gov.on.ca/pepg/publications/NoticeOfCollection.pdf

Authority to Disclose Personal Information to Statistics Canada

The Ministry of Advanced Education and Skills Development discloses student-level enrolment-related data it collects from the colleges and universities as required by Statistics Canada in accordance with Section 13 of the Federal Statistics Act. This gives Ministry of Advanced Education and Skills Development Act authority to disclose personal information in accordance with s. 42(1) (e) of FIPPA

Notification of Disclosure of Personal Information to Statistics Canada

For further information, please see the Statistics Canada's web site at http://www.statcan.ca and Chapter XIV Statistics Canada.

Address for University Communication

Depending on the nature and timing of the communication, the University may use one of these addresses to communicate with students. Students are, therefore, responsible for checking all of the following on a regular basis:

Email Address

The University issued email address is considered an official means of communication with the student and will be used for correspondence from the University. Students are responsible for monitoring their University-issued email account regularly. See Chapter I--Statement of Students' Academic Responsibilities for more information.

Home Address

Students are responsible for maintaining a current mailing address with the University. Address changes can be made, in writing, through Enrolment Services.

Name Changes

The University of Guelph is committed to the integrity of its student records, therefore, each student is required to provide either on application for admission or on personal data forms required for registration, his/her complete, legal name. Any requests to change a name, by means of alteration, deletion, substitution or addition, must be accompanied by appropriate supporting documentation.

Student Confidentiality and Release of Student Information Policy Excerpt

The University undertakes to protect the privacy of each student and the confidentiality of his or her record. To this end the University shall refuse to disclose personal information to any person other than the individual to whom the information relates where disclosure would constitute an unjustified invasion of the personal privacy of that person or of any other individual. All members of the University community must respect the confidential nature of the student information which they acquire in the course of their work.

Complete policy at https://uoguelph.civicweb.net/document/68892/ORSInfoReleasePolicy060610.pdf?handle=FF982F8A9AEA4076BE4F3D88147172B8.

Learning Outcomes

On December 5, 2012, the University of Guelph Senate approved five University-wide Learning Outcomes as the basis from which to guide the development of undergraduate degree and diploma programs, specializations and courses:

1. Critical and Creative Thinking
2. Literacy
3. Global Understanding
4. Communicating
5. Professional and Ethical Behaviour

These learning outcomes are also intended to serve as a framework through which our educational expectations are clear to students and the broader public; and to inform the process of outcomes assessment through the quality assurance process (regular reviews) of programs and departments.

An on-line guide to the learning outcomes, links to the associated skills, and detailed rubrics designed to support the development and assessment of additional program and discipline-specific outcomes, are available for reference on the Learning Outcomes website.

1. Critical and Creative Thinking

Critical and creative thinking is a concept in which one applies logical principles, after much inquiry and analysis, to solve problems with a high degree of innovation, divergent thinking and risk taking. Those mastering this outcome show evidence of integrating knowledge and applying this knowledge across disciplinary boundaries. Depth and breadth of understanding of disciplines is essential to this outcome.

In addition, **Critical and Creative Thinking** includes, but is not limited to, the following outcomes: **Inquiry and Analysis; Problem Solving; Creativity; and Depth and Breadth of Understanding.**

2. Literacy

Literacy is the ability to extract information from a variety of resources, assess the quality and validity of the material, and use it to discover new knowledge. The comfort in using quantitative literacy also exists in this definition, as does using technology effectively and developing visual literacy.

In addition, **Literacy** includes, but is not limited to, the following outcomes: **Information Literacy, Quantitative Literacy, Technological Literacy, and Visual Literacy.**

3. Global Understanding

Global understanding encompasses the knowledge of cultural similarities and differences, the context (historical, geographical, political and environmental) from which these arise, and how they are manifest in modern society. Global understanding is exercised as civic engagement, intercultural competence and the ability to understand an academic discipline outside of the domestic context.

In addition, **Global Understanding** includes, but is not limited to, the following outcomes: **Global Understanding, Sense of Historical Development, Civic Knowledge and Engagement, and Intercultural Competence.**

4. Communicating

Communicating is the ability to interact effectively with a variety of individuals and groups, and convey information successfully in a variety of formats including oral and written communication. Communicating also comprises attentiveness and listening, as well as reading comprehension. It includes the ability to communicate and synthesize information, arguments, and analyses accurately and reliably.

In addition, **Communicating** includes, but is not limited to, the following outcomes: **Oral Communication, Written Communication, Reading Comprehension, and Integrative Communication.**

5. Professional and Ethical Behaviour

Professional and ethical behaviour requires the ability to accomplish the tasks at hand with proficient skills in teamwork and leadership, while remembering ethical reasoning behind all decisions. The ability for organizational and time management skills is essential in bringing together all aspects of managing self and others. Academic integrity is central to mastery in this outcome.

In addition, **Professional and Ethical Behaviour** includes, but is not limited to, the following outcomes: **Teamwork, Ethical Reasoning, Leadership, and Personal Organization and Time Management**

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XII. Course Descriptions

General Information

Subject Area and Alpha Course Prefix Index

Subject Area and Alpha Course Prefix Index

ALPHA COURSE PREFIX	SUBJECT AREA
DAGR	Agriculture and Equine Studies
DENM	Environmental Management
DHRT	Horticulture
DTM	Turfgrass Management
DVT	Veterinary Technology
FREE	Associated Program Requirements

General Information

Course Labeling and Levels

Each course is identified by a two-part code. The first part of the code refers to the subject area, the second usually refers to the level of the course. Thus, the course DAGR*3200 is a course in the subject area of Agriculture, and is of a level that places it among courses in the 3000 series. The series 1000, 2000, 3000 and 4000 numbers are intended to indicate progressively more demanding content, and correspondingly increasing competence on the part of the students enrolled in the course. Courses in the 1000 series are mainly for first semester students, those in the 2000 series are mainly for second semester students, and those in the 3000 series are for third semester students. Similarly, courses in the 4000 series are mainly intended to be taken by students in the fourth semester of associate diploma programs.

It is important that students planning their courses have clearly in mind the significance of these numbers so that they may guard against undertaking course work at levels for which they are insufficiently prepared. A number of courses have stated prerequisites which are prior requirements for entry to the course. Students who do not satisfy course prerequisites, or who, in the opinion of the instructor, do not possess an equivalent background to that of the stated prerequisites, are not eligible to enrol in the course. When some specific background is desirable but not required, the course description will include a statement of recommended background. It is understood that the instructor may accept equivalent courses from other institutions in place of the stated prerequisites. Students who wish to enrol in courses for which they do not have the stated prerequisite(s) must obtain instructor approval as outlined in Section VIII in this Calendar.

Course Information

The letters S, F, W indicate the University's intention to offer the course in the Summer (S), Fall (F) or Winter (W) semester during the academic year covered by this Calendar. Although courses normally will be offered in the semester indicated, students preparing their course programs are advised to consult the Course Timetable. The University cannot guarantee that all courses will be offered in the exact semester indicated.

The figures in parentheses ( ) following the semester designation are a general guide to the lecture and laboratory contact hours per week, the first digit being the number of lecture hours and the second, the number of laboratory hours. The credit weight for each course appears in brackets [ ]. A credit weight of [0.50] indicates 10-12 student effort hours, including class time, on academic tasks associated with the course.

Detailed course descriptions are maintained at the office of the department offering the course. Some courses, designated "Experiential Learning" courses in the Calendar description, are deliberately designed to accommodate the need to grant academic credit for experiential learning external to regular courses, in such contexts as co-operative education, field observation/job shadowing, internship/externships, practica, service learning, or work study (and other approved experience). Prior approval for admission to these courses must be obtained from the department and instructor concerned.

Course Prerequisites

In lists of course prerequisites, "or" conditions are spelled out explicitly, but "and" conditions are indicated with a comma ",". For example: "DAGR*1200, DAGR*1300, DAGR*2200" means "DAGR*1200 and DAGR*1300 and DAGR*2200".

Course Equates and Restrictions

Equates

Equate indicates a course identical to the one under which it is listed. The course may have been re-numbered or may be cross-listed under two subject areas. **Students will not be permitted to register in equated courses.**

Restrictions

Restriction indicates sufficient over-lap in content that the course under which it is listed may not be taken if the student already has credit for the course identified as the restriction. Students will not be permitted to register in restricted courses.

Language of Instruction

Classes at Guelph and Ridgetown are offered in English only.

Agri-Food Leadership

DAFL*4050 Leadership W (5-0) [0.50]

This course is designed to introduce students to basic leadership principles and skills. Topics include: leadership styles; employee behaviour and motivation; group and interpersonal dynamics; ethics; human relations; power and influence; organizational structure and culture; as well as an introduction to change management.

Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

Agriculture

DAGR*1000 Livestock Systems F (3-2) [0.50]

Students will gain an overall understanding of the livestock industry, focusing on major production issues and future challenges. Examples from various livestock production systems will be highlighted.

Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DAGR*1070 Introduction to Business Management F,W (5-0) [0.50]

This course introduces business management principles, functions, and processes. Students will learn about the business environment, decision-making, and the role of the organizational functions, with a particular focus on accounting principles, accounting statements, and the use of financial information.

Restriction(s): DAGR*2110 , DAGR*3100
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DAGR*1090 Communications & Software Applications I F (2-3) [0.50]

Students will develop written language skills and become proficient at using word processing software. Practical skills include writing business letters and other business correspondence, resumes, formal and informal reports, instructional writing, critical thinking and critical writing. Students will become familiarized with campus software systems including campus e-mail, library resources, and classroom support software. Instruction will be provided in computer file management and using the internet as a research tool.

Restriction(s): DAGR*1610 , DAGR*1620 , DAGR*1720
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DAGR*1200 Applied Plant Science F,W (3-2) [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 and horticultural industry.

Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DAGR*1300 Soil Principles F (3-2) [0.50]

This course includes origin and classification of soils, identification and importance of major soil types, identification of primary and secondary nutrients and how they are supplied, composition of soil including minerals, water, air, organic matter and biological organisms and how they interact and the importance of soil as a resource.

Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DAGR*1350 Agricultural Mechanization and Safety F,W (3-2) [0.50]

The course will cover the operating principles and components of tractors and equipment for tillage, planting, and the application of chemicals and fertilizers and harvesting. The course will emphasize safety in all aspects of the operation of agricultural equipment.

Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DAGR*1600 Applied Mathematics F (3-2) [0.50]

This course is designed to augment mathematics skills necessary to compete in today's business environments. Typical applications are chemical rate conversions, solutions and mixtures, elementary algebra and financial topics. The aim is to teach students how to solve actual mathematical problems encountered in the day-to-day operation of agricultural/horticultural/environmental operations.

Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DAGR*2000 Animal Science W (3-2) [0.50]

This course includes the biological principles applicable to the animal sciences with modules on growth, carcass composition, nutrition, reproduction, genetics and health.

Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DAGR*2010 Applied Microbiology W (2-1) [0.50]

This course is an introduction to theoretical and practical aspects of microbiology. Topics include the study of micro-organisms with emphasis on their morphology, physiology, biochemistry, culture and identification. The operation of light microscope, media preparation, and laboratory safety are discussed.

Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DAGR*2020 Financial Management F,W (4-0) [0.50]

Student will learn important concepts and techniques required to analyze financial performance and guide business decision making. A broad range of financial topics will be covered, including financial statements and cash flow analysis, financial forecasting and planning, internal control, budgeting, taxation, and the time value of money.

Prerequisite(s): DAGR*1070
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DAGR*2090 Communications & Software Applications II W (3-2) [0.50]

Students will develop effective oral communication and presentation skills using software. Oral communication skills, preparing formal and informal reports with and without technological support. Practical presentation skills include the use of voice, eye contact, time appropriateness and response to questions. Students will also understand the importance of formalized meetings and be instructed in the use of spreadsheet software as a data management tool. Software available on personal electronic devices used to access business and production information will be overviewed.

Restriction(s): DAGR*2600 , DAGR*2620 , DAGR*2720 .
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DAGR*2150 Precision Agriculture W (3-2) [0.50]

This course is designed to introduce students to the basic principles of precision farming tools and techniques. Topics will include map reading, data collection, data analysis - including geo-statistical methods, and an overview of current precision agriculture technology. Labs will provide hands on learning of geographic information systems (GIS) software, and global positioning (GPS) technology.

Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DAGR*2170 Introduction to US Agriculture W (1-0) [0.00]

This is a required preparatory course for students who plan to participate in the upcoming US Agriculture Study Tour course, DAGR 3170. The course will introduce and familiarize students with the locations which will be visited during the one-week field trip portion of DAGR 3170 that takes place during the late summer. A pass/fail grade will be assigned upon completion of this course. Enrolment into DAGR*2170 does not guarantee acceptance into DAGR*3170.

Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DAGR*2180 Belize Study Tour W (2-0) [0.50]

This course involves a nine day field study to Belize which will introduce students to international agriculture and horticulture and international development. This will be achieved through direct interaction with producers, agriculture related businesses, horticultural facilities, education and international development projects. Students will be given the opportunity to increase their knowledge of Belizean agricultural practices, horticultural plant uses and international development projects. The field study is a mandatory component of the course for which the student assumes the cost of transportation, food and lodging.

Prerequisite(s): 2.50 credits
Restriction(s): Instructor consent required.
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DAGR*2200 Cereal and Forage Management W (3-2) [0.50]

The production and management of cereals and forages is discussed. Topic areas include variety and species selection, soil fertility management, planting dates, row widths, seeding rates, pest management systems, harvesting, drying and storage as applicable.

Prerequisite(s): DAGR*1200, DAGR*1300
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DAGR*2210 Applied Weed Science F,W (3-2) [0.50]

Weeds will be studied in relation to agricultural practices. Principles of cultural, biological, and chemical control will be outlined. Laboratories will include weed identification and weed control methods.

Prerequisite(s): DAGR*1200
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DAGR*2220 Viticulture and Oenology W (2-3) [0.50]

This course introduces students to the history of grapes and grape production in Ontario, environmental factors which affect grape production in a cool climate, and practices for establishing and managing a vineyard in the context of producing high-quality wines. It will also provide an overview of the history of winemaking, wines produced in Ontario and other wine-producing regions of the world, and an introduction to the principles and making the various standard types of wine.

Restriction(s): Student must be 19 years of age or older.
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DAGR*2360 Machinery Maintenance W (1-3) [0.50]

This course gives the student the basics in agricultural equipment repairs. A very practical and hands-on approach will be used, with an emphasis on the safe use of tools and shop safety.

Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DAGR*3000 Beef Production F (3-2) [0.50]

Beef cow-calf and feedlot operations are examined, including crossbreeding and pure breeding programs, along with management of the cow-calf herd. The feedlot sections deal with ration formulation, feedlot management, meat quality, marketing and health protection.

Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DAGR*3010 Dairy Production I F (3-2) [0.50]

Students will undertake a study of dairy management systems. Topics will include housing systems, nutrition and feeding programs, sire selection and breeding programs, herd health and milk marketing strategies.

Prerequisite(s): DAGR*2000
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DAGR*3040 Pork Production F (2-3) [0.50]

This course will provide students with the opportunities to learn both the principles and the skills necessary to manage and care for pigs according to industry standards. Case studies will be used to help students develop the skills necessary to assess farm related pork management problems.

Co-requisite(s): DAGR*2000
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DAGR*3070 Introduction to Agricultural Economics & Marketing F,W (3-0) [0.50]

This course will provide an application of fundamental economic concepts to agriculture and an introduction to marketing systems and policy institutions related to the Canadian agriculture industry. Topics will include price determination, futures markets, agricultural commodity marketing tools, effects of government intervention, and international trade.

Prerequisite(s): DAGR*1070
Equate(s): DAGR*3060
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DAGR*3080 Marketing W (3-0) [0.50]

This course introduces fundamental marketing concepts involved in the distribution of goods and services from the producer to the consumer. Students will learn about the marketplace, functions of the marketing mix (product, price, promotion, place), as well as personal selling.

Prerequisite(s): DAGR*1070
Restriction(s): DAGR*3120
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DAGR*3130 Sales and Sales Management F,W (2-1) [0.50]

This course is an overview of personal selling in today's business environment with particular emphasis on skills needed to present an effective sales presentation. Buyer motivation and behaviour will be discussed along with managing time and sales territories.

Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DAGR*3170 US Agriculture Study Tour F (3-0) [0.50]

This course involves a one-week field trip to the U.S. which will introduce students to international agri-business through direct interaction with primary producers, agriculture related businesses, and researchers. Students will be given the opportunity to speak directly with professionals in the agri-business industry to increase their knowledge of U.S. agricultural practices. An additional fee will be assessed per-student to cover the cost of transportation and accommodation. This course must be recorded as part of your Fall course registration. Tuition and compulsory fees will be calculated accordingly. The study tour will take place in the last week of August each year.

Prerequisite(s): 5.00 credits including DAGR*2170
Restriction(s): Instructor consent required.
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DAGR*3180 World Dairy Expo Study Tour F (2-0) [0.50]

This course will provide students with the opportunity to see the latest in research, technology, and genetics available to the dairy industry through a five day trip which will include attending the World Dairy Expo in Madison, Wisconsin. At the Expo the students will be able to attend seminars, cattle shows, examine new technology and interact with dairy producers and suppliers from around the world. Pre and post conference trips will be taken to American dairy operations and dairy research facilities. The field trip is a mandatory component of the course for which the student assumes the cost of transportation, food and lodging.

Prerequisite(s): 5.00 credits
Restriction(s): Instructor consent required.
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DAGR*3200 Corn and Oilseed Management F (3-2) [0.50]

Management systems for the production of corn, soybeans, canola and edible beans will be presented. Specific topics include variety and species selection, row widths, seeding rates, planting dates, fertility, pest management, harvesting and storage. Current research information is discussed in relationship to production practices.

Prerequisite(s): DAGR*1200, DAGR*1300
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DAGR*3210 Insect and Disease Management F (3-2) [0.50]

The identification, biology and control of insects and diseases of field crops are presented. Control measures and the benefits and limitations of agricultural chemicals will be examined.

Restriction(s): DAGR*1200
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DAGR*3250 Fruit Production F,W (2-3) [0.50]

Management systems for the major fruit crops in Ontario are discussed. Topics include climatic and soil conditions, cultural management, pruning and training.

Prerequisite(s): DAGR*1200, (DAGR*1300 or DHRT*3230)
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DAGR*3260 Vegetable Production F (2-3) [0.50]

This course includes commercial production and management of vegetable crops grown in Ontario. Topics discussed will include site selection, soil conditions, establishment, cultural practices, harvesting, post-harvest handling and marketing.

Prerequisite(s): DAGR*1200, (DAGR*1300 or DHRT*3230)
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DAGR*3510 Experiential Learning in Agriculture S,F,W [0.50]

Student-initiated learning opportunities can be developed as a credit course in consultation with a supervising faculty member. Details of the activities included in the program will be outlined in a learning contract initiated by the student and agreed to by the faculty supervisor prior to the commencement of the work experience.

Prerequisite(s): 4.00 credits, registration in the Diploma Program in Agriculture
Restriction(s): DAGR*3880 , DFN*3510 , DHRT*3510
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DAGR*3900 Special Project S,F,W (0-0) [0.50]

A self-directed student project focusing on a topic of academic and/or practical interest to the student. 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 assigment, a literature review, a hands-on assignment with specific learning objectives and milestones for achieving these objectives.

Prerequisite(s): 3.00 credits, registration in the Diploma in Agriculture program, written permission of the faculty supervisor.
Restriction(s): DAGR*3910 ,
Restriction(s): DFN*3910 ,
Restriction(s): DHRT*3910
Restriction(s): Instructor consent required.
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DAGR*4010 Animal Health W (3-0) [0.50]

Economic animal production requires healthy livestock and this course is designed to stress animal health. Diseases important to livestock in Ontario are discussed, with emphasis being placed on prevention and control methods.

Prerequisite(s): DAGR*2000
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DAGR*4020 Poultry Production W (3-2) [0.50]

This course will provide students with the opportunities to learn both the principles and the skills necessary to manage and care for poultry according to industry standards. Case studies will be used to help students develop the skills necessary to assess farm related poultry management problems.

Co-requisite(s): DAGR*2000
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DAGR*4040 Small Ruminant Production F,W (3-2) [0.50]

This course includes goat and sheep production and is studied with examples from Ontario and around the world. The major topics include: production systems, breeding, nutrition, health and welfare and products.

Prerequisite(s): DAGR*1000, DAGR*2000
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DAGR*4100 Commodity Marketing W (3-0) [0.50]

This course provides an understanding of commodity and currency price risks for corn, beans, wheat, cattle and hogs in Ontario. It includes the practical use of instruments that are available to deal with these risks and the development of an applied risk management strategy.

Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DAGR*4120 Dairy Production II W (3-2) [0.50]

This course covers advanced aspect of dairy nutrition and breeding strategies. Students learn to develop practical and economical feeding programs for calves, heifers, dry and milking cows. Students will complete an in-depth study of selection strategies and reproductive technologies (artificial insemination, embryo transfer) available to Ontario dairy producers.

Prerequisite(s): DAGR*3010
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DAGR*4150 Renewable Energy & Agriculture F,W (3-2) [0.50]

This course will introduce students to the current energy situation, energy use in agriculture, the impacts of energy production and use on the environment, and renewable energy opportunities for the rural community. Types of bioenergy crops will be described, including agronomic, handling, storage, transportation and end-use issues. Heat and power production technologies and how these integrate into agriculture and rural communities will be discussed. Environmental assessment, economics, and market opportunities of renewable energy production and use will be explored.

Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DAGR*4180 Dairy Herd Management F,W (2-3) [0.50]

This course is designed to give students the skills necessary to manage the daily operations of a cattle herd. these skills will include monitoring the health of calves and cows, proper milking techniques, breeding techniques, and hoof trimming. Using real herd production data, students will analyze the current production and management practices on cattle operations to identify areas of improvement. Using on farm data and observation, students will recommend changes to the operation including immediate (eg. culling, breeding decisions) and longer term plans (updating facilities or expansion) to improve operation efficiency and profit.

Prerequisite(s): DAGR*2000
Co-requisite(s): DAGR*3010
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DAGR*4190 Ruminant Nutrition W (3-2) [0.50]

This course expands on ruminant nutrition principle. Students will learn to develop practical and economical rations and feeding programs for ruminant livestock.

Prerequisite(s): DAGR*3000 or DAGR*3010
Co-requisite(s): DAGR*4040
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DAGR*4200 Cropping Systems W (2-2) [0.50]

Current and emerging crop production systems will be compared and evaluated in relationship to soil productivity, environmental awareness and the agricultural economy. Climate and weather and their impact on crop production is examined. Specialized production systems including strip tillage, seed production and organic production will be included.

Prerequisite(s): DAGR*1200
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DAGR*4210 Crop Diagnostics and Recommendations W (2-2) [0.50]

This course provides a comprehensive study of weeds, insects and diseases of field crops. Case studies are used to develop problem-solving skills. Pest management control strategies are identified. Students will develop the skills and knowledge to assist in over-the-counter and on-farm pest management recommendations.

Prerequisite(s): DAGR*2210 or DAGR*3210
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DAGR*4220 Organic Production F,W (2-2) [0.50]

This course provides a study of the basic concepts of organic agricultural production, including production techniques in field and greenhouse crops and farm animals, produce certification, and marketing.

Prerequisite(s): DAGR*1000, DAGR*1200, DAGR*1300
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DAGR*4350 Farm Structures and Environment W (3-2) [0.50]

This course provides an introduction to basic engineering principles related to livestock facilities and their environment. Students will gain a basic understanding of how to initiate the planning of a livestock structure or an environmental control system, including ventilation and manure storage. Environmental regulations concerning manure storage and handling will be discussed.

Prerequisite(s): Minimum of 5.00 credits, including DAGR*1600
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DAGR*4450 Student Managed Enterprise II W (3-0) [0.50]

This is a hands-on entrepreneurial course that provides students with developing and operating an enterprise. In this course students implement the business model developed in Student Managed Enterprise I. Students are responsible for the day-to-day operations of the enterprise, including all aspects of production, marketing, and distribution of the product.

Prerequisite(s): DAGR*3450
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DAGR*4600 Human Resource Management F,W (3-2) [0.50]

Students will learn the theoretical and practical skills of management and interacting with people. Topics will include recruiting, supervising, motivation, training employees, effective listening, dealing with difficult people, group dynamics and leadership skills.

Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DAGR*4610 Business Project W (4-0) [0.50]

Students will identify a viable product or service, and will undertake a comprehensive study of the technical and economic aspects of a business designed to sell that product. Students will acquire basic information about the product, define their business and develop a business plan.

Prerequisite(s): 7.50 credits, including DAGR*2020
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DAGR*4650 Farm Project W (4-0) [0.50]

This course provides a comprehensive analysis of a farm business. The students will be responsible for acquiring basic information about the enterprise, analyzing its strengths and weaknesses and developing a 3 year financial projection based on a major development plan.

Prerequisite(s): DAGR*2020, 7.50 credits
Equate(s): DAGR*4620
Restriction(s): DAGR*4450,
Restriction(s): DAGR*4610
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

Environmental Management

DENM*1000 Environmental Science and Issues F (3-2) [0.50]

This course will expose the student to a broad range of environmental issues facing society today. The course will present the student with issues such as environmental quality and protection, the effects of industrialization and the need for conservation, global warming and the production and politics of food and its affect on the global, national, regional and local environmental quality.

Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DENM*1120 Mathematics for Environmental Operators F (3-2) [0.50]

This course will introduce students to mathematical concepts used by Wastewater, Water, Distribution and Collection Operators. The material taught will address the concepts required to write the optional Ministry of the Environment “Operator In Training Exams”. Students will learn how to evaluate the efficiency of the individual process units of the plant and understand the basic mathematical concepts that are essential for maintaining efficient plant operation and compliance with environmental approvals and regulations.

Restriction(s): Registration in the Environmental Management Diploma Program.
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DENM*1150 Environmental Law and Governance F (5-0) [0.50]

This course will introduce the student to the Canadian legal process. The development of statutes, regulations and by-laws and the roles and responsibilities of the various levels of government will be explored from an environmental and constitutional context. Environmental compliance, tort law, due diligence, corporate environmental liability, the role of the media and NGO’s, and the role and responsibilities of regulatory agencies will be examined. Environmental policies and treaties dealing with issues such as climate change, Alberta oil and hazardous waste as examples will be discussed.

Restriction(s): DENM*1050 ,
Restriction(s): DENM*3050
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DENM*1180 Introduction to GIS F (1-4) [0.50]

This course will introduce the student to the basic principles of Geographic Information Systems (GIS), map reading and production. They will learn how to read maps and to create their own maps using current GIS technology. Students will learn to use GIS software, the Global Positioning System (GPS) and how these tools are used to collect, organize and store spatial data. Finally, Remote Sensing techniques will be examined reviewing the range of technology from basic air photo interpretation to the full range of current electronic sensors utilized by the land management professionals.

Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DENM*1200 Spills and Contaminated Site Remediation F (3-2) [0.50]

This course will explore the environmental, legal, technical and ethical aspects of the management, control and abatement of reportable spills to the environment. Spill response reporting requirements, site remediation options, spill prevention and contingency planning will be included. Students will gain a detailed understanding of the site assessment process by completing a Phase 1 and Phase 2 assessment of a contaminated property and developing a decommissioning strategy for their chosen site.

Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DENM*2000 Occupational Health and Safety F (3-2) [0.50]

This course provides an introduction to the topic of occupational health and safety. Topics to be covered include current Ministry of Labour Statutes and Regulations that pertain to the workplace. Students will become informed and conversant with topics including hazardous materials, hazardous chemicals, material safety data sheets, the Workplace Hazardous Materials Information System and health and safety planning.

Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DENM*2020 Advanced Math and Water Chemistry W (3-2) [0.50]

This course will cover both advanced math as well as water chemistry concepts. Students will be taught to determine process efficiency through the use of mathematical calculations rather than "trial and error" methods. Typical "In-plant" calculation and Labs that utilize actual plant samples are discussed. Student gain an understanding of basic chemistry concepts, chemical phases of treatment such as coagulation, sedimentation, softening, disinfection and chemical removal of the various undesirable substances.

Prerequisite(s): DENM*1120
Restriction(s): Registration in the Environmental Management Diploma Program.
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DENM*2050 Site Assessment F,W (3-2) [0.50]

Environmental site assessments are now required by lenders for mortgage purposes prior to the purchase of industrial, commercial, institutional, agricultural and residential properties. This course will provide a detailed understanding of the site assessment process and students will complete a Level 1 Site Assessment study and report as part of the course. Risk assessment, environmental auditing and the decommissioning of contaminated sites will also be explored and discussed. Case studies will provide an overview of specific site assessments and subsequent large scale Level 2, 3 and 4 site remediation.

Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DENM*2100 Ecology F (3-2) [0.50]

An introduction to the science of ecology, the study of interactions between organisms and their environments. Major topics include adaptation, populations, communities, biodiversity, ecosystems and competition. The effects of climate and human activities on ecological processes are also considered. Ecological principles are used to explain the issues associated with several environmental problems.

Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DENM*2150 Water Resource Management W (3-2) [0.50]

Water is a precious resource that is all-too-often taken for granted. This course will demonstrate the significance of the various elements of the hydrologic cycle (e.g. precipitation, runoff, infiltration, groundwater recharge and discharge, etc.) It will focus on water supply systems, water wastewater perspective with other jurisdictions and the world. The students will learn of common water quality problems, including causes, and pathways that contaminants follow to reach water and groundwater.

Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DENM*2200 Environmental Monitoring F (2-3) [0.50]

This course will introduce the Environmental Management student to the various methods used to measure environmental impact. Students will achieve a summary understanding of the various government and other agency threshold limits and guidelines of environmental parameters such as water quality, vegetarian, terrestrial and social impact analysis.

Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DENM*3000 Data Analysis and Statistics W (3-2) [0.50]

Introduction to the use of statistics in the field of environmental management. Basic concepts include probability, observations, generalization of means, normal distribution, standard deviation, standard error, sampling, principles of experimental design, use of correlation and regression, index numbers.

Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DENM*3030 Not-For-Profit Management W (5-0) [0.50]

Students will learn aspects of environmental organizations, and other not-for-profit and charitable sector groups including recruitment and maintenance of a volunteer base, fundraising and financial management, event and project management, and risk management. In addition to these topics, this course will provide an overview of the multiple aspects of running or working for a not-for-profit organization – from conducting an effective meeting to grant writing, from ethics to best practices for an effective board of directors.

Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DENM*3100 Introduction to Applied Microbiology W (2-3) [0.50]

This course is designed for students in environmental studies. The importance from an environmental point of view, including water systems and soils as well as their importance in disease, nutrition, food and food processing will be emphasized.

Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DENM*3120 Introduction to GIS F (1-4) [0.50]

This course will introduce the student to the basic principles of Geographic Information Systems (GIS), map reading and production. They will learn how to read maps and to create their own maps using current GIS technology. Students will learn to use GIS software, the Global Positioning System (GPS) and how these tools are used to collect, organize and store spacial data. finally, Remote Sensing techniques will be examined reviewing the range of technology from basic air photo interpretation to the full range of current electronic sensors utilized by the land management professionals.

Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DENM*3150 Agriculture and Environmental Stewardship F (3-2) [0.50]

This course examines the impact and role of farming in the agroecosystem. Lectures and case studies will be used to explore potential pathways of soil degradation and environmental contamination from agriculture, site assessment of environmental risk associated with specific farm operations and the utilization of best management practices for the conservation of soil, water and other natural resources.

Prerequisite(s): 1 of DAGR*1300, DEQN*1070 , DEQN*3070, DHRT*2230, DHRT*3230
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DENM*3160 Agricultural Chemicals in the Environment W (3-2) [0.50]

An introduction to the environmental, human health and economic issues associated with the use of chemicals, especially pesticides, in agriculture and landscape environments. Students will become informed and conversant on the benefits and possible risks of pests, pesticides, bio-controls and transgenic organisms that are used for pest management.

Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DENM*3200 Water Treatment F (2-3) [0.50]

This course provides the student with the basic design concepts and operational techniques of industrial and municipal water treatment systems. Several treatment processes for ground and surface supplies will be discussed including optimization and testing methodologies as well as the legal requirements of water taking in Ontario. Analytical calculations pertaining to water treatment will be examined. The participants in the course will be given the opportunity to write Provincial Certification Examination for the Water Operator-In-Training classification.

Prerequisite(s): DENM*2200, DENM*3100
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DENM*3210 Sewage & Waste Water Treatment F (2-3) [0.50]

This course covers the introductory concepts of sewage and some related industrial waste treatment. Topics covered encompass the various unit treatment mechanisms currently utilized such as the biological, chemical and physical processes, legislation, different plant configurations, solids handling and disposal, process optimization and applicable testing methodologies. Analytical calculations pertaining to sewage treatment will be examined. The participants in the course will be given the opportunity to write the Provincial Certification Examination for the Sewage Operator-In-Training classification.

Prerequisite(s): DENM*2200, DENM*3100
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DENM*3220 Water Distribution and Wastewater Collection W (3-2) [0.50]

This course provides the student with the basic design concepts and operational techniques of water distribution and wastewater collection systems. The student will receive instruction in system hydraulics, system response, operating limitations, system demands, operation and maintenance, water quality, and related system design factors.

Prerequisite(s): DENM*3200 or DENM*2200
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DENM*3910 Special Study Project F,W (3-0) [0.50]

A self-directed student project focusing on a topic of academic and/or practical interest to the student. 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, a hands-on assignment with specific learning objectives and milestones for achieving these objectives.

Prerequisite(s): 5.00 credits
Restriction(s): DAGR*3900, DHRT*3910, Registration in the Environmental Management Diploma Program and written permission of the faculty supervisor.
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DENM*4000 Business Practices and Ethics F,W (3-2) [0.50]

Students will be introduced to a basic understanding of entrepreneurship and business ethics. They will learn how a business is formed and various legal structures, marketing, book keeping, public presentation skills and how to write a resume. The student will become acquainted with business planning, budgets and financial planning, proposal writing and delivery. Finally the students will study the advantages of professional designation and the rights and responsibilities that come with it.

Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DENM*4050 Environmental Project W (3-2) [0.50]

This course is designed to give the student an opportunity to thoroughly review the environmental systems of an industry, municipality, agribusiness and/or agricultural enterprise. The student will complete an Environmental Management System using Gap analysis and create environmental policies and action plans.

Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DENM*4070 Waste and Water Operation Techniques W (1-4) [0.50]

This course is designed for students who are interested in pursuing a career as a water and/or wastewater treatment plant operator. Students will carry out the kinds of maintenance and repairs that are typically encountered by plant operators. These will include blueprint reading, basic electrical systems and safety, documentation and record keeping, pumps for water systems, wastewater pumps, metering pumps and chemical feed systems, lift stations, distribution and collection system maintenance and repair. Principles of safety will be stressed throughout the course.

Prerequisite(s): DENM*3200 or DENM*3210
Restriction(s): Registration in the Environmental Management Diploma Program
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DENM*4100 Land Use Planning W (3-2) [0.50]

Students will become familiar with land use planning legislation and controls used in Ontario and across Canada. They will begin with the study of settlement theory and how land development effects the natural environment. The various legislative tools used to measure and control the development of land and how to understand the public's role in the process. The students will also be introduced to the higher levels of land use planning including the provincial and federal environmental assessment processes.

Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DENM*4120 Advanced GIS W (1-4) [0.50]

This course will allow students to expand their knowledge of the functionality of ArcGIS software as it pertains to their particular field of interest, whether it be environmental conservation, agriculture or municipal facilities management. Students will explore advanced data analysis functionality of ArcToolbox, including address geocoding, data conversion, map projections, etc. and work with the ArcGIS ModelBuilder for diagramming solutions to spatial analysis problems. In addition, students will be able to explore ArcGIS extensions such as Spatial Analyst and Tracking Analyst as they analyse field data that they will collect for their final project using a variety of data collection techniques, including GPS and digital aerial photographs.

Prerequisite(s): DENM*1100 or DENM*1180
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DENM*4150 Sampling and Analysis W (2-3) [0.50]

This is a practical course with hands-on approach designed to increase students' confidence and competency in performing laboratory and field work. Specific skills that will be acquired in this course will include: preparing a standard operation procedure; preparing a list of analytes for study; analyzing organic contaminants and heavy metals in surface water, groundwater and sediment, and evaluating the degree of contamination; evaluating vegetative communities in various types of habitat; compiling a representative species list; performing a title search; evaluation data, including quality control data; and analyzing macro-invertebrate and fish data. Collectively, students will use their acquired knowledge to design, carry out, interpret the results and prepare comprehensive report on a selected area.

Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DENM*4200 Watershed Management and Conservation F (3-2) [0.50]

Students will learn to appreciate water issues on a watershed scale. They will see the impacts of various land uses on the quantity and quality of water leaving a watershed. The course will examine not only the impacts of human habitation on a watershed but will consider the impact of the forces of nature. The dynamics of various elements of a watershed (e.g. wetlands, dams, reservoirs, riparian zones, land cover, etc) will be studied in order to understand the importance of each in the entire system.

Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DENM*4210 Nutrient Management W (3-2) [0.50]

This course will examine the best management practices associated with nutrient management on farms. Emphasis will be placed on the components and development of a nutrient management plan and the safe utilization of manures and bio-solids in agricultural production systems.

Prerequisite(s): Minimum of 8.0 credits
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DENM*4250 Industrial Waste Management W (3-2) [0.50]

This course is designed to give the student a thorough understanding of the field of industrial wastes from a regulatory perspective. Topics include current Federal and Ontario hazardous waste statutes and regulations. The registration and manifesting of a variety of hazardous and non-hazardous industrial wastes will be explored. Waste minimization and pollution prevention strategies and methodologies will also be discussed.

Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DENM*4260 Spills Response Planning W (3-2) [0.50]

The purpose of this course is to acquaint the student with the legislation and rules surrounding spills and emergency planning. The student will demonstrate the technology and techniques available and how and when it is used. The process of contingency planning and the need for Environmental Management Systems will also be covered.

Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DENM*4400 Environmental Industry Placement W (0-5) [0.00]

This four-week mandatory, post-semester training and evaluation period will offer the student the opportunity to gain practical experience in off-campus work placements typical of those available to them upon graduation. Students are required to perform many of the duties that are commonly performed by graduates, are assessed by industry representatives as well as the course instructor. A report of their experiences will be required to be submitted to the course instructor at the conclusion of their experience. A pass/fail grade will be assigned upon completion of the course. Students choosing to do their work placement in the water or wastewater treatment field must have successfully completed OIT certification in order to participate in the externship.

Prerequisite(s): 9.00 credits
Restriction(s): Registration in the Environmental Management Diploma Program.
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DENM*4500 Environmental Management Externship W (0-5) [0.50]

This course will offer the student the opportunity to gain practical experience in actual work placements typical of those available to them upon graduation. They will: experience daily facility or agency operations; further develop their knowledge and skills in sampling and analysis practices associated with a specific type of work placement; further develop report writing and/or data documentation skills; make verbal and written presentations and gain experience with industry-standard computerized systems in place at many of the workplaces (e.g. SCAD programming). Students wishing placements at Water or Wastewater Treatment facilities must have obtained the Ontario Ministry of Environment Operator In Training (O.I.T.) certification, and have passed DENM*3200 or DENM*3210 (whichever applies).

Restriction(s): Registration in the Environmental Management Diploma Program.
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

Equine Studies

DEQN*1010 Introduction to the Horse Industry F (3-0) [0.50]

This course will explore business and employment opportunities in the horse industry. Various sectors and disciplines will be studied to reveal the economic and employment impact on the horse industry provincially, nationally and internationally. An overall theme in this course will be the use of horses as sport and leisure animals versus horses used as agricultural commodities. A study of equine sport and regulatory governing bodies will also be studied in detail.

Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DEQN*1020 Horse Structure and Function F (3-1) [0.50]

This course encompasses the gross anatomy and physiology of the horse. The course includes an introduction to anatomical terminology, the integumentary system, skeletal system, muscular system, urinary system, cardio-vascular system, the respiratory system, the digestive system and the endocrine system.

Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DEQN*1050 Horse Health F (3-1) [0.50]

This course is an introduction to equine health and disease, the care of sick animals and other stable management practices related to the health care of horses.

Restriction(s): DAGR*4810
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DEQN*1150 Practical Horse Care I F (1-3) [0.50]

This course introduces students to the elements and importance of day to day stable facility management. Daily animal care including feeding, watering, grooming, tack maintenance and turn out is taught and practiced. this course emphasizes safe handling of horses, occupational health and safety, daily routines and record keeping. Students are responsible for twice daily feeding and stall care.

Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DEQN*1200 Horse Facility Management and Design F (2-2) [0.50]

This course is designed to familiarize students with the basic skills and procedures used in the management of an equine facility. Topics included within this course are the building, renovating and management of horse facilities including site planning and interior design. Special consideration is given to environmental control, waste management and environmental stewardship.

Restriction(s): DAGR*4830
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DEQN*2030 Horse Conformation and Lameness W (3-1) [0.50]

Upon completion of this course the student will be able to evaluate a horse's conformation, relate form to function and develop an understanding of the common lameness and blemishes found in horses and their relationship to athletic performance.

Prerequisite(s): DEQN*1020
Restriction(s): DAGR*3810
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DEQN*2040 Horse Feeds and Nutrition W (2-1) [0.50]

This course introduces students to the topics of digestion, feed nutrients, feed stuffs and feeding practices for horses.

Restriction(s): DAGR*3820
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DEQN*2100 Horse Conditioning W (2-1) [0.50]

Students will learn to define exercise and understand the importance of conditioning a horse both physically and mentally. Students will also practice developing and monitoring a fitness program and illustrate methods to monitor fitness levels during training.

Restriction(s): DAGR*4800
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DEQN*2130 Horse Reproduction W (3-1) [0.50]

Anatomy and physiology of the mare and stallion is covered, along with sexual maturation, breeding techniques and management, fertilization. gestation, parturition and foal care. Management of stallions. mares and foals in regards to housing and handling is discussed along with genetic selection and inheritance.

Restriction(s): DAGR*4820
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DEQN*2150 Practical Horse Care II W (1-3) [0.50]

This course builds on skills taught in Practical Horse Care I. Course focuses on building knowledge and skills in three functional areas: day to day facility operations, horse handling and daily care of horses. This course emphasizes further skill development in handling, grooming, bandaging, daily routine and hoof care. Students are responsible for twice daily feeding and stall care.

Prerequisite(s): DEQN*1150
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DEQN*3050 Advanced Horse Nutrition F (3-2) [0.50]

Students will learn to identify and prevent common nutrition based disorders in a variety of horse production groups. Horses are used in this course to ensure authenticity and relevancy to real world industry issues.

Prerequisite(s): DEQN*2040
Restriction(s): DAGR*4780
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DEQN*3070 Forage Management for Horses F (3-2) [0.50]

Students will learn the principles of forage establishment and management for the purpose of providing good quality, affordable pasture and hay for horses. Field trips provide students the opportunity to assess the conditions of local pastures and hay fields then discuss appropriate management practices.

Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DEQN*3150 Practical Horse Care III F (1-3) [0.50]

This course builds on skills taught in Practical Horse Care II and expands to incorporate a student led and managed barn environment. This course emphasizes team work through managing student teams and leadership through working in supervisory capacity in the barn environment. Staff management, scheduling and efficient stable routine are also practiced. Students are responsible for twice daily feeding and stall care.

Prerequisite(s): DEQN*2150
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DEQN*3210 Equine Complementary Therapies F (2-1) [0.50]

This course covers the complementary therapies available to a horse care-giver or equine manager in the therapeutic or convalescent care of horses. The course includes an introduction to massage therapy, acupressure, acupuncture and herbology. As well, heat, hydro, cold and electromagnetic, ultrasonography and magnetic therapy are discussed. Case study and hands-on work will be included in the lab portion of the course.

Prerequisite(s): DEQN*1020, DEQN*2010
Restriction(s): DAGR*3930
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DEQN*4050 Rider Conditioning W (3-2) [0.50]

This course covers athletic conditioning requirements and guidelines for riders at each stage of athletic development. Equestrian discipline-specific considerations are also discussed.

Prerequisite(s): Minimum 8.00 credits
Restriction(s): DAGR*3750
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DEQN*4320 Equine Business Venture W (3-0) [0.50]

In this course students will undertake a comprehensive study to develop a business plan for a new venture or develop a long term management plan for an existing equine operation. Drawing upon knowledge and skills gained from previous courses, students will complete and present a formal business report.

Prerequisite(s): 8.00 credits, including DAGR*1070
Restriction(s): DAGR*4610, DAGR*4650
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DEQN*4500 Industry Externship W (0-0) [0.00]

This course provides students with an opportunity to develop hands-on work experience and exposure to an equine industry. The focus of this externship is to further develop professional work habits. The four-week externship, with a minimum of 140-hours, begins immediately following semester 4. A pass/fail grade will be assigned at the end of the course. If the externship is not completed satisfactorily, it will have to be successfully repeated before the student can graduate.

Prerequisite(s): 12.0 credits
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

Horticulture

DHRT*1000 Landscape Management F (2-3) [0.50]

The use of hand tools, power machinery, and traditional and contemporary methods in the on-going maintenance of landscape installations will be presented, along with proper equipment operation and safety.

Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DHRT*1050 Plant Identification I F (2-3) [0.50]

This course provides an introduction to the identification of common landscape plants. Students will learn to identify plants by sight through recognition of subtle differences. Botanical names will be taught. Growing requirements, physical features, ornamental characteristics and potential landscape uses will be discussed.

Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DHRT*2000 Greenhouse Management F,W (3-2) [0.50]

Students will learn the basics of greenhouse design and use. Topics such as structures, ventilation, heating, supplemental lighting, relative humidity, irrigation, fertility management and CO2 enrichment will be included. Management and cultural principles of commercial production of various horticultural crops in greenhouses will be used to illustrate management strategies.

Prerequisite(s): DAGR*1200
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DHRT*2050 Ecological Principles of Managed Landscapes W (3-2) [0.50]

This course focuses on ecological interactions in various situations related to horticulture and the environment - managed landscapes, greenhouses, nurseries. The adaptations of plants to specific environmental conditions and their ecological interrelatedness with other species, life histories, metapopulations and how these influence community structure. Students will acquire skills to produce native plant species in the greenhouse.

Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DHRT*2090 Introduction to Landscape Construction W (2-3) [0.50]

This course will examine materials and combinations of materials commonly used in landscape structures. Construction methods and common practices for a variety of landscape projects will be described and demonstrated. Use of the survey level and rod for taking elevations and for projects layout will be demonstrated. Information given will be suitable for taking pertinent Certified Horticultural Technician examinations. (Also offered through distance education format.)

Prerequisite(s): DHRT*2100
Restriction(s): Intended for Horticulture Diploma students.
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DHRT*2100 Landscape Design W (2-4) [0.50]

Students will study the principles of landscape design and learn how to integrate different design styles, different types of landscape materials, structures and plants to create an attractive residential living environment. Students will learn how to identify the design requirements of a site, choose appropriate plants or structures, arrange landscape components and draw a plan of the proposed layout. Introductory drafting techniques will be practised.

Prerequisite(s): DHRT*1050
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DHRT*2160 Greenhouse Control Systems W (2-1) [0.50]

This course will explore computerized environmental control systems that allows growers the ability to integrate the control of all the systems involved in manipulating the greenhouse environment. While recognizing that specific systems for environmental control can vary and change from one greenhouse to the next, as well as over time, there are basic requirements for environmental control that all greenhouses must meet to be able to produce a successful crop.

Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DHRT*2200 Plant Propagation W (2-2) [0.50]

This course covers the principles and practices of propagation for horticultural plants. Sexual (seed) propagation to include seed maturation, dormancy and seed germination; vegetative (asexual) propagation, including division, layering, budding, grafting and tissue culture are also discussed.

Prerequisite(s): DAGR*1200
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DHRT*2230 Soil and Water Use in Agroecosystems W (3-2) [0.50]

This course examines the role of agriculture, landscape horticulture and nursery production on soil processes and properties, and water resources. The course will examine best management practices to conserve soil and water resources and enhance the quality of the ecosystems of which they are a part. In the course, soil and water conservation techniques including plant selection, xeriscaping, the use of ground covers, and dry shade gardening will be covered. The student will also be introduced to various aspects of the hydrologic cycle in the context of designing landscapes and production systems to reduce water use.

Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DHRT*2250 Horticultural Equipment Management W (2-3) [0.50]

This course examines common equipment used for horticultural practices. The student will develop the skills and knowledge to be able to maintain, adjust and repair equipment used in horticulture. A focus on shop practices and use of shop tools will be covered. This course will emphasize safety in all aspects of operation and use of equipment.

Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DHRT*3050 Plant Identification II F (2-3) [0.50]

This is an advanced course continuing the identification of landscape plants. Growing requirements, physical approximate size at maturity and ornamental characteristics will be discussed for each plant. Less common taxa and additional cultivars will be highlighted.

Prerequisite(s): DHRT*1050
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DHRT*3120 Applied Landscape Construction F (1-4) [0.50]

This course provides training and practice in applied landscape construction techniques and safe work habits. Structures such as walls, paved areas, fences, lighting, water features and planting areas will be laid out and installed. Construction practices including base preparation, installation, backfilling and completion/finishing will be explored under supervision of trained landscape design-build experts. Skills will be evaluated at the Certified Horticultural Technician (CHT) level.

Prerequisite(s): DHRT*2090
Restriction(s): Intended for Horticulture Diploma students.
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DHRT*3150 Nursery Management F (2-3) [0.50]

The course covers the setup and organization of a horticultural nursery and the methods of production for field and container-grown landscape nursery stock including cultural management and merchandising in wholesale and retail operations.

Prerequisite(s): DHRT*2200
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DHRT*3170 Horticultural Weed Science F (3-0) [0.50]

Identification of common weeds in horticulture, methods of weed control, herbicide mode of action and basis of selectivity are the primary areas included in this course.

Prerequisite(s): DAGR*1200
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DHRT*3180 Greenhouse Structures and Engineering F (2-2) [0.50]

This course describes the component parts of a typical vegetable production greenhouse and will focus on the set-up and organization of the greenhouse. This includes greenhouse design and how design affects the greenhouse environment, ventilation, temperature control, light, glazing material, CO2, relative humidity and heat loss

Prerequisite(s): DHRT*2000
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DHRT*3300 Greenhouse Ornamental Production F,W (3-2) [0.50]

Production practices of selected greenhouse ornamental crops, pot crops and cut flower crops will be demonstrated.

Prerequisite(s): DHRT*2000, DHRT*2200
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DHRT*3510 Experiential Learning in Horticulture S,F,W [0.50]

Student-initiated learning opportunities can be developed as a credit course in consultation with a supervising faculty member. Details of the activities included in the program will be outlined in a learning contract initiated by the student and agreed to by the faculty supervisor prior to the commencement of the work experience.

Prerequisite(s): 4.00 credits
Restriction(s): DAGR*3510, DFN*3510 Registration in the Diploma Program in Horticulture.
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DHRT*3910 Special Study Project S,F,W (0-0) [0.50]

A self-directed student project focusing on a topic of academic and/or practical interest to the student. 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, a hands-on assignment with specific learning objectives and milestones for achieving these objectives.

Prerequisite(s): 4.00 credits
Restriction(s): DAGR*3900, DFN*3910 Registration in the Horticulture Diploma Program Written permission of the faculty supervisor.
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DHRT*4000 Ornamental Plant Protection W (3-2) [0.50]

This course is a study of the biology and control of insects and diseases of nursery, landscape, turfgrass and greenhouse crops. Approaches to integrated pest management are incorporated into control methods.

Prerequisite(s): DAGR*1200, DHRT*1050
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DHRT*4050 Certification and Safety F (3-2) [0.50]

Students will learn the necessary information required to write examinations which are a legal requirement for anyone wishing to apply or sell pesticide products in Ontario. For interested students, licensing exams can be arranged with licensing authorities upon payment of relevant fees. Students will be introduced to federal and provincial legislation governing worker health and safety in the workplace. In particular WHMIS, risk analysis, poisoning, First Aid, labeling and storage & disposal are covered.

Prerequisite(s): DAGR*1600
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DHRT*4150 Landscape Construction Project W (2-3) [0.50]

Students will develop the capacity to develop a typical landscape construction structure and project installation through the preparation of working document and specification information. Codes, bylaws, and regulations governing the landscape construction segment of the horticulture industry will be discussed. Real-life scenarios - client wish lists, suitable sites, project requests - will be used to develop the skills and capabilities to outline typical landscape construction projects, including walls, decks, patios, fences and screens, water features, lighting, irrigation, and drainage.

Prerequisite(s): DHRT*2090, DHRT*3120
Restriction(s): Enrolment in the Horticulture Diploma program.
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DHRT*4190 Greenhouse Vegetable Production W (3-2) [0.50]

This course covers production practices for major and some minor greenhouse vegetable crops. Students will apply management techniques to greenhouse vegetable production including fertility, production systems unique to vegetable production, insect and disease control, advanced computer controls of the environment and irrigation techniques.

Prerequisite(s): DHRT*2000
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DHRT*4200 Greenhouse Integrated Pest Management W (3-2) [0.50]

This course will introduce students to integrated pest management (IPM) in the greenhouse, including cultural, biological, and chemical controls. Key components of effective pest and disease control programs include: crop monitoring, cultural control, resistant cultivars, biological control and chemical control.

Offering(s): First offering - Winter 2020
Prerequisite(s): DHRT*2000
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DHRT*4290 Advanced Greenhouse Vegetable Production W (3-3) [0.50]

Building on topics covered in greenhouse production courses, this course will examine production mediums (soil, rockwool, coco fibre, nutrient film technique and hydroponics), analytical testing, and diagnosing nutrient disorders. Students will also examine post-harvest considerations of greenhouse vegetable crops.

Offering(s): First offering - Winter 2020
Prerequisite(s): DHRT*4190
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DHRT*4300 Arboriculture W (2-3) [0.50]

This course will provide students with the opportunities to learn both the principles and the skills necessary to manage and care for trees in the landscape. Case studies will be used to help students develop the skills necessary to assess tree problems.

Prerequisite(s): DHRT*1050
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

Turfgrass Management

DTM*1000 The Turf Industry F (1-4) [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

DTM*1100 Plant Biology F,W (3-2) [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

DTM*1200 Turf Equipment F (2-2) [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

DTM*1300 Turf Soil Principles F (3-2) [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

DTM*1400 Landscape Plants F (2-3) [0.50]

The course covers recognition, identification, naming, physical features and cultural adaptation of native and introduced woody and herbaceous plants found in cultivated landscapes. Students will be able to identify plants in the landscape and from portions of plants in the laboratory. The course prepares the students for future courses by providing them with tools for future learning.

Co-requisite(s): DTM*1100
Department(s): Department of Plant Agriculture

DTM*1500 Turf Communication Skills W (3-0) [0.50]

The course provides students with the skills to develop good written and oral communication skills. Practical examples enable students to speak and write effectively in the field of turfgrass management. The course also includes an introduction to group management skills and students will be required to work independently and meet in focus groups and complete work outside of scheduled class time.

Co-requisite(s): DTM*1000
Department(s): Department of Plant Agriculture

DTM*2000 Turf Management I W (2-3) [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

DTM*2100 Turf Irrigation and Drainage W (2-3) [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

DTM*2200 Computers and Math for Turf W (2-3) [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

DTM*2400 Landscape Design W (1-3) [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

DTM*2500 Arboriculture F (2-3) [0.50]

This course covers the culture and maintenance of trees in golf courses, parks, lawns and other urban landscapes where trees and turfgrasses are used in combination. Students learn both the principles and practices common in the proper care of trees. Case studies help students develop skills necessary to diagnose problems with urban trees.

Co-requisite(s): DTM*1100, DTM*1400
Department(s): Department of Plant Agriculture

DTM*2600 Turf Environmental Management W (2-3) [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

DTM*3000 Turf Management II F (3-2) [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

DTM*3100 Current Turf Practices F (3-0) [0.50]

This course provides a setting to discuss and reflect on summer work experiences and introduces students to current trends in the golf course, sports field and home lawn industries. The course is based on discussions and seminars led by students to cover emerging trends in turfgrass management.

Prerequisite(s): DTM*1000, DTM*2000, 4.00 credits
Department(s): Department of Plant Agriculture

DTM*3200 Turf Diseases F (2-2) [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

DTM*3300 Turf Insects and Weeds F (2-3) [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

DTM*3400 Landscape Construction F (2-3) [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

DTM*3800 Special Study Project I S,F,W (0-0) [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 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): 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

DTM*4000 Turf Management III W (2-3) [0.50]

This course emphasizes the differences between abiotic and biotic stressors and their management. The course reinforces 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

DTM*4200 Design and Construction of Golf Courses and Sports Fields W (1-4) [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

DTM*4300 Turf Case Studies W (3-0) [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

DTM*4400 Human Resources Management W (3-0) [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 solving 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

DTM*4500 Business and Finance for Turf W (3-0) [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

DTM*4600 Computer Assisted Design W (1-4) [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

DTM*4800 Special Study Project II W (0-0) [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.rolment in Diploma in Turfgrass Management.
Department(s): Dean's Office, Ontario Agricultural College

Veterinary Technology

DVT*1000 Livestock Production and Management W (4-0) [0.50]

This course introduces the students to food animals and horses, with an emphasis on terminology, nutrition, behaviour and housing. The food animal portion also includes common breeds, marketing, and breeding practices of various species, including sheep, poultry, dairy cattle, beef cattle and swine. The equine portion of the course emphasizes the techniques, terminology and common diseases that the veterinary technician working in an equine practice would be exposed to, through the use of lectures, slides, videos and handouts. The colony horses provide hands-on experience in behaviour, handling, and restraint, as well as stable management.

Restriction(s): Registration in the Associate Diploma in Veterinary Technology Conventional program.
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DVT*1010 Anatomy and Physiology I S,F (2-2) [0.50]

This course encompasses the gross anatomy and physiology of domestic animals with special emphasis on the cat as a pet animal species. The course covers all major body systems, with emphasis on those of veterinary clinical significance.

Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DVT*1040 Medical Exercises I S,F (1-3) [0.50]

This is a practical introductory course with an emphasis on working with dogs, cats, birds, horses, cattle, sheep and pigs. Animal care and bathing are assigned to students on a rotating basis. Basic restraint, examination, medication and bandaging are discussed and practiced. Injection and venipuncture techniques are introduced.

Restriction(s): Registration in the Associate Diploma in Veterinary Technology Conventional or Alternative program.
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DVT*1080 Laboratory Quality Assurance S,F (3-2) [0.50]

This course introduces students to quality control and the mathematical calculations required in a laboratory environment. The quality control module is an introduction to basic clinical chemistry principles, common laboratory equipment safety, quality controls, mathematical calculations, and proper analytical techniques. The mathematical module introduces the veterinary technology student to the basic mathematical concepts and skills necessary to efficiently function in a clinical laboratory environment. Basic mathematical manipulations and calculations performed without the use of calculators are encouraged. Various mathematical calculations required to perform laboratory measurements are discussed and practiced.

Offering(s): Last offering - for the Alternative Program is Summer 2017
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DVT*1100 Large Animal Production and Management I F (0-0) [0.25]

This course introduces the students to sheep, poultry and horses, with an emphasis on terminology, nutrition, behaviour and housing. This course also includes common breeds, marketing, and breeding practices of various species. The equine portion of the course emphasizes the techniques, terminology and common diseases that the veterinary technician working in an equine practice would be exposed to.

Offering(s): Offered through Distance Education format only.
Restriction(s): Registration in the Associate Diploma in Veterinary Technology program.
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DVT*1110 Intro to Veterinary Technology F (0-0) [0.25]

This online course will introduce the student to fundamental concepts and skills used within veterinary medicine that will be integrated into current and future courses. Students will study medical terminology, and concepts in genetics as they relate to veterinary medicine, as well as sanitation within an animal housing environment.

Offering(s): Offered through Distance Education format only.
Restriction(s): Registration in the Associate Diploma in Veterinary Technology Alternative program.
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DVT*1150 Microbiology, Cytology and Hematology I F,S (4-4) [0.50]

This course consists of theoretical and practical modules in hematology, microbiology, and cytology. The hematology module will introduce students to the basic aspects of animal blood evaluation. Practical sampling techniques, handling and processing of samples, and cell identification will be introduced. Hematology mathematical calculations will also be covered. The microbiology module includes the study of microorganisms with emphasis on their morphology, physiology, biochemistry, culture, and identification. Operations of the light microscopes and laboratory safety will be discussed. The cytology module will introduce students to aspects of cellular and tissue sample collection, preparation, and microscopic evaluation of normal and abnormal samples from the body.

Restriction(s): Registration in the Associate Diploma in Veterinary Technology Conventional or Alternative program.
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DVT*1160 Foundations of Veterinary Technology F (3-0) [0.50]

This course introduces the students to fundamental concepts and skills used within veterinary medicine that will be integrated into current and future courses. Students will study medical terminology, concepts in genetics as they relate to veterinary medicine, applied scientific mathematics, and proper animal housing sanitation, including quarantine protocols.

Restriction(s): Registration in the Associate Diploma in Veterinary Technology program.
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DVT*1300 Large Animal Production and Management II W (0-0) [0.25]

This course introduces the students to food animals such as beef, dairy and swine, with an emphasis on terminology, nutrition, behaviour and housing. The food animal portion also includes common breeds, marketing, and breeding practices of various species.

Offering(s): Offered through Distance Education format only.
Restriction(s): Registration in the Associate Diploma in Veterinary Technology Alternative program.
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DVT*1350 Pharmacology & Vet. Tech Math S (4-0) [0.50]

This course introduces pharmacological theory and the mathematics applied to utilize pharmaceutical agents in a veterinary clinical setting. The mode of action, mechanisms of absorption, distribution, metabolism and excretion of drug classes commonly used in veterinary medicine will be discussed. Students will learn applied clinical calculations, accurately perform drug dose and fluid therapy calculations, and analyze statistical data.

Restriction(s): Registration in the Associate Diploma in Veterinary Technology Alternative program.
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DVT*2000 Companion Animal Management F (6-0) [0.50]

This course offers the veterinary technician student the information required to understand small animal husbandry. Through lectures, practical information is gained into the companion animal's nutritional needs, behaviour patterns and preventative health care. Students learn what is normal and abnormal behaviour and how to advise clients on applying proper training techniques. The emphasis in this course is the prevention of health problems in companion animals.

Offering(s): Also offered through Distance Education format.
Restriction(s): Registration in the Associate Diploma in Veterinary Technology Conventional or Alternative program.
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DVT*2010 Anatomy and Physiology II W (4-2) [0.50]

A continuation of DVT*1010, the course covers the structure and functions of select major body systems with emphasis on the lymphatic system and its importance in preventing and/or overcoming disease. Disease transmission, development and serological diagnosis will be discussed.

Prerequisite(s): DVT*1010
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DVT*2020 Haematology/Cytology S,W (2-4) [0.50]

This course expands upon the information introduced in DVT*1070 . The veterinary technology student will study basic theoretical and practical aspects of feline, equine and bovine blood. Blood cell precursors will be studied and corrected counts will be included. Alterations of RBCs and WBCs will be covered. The performance, assessment and evaluation of common veterinary clinical procedures are emphasized. Haematological mathematical calculations will also be covered, as well as a section on cytology.

Offering(s): Last offering - for Alternative Program: Summer 2018
Prerequisite(s): DVT*1070 or (DVT*2200, DVT*2210)
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DVT*2040 Medical Exercises II S,W (1-3) [0.50]

This course provides practical experience with venipuncture, IV catherization, anaesthesia and aseptic surgical techniques, bird restraint, and the performance of fluid therapy and drug dose calculations.

Co-requisite(s): DVT*1040
Restriction(s): Registration in the Associate Diploma in Veterinary Technology Conventional or Alternative program.
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DVT*2050 Urinalysis W (1-2) [0.50]

This is a theoretical and practical course which emphasizes the macroscopic, chemical and microscopic characteristics of urine, along with the concepts of urinary diagnostic testing. The prevention and dietary treatment of urolithiasis is explored.

Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DVT*2060 Communications & Vet Software S,F (2-2) [0.50]

Issues dealing with communication between the veterinary technician and clients, co-workers and the employer/ veterinarian are explored using communication theory and skills. Application of theories are demonstrated through discussions and class exercises. Hands-on labs introduce the use of computers in the veterinary clinic using current veterinary clinic software programs.

Restriction(s): Registration in the Associate Diploma in Veterinary Technology Conventional or Alternative program.
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DVT*2070 Pharmacology & Applied Calculations W (3-0) [0.50]

This course introduces pharmacological theory and the mathematics applied to utilize pharmaceutical agents in a veterinary clinical setting. The mode of action, mechanisms of absorption, distribution, metabolism and excretion of drug classes commonly used in veterinary medicine will be discussed. Students will learn to accurately perform drug dose and fluid therapy calculations, and analyze statistical data.

Restriction(s): Registration in the Associate Diploma in Veterinary Technology Conventional program.
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DVT*2100 Veterinary Nursing Techniques I F (0-0) [0.25]

This course is concerned with practical animal nursing relative to the basic needs of the animal. Students learn about general patient management, including the importance of history taking, medical records, the physical exam, patient handling, hospital safety, and fluid therapy. Students learn how to care for healthy large and small animals, maintain a hospital area, and nurse sick and injured animals.

Offering(s): Offered through Distance Education format only.
Prerequisite(s): 4.50 credits
Restriction(s): Registration in the Associate Diploma in Veterinary Technology program.
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DVT*2150 Hematology II S,W (2-4) [0.50]

Students will strengthen their understanding of theoretical and practical aspects of canine and feline blood evaluation. Students will be introduced to the hematology of other species, including equine, bovine, avian and exotics. Blood cell precursors and common disease processes affecting the blood will be studied. The performance, assessment and evaluation of common veterinary clinical procedures will be emphasized. Hematological mathematical calculations will also be practiced.

Restriction(s): Registration in the Associate Diploma in Veterinary Technology Conventional or Alternative program.
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DVT*2200 Introduction to Immunobiology F (0-0) [0.25]

This course covers the structure and function of the lymphatic system and its importance in preventing and/or overcoming disease. Disease transmission, development, and serological diagnosis will be discussed.

Offering(s): Offered through Distance Education format only.
Restriction(s): Registration in the Associate Diploma in Veterinary Technology Alternative program.
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DVT*2210 Introduction to Anesthetic Principles F (0-0) [0.25]

This course introduces the practical and theoretical aspects of anesthetic techniques in animals. Emphasis is on the principles of general anesthesia using gas anesthetic machines. Also discussed are sedation, general anesthesia using injectable agents, and local analgesia. Students will utilize this knowledge during the laboratory sessions of Surgical Exercises.

Offering(s): Offered through Distance Education format only.
Prerequisite(s): 4.50 credits
Restriction(s): Registration in the Associate Diploma in Veterinary Technology Alternative program.
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DVT*2220 Introduction to Radiography W (0-0) [0.25]

This course introduces practical and theoretical aspects of radiography in veterinary medicine. Topics include radiation safety, radiographic equipment (analog versus digital), production of radiation, intensifying screens, films, grids, and manual and automatic processing. The course introduces a variety of special imaging techniques utilized in veterinary medicine.

Offering(s): First offering - Winter 2019 Offered through Distance Education format only.
Prerequisite(s): 4.50 credits
Restriction(s): Registration in the Associate Diploma in Veterinary Technology Alternative program.
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DVT*2300 Veterinary Anatomy and Physiology S (2-2) [0.25]

A continuation of DVT*1010, the course encompasses the structure and functions of select major body systems of domestic animals, with emphasis on the cat as a pet animal species. This course covers the following major body systems of significance in veterinary clinical medicine: cardiovascular, digestive, respiratory, reproductive, nervous, and special senses. (Not offered through distance education format.)

Prerequisite(s): DVT*2200, DVT*2210
Restriction(s): Registration in the Associate Diploma in Veterinary Technology program.
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DVT*2310 Veterinary Nursing Techniques II S (1-3) [0.25]

This course incorporates kennel and barn duties and general care and feeding of the colony animals including cats, dogs, rodents, birds and horses. It is meant to introduce the students to the running of a veterinary clinic. Students are supervised and evaluated on all aspects of animal care which fall under this broad topic. As well, they collect samples, treat sick and injured animals in the colony on an as required basis. Specific nursing techniques are introduced in a more formal way. (Not offered through distance education format.)

Prerequisite(s): DVT*2200, DVT*2210
Restriction(s): Registration in the Associate Diploma in Veterinary Technology program.
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DVT*2320 Surgical Exercises S (1-3) [0.25]

This course deals with the practical and theoretical aspects of anaesthetic and surgical techniques in animals. The anesthesia part of the course builds on the knowledge aquired in Introduction to Anesthetic Principles. Each laboratory session is also preceded by a lecture in which the students learn about the rationale behind and possible complications with each surgery, thus enabling them to be involved in client education. During the laboratory sessions, the students work in small groups, rotating within these groups, becoming proficient in anaesthesia, surgical assistance, instrument handling, surgical nursing, and post-operative care. (Not offered through distance education format.)

Prerequisite(s): DVT*2200, DVT*2210
Restriction(s): Registration in the Associate Diploma in Veterinary Technology program.
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DVT*2330 Clinical Chemistry S (2-3) [0.25]

This course emphasizes and familiarizes students with practical laboratory techniques utilized routinely in veterinary practice. The course will cover topics ranging from proper sample collecting to organ function. We will include chemistry, haemotology and cytology in the discussion and during laboratory sessions.

Prerequisite(s): DVT*2200, DVT*2210
Restriction(s): Registration in the Associate Diploma in Veterinary Technology program.
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DVT*2340 Exercises in Radiography I S (1-3) [0.50]

This course introduces practical application of veterinary radiography. Students will practice radiation safety, learn proper positioning techniques to produce diagnostic images, and use analog and digital radiographic equipment on small and large animals utilizing mechanical restraint.

Offering(s): First offering - Summer 2019
Restriction(s): Registration in the Associate Diploma in Veterinary Technology Alternative program.
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DVT*3000 Laboratory Animal Science S,F (3-0) [0.50]

This course familiarizes the students with scientific research involving animals, as well as issues in veterinary ethics. Topics include the role of the veterinary technician in research, regulations governing the use of animals in research, basic steps required to conduct a research project, how various animal species are used in research, assessment of animal health and welfare during a research procedure, and the care and common diseases of research animals. Through the preparation and presentation of seminars, students are encouraged to examine various aspects of veterinary ethics.

Offering(s): Last offering - for Alternative Program: Summer 2019
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DVT*3010 Animal Nursing I F (2-3) [0.50]

This course is concerned with practical animal nursing relative to the basic needs of the animal. Students learn about general patient management, including the importance of history taking, medical records, the physical exam, patient handling, fluid therapy and hospital care/safety. Common diseases and conditions are also discussed. Students are required to care for healthy large and small animals, and maintain a hospital area. Students may also visit small, large, equine and referral practices to observe and participate in the practical aspects of veterinary technology.

Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DVT*3020 Parasitology & Clinical Chemistry F (4-4) [0.50]

This course emphasizes practical laboratory techniques utilized routinely in veterinary practice. The clinical chemistry module is an introduction to basic clinical chemistry principles. Topics of discussion will include: common laboratory safety and equipment; quality controls; mathematical calculations and proper analytical techniques. The parasitology module familiarizes the student with the host-parasite relationship for the common parasites of veterinary significance in Canada. Topics of discussion for the various parasites will include: parasite location in the host, methods of infection, development and behaviour, clinical signs of disease, diagnoses and potential human health hazards. Various laboratory tests used in the diagnosis of animal parasites are studied/performed in the laboratory periods.

Restriction(s): Registration in the Associate Diploma in Veterinary Technology Conventional program.
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DVT*3030 Radiography I F (2-3) [0.50]

This course deals with practical and theoretical aspects of radiography in veterinary medicine. Lectures cover radiation safety, positioning, analog and digital radiographic equipment, production of radiation, intensifying screens, films, grids, and manual and automatic processing. During the laboratory sessions, the students work in small groups learning proper positioning techniques, and troubleshooting to produce diagnostic images of small and large animals.

Restriction(s): Registration in the Associate Diploma in Veterinary Technology Conventional program.
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DVT*3050 Surgical and Anaesthetic Principles I F (3-3) [0.50]

This course deals with the practical and theoretical aspects of anaesthetic and surgical techniques in animals. The lecture portion of the course introduces the students to various anaesthetic agents and techniques, as well as the principles of asepsis, the importance of monitoring and the correct response to anaesthetic emergencies. Each laboratory session is also preceded by a lecture in which the students learn about the rationale behind and possible complications with each surgery, thus enabling them to be involved in client education. During the laboratory sessions, the students work in small groups, rotating within these groups, becoming proficient in anaesthesia, surgical assistance, instrumental handling, surgical nursing and post-operative care.

Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DVT*3060 Genetics F (3-0) [0.50]

This course provides a basic understanding of the principles of protein synthesis, DNA replication, heritability, selective breeding, and recombinant DNA, vaccine production, and new techniques in genetic engineering, as well discussions surrounding ethical issues concerning recent genetic research.

Offering(s): Last offering - for Alternative Program Fall 2018
Prerequisite(s): 6.00 credits
Restriction(s): DVT*1030 , Registration in the Associate Diploma in Veterinary Technology program.
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DVT*3070 Animal Dentistry I F,S (1-3) [0.50]

This course introduces the fundamentals of small animal oral health, including the anatomy and physiology of the tooth and surrounding structures, and the disease processes which can occur. The emphasis is on the prevention of oral disease. Students are introduced to the proper techniques involved in performing a complete dental prophylaxis, and given the information needed to enable them to counsel clients on appropriate preventative home care.

Offering(s): First offering - for Conventional Program: Fall 2018 First offering - for Alternative Program: Fall 2019
Restriction(s): Registration in the Associate Diploma in Veterinary Technology Conventional or Alternative program.
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DVT*3200 Public Health F (0-0) [0.25]

This course is designed to introduce the veterinary technology student to the interrelation of animal and human health. Meat inspection programs are discussed with emphasis on humane slaughter, environmental sanitation,ante mortem and post mortem examination, condemned meats, animal by-products and meat labeling. As well, epidemiology, zoonoses, water sanitation, microbiology of food and meat hygiene are addressed. Simple statistics that measure health and disease are also considered.

Offering(s): Offered through Distance Education format only.
Restriction(s): Registration in the Associate Diploma in Veterinary Technology Alternative program.
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DVT*3210 Veterinary Nursing Techniques III W (0-0) [0.25]

This course is concerned with practical animal nursing relative to the basic needs of the animal. Students learn about general patient management, including the importance of history taking, medical records, the physical exam, patient handling, hospital safety, and fluid therapy. Students learn how to care for healthy large and small animals, maintain a hospital area, and nurse sick and injured animals.

Offering(s): Offered through Distance Education format only.
Prerequisite(s): DVT*1090 or DVT*3040
Restriction(s): Registration in the Associate Diploma in Veterinary Technology program.
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DVT*3300 Veterinary Nursing Techniques IV S (1-3) [0.25]

This course incorporates kennel and barn duties and general care and feeding of the colony animals including cats, dogs, rodents, birds and horses. It will expand upon the running of a veterinary clinic as introduced in DVT*2310. Additional animal nursing techniques are introduced in a more formal way. (Not offered through distance education format.)

Prerequisite(s): DVT*3200, DVT*3210
Restriction(s): Registration in the Associate Diploma in Veterinary Technology program.
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DVT*3320 Veterinary Parasitology S (2-2) [0.25]

This course emphasizes and familiarizes students with practical laboratory techniques utilized routinely in veterinary practice in respect to common internal and external parasites found on small animals and food producing animals of veterinary significance in Canada. Topics of discussion for the various parasites will include: location in the host, methods of infection, development and behaviour, clinical signs of disease, prevention, diagnoses and potential human health hazards. Various laboratory tests used on various species specimens in the diagnosis of animal parasites are studied/performed in laboratory periods. (Not offered through distance education format.)

Prerequisite(s): DVT*3200, DVT*3210
Restriction(s): Registration in the Associate Diploma in Veterinary Technology program.
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DVT*3330 Veterinary Clinic Management S (2-3) [0.25]

This course is designed to familiarize students with the basic skills and procedures used in the management of veterinary hospitals, with emphasis on small animal facilities. The lecture portion of the course delves into the role of the practice manager regarding: hospital safety; personnel & client management; basic bookkeeping and marketing strategies. The laboratory portion is intended to provide the student with practical experience in inventory control, purchasing and receiving of drugs, supplies and equipment pertinent to the sound financial operation of a modern veterinary practice. (Not offered through distance education format.)

Prerequisite(s): DVT*3200, DVT*3210
Restriction(s): Registration in the Associate Diploma in Veterinary Technology program.
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DVT*4000 Dentistry S,W (1-3) [0.50]

This course introduces the fundamentals of small animal oral health, including the anatomy and physiology of the tooth and surrounding structures, and the disease processes which can occur. The emphasis is on the prevention of oral disease. Through the use of models and live patients, the student is introduced to the proper techniques involved in performing a complete dental prophylaxis and is given the information needed to enable them to counsel clients on appropriate preventative home care.

Offering(s): Last offering - for Conventional Program: Winter 2018 Last offering - for Alternative Program: Summer 2019
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DVT*4010 Animal Nursing II W (2-3) [0.50]

A continuation of DVT*3010, concerned with practical animal nursing relative to basic needs of the animal. Students learn about general patient management, including the importance of history-making, medical records, the physical exam, patient handling, fluid therapy and hospital care. Common diseases and conditions are also discussed. Students are required to care for healthy large and small animals and maintain a hospital area. Students may visit small, large, equine and referral practices to observe and participate in the practical aspects of veterinary technology.

Prerequisite(s): DVT*3010
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DVT*4020 Diagnostic Techniques II S,W (1-3) [0.50]

This course emphasizes practical laboratory techniques routinely in veterinary practice. The material acquired in the introductory courses in laboratory techniques is expanded upon, particularly in the areas of bacteriology, haematology, cytology and mycology. Both large and small animal samples are utilized in order to prepare students to work in small, large or mixed animal practices.

Offering(s): Last offering - for Conventional Program: Winter 2018 Last offering - for Alternative Program: Summer 2019
Prerequisite(s): DVT*3020 or DVT*3200, DVT*3210
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DVT*4030 Radiography II S,W (1-3) [0.50]

This course covers practical applications of all aspects of radiography in veterinary medicine. Emphasis of this course is on proper positioning, using mechanical restraint, trouble shooting, use of contrast media, different techniques with exotic animals and creating a technique chart.

Prerequisite(s): DVT*2340 or DVT*3030
Restriction(s): Registration in the Associate Diploma in Veterinary Technology Conventional or Alternative program.
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DVT*4040 Hospital Management F (3-1) [0.50]

This course is designed to familiarize students with the basic skills and procedures used in the management of animal hospitals, with emphasis on small animal facilities. Topics included within this course are personnel management, client relations, marketing strategies, inventory control, public health issues, and financial management.

Restriction(s): Registration in the Associate Diploma in Veterinary Technology Conventional program.
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DVT*4050 Surgical and Anaesthetic Principles II S,W (1-3) [0.50]

This lecture and laboratory course builds on the skills and knowledge acquired during DVT*3050 or DVT*2210 and DVT*2320. The lecture portion gives background information on the anatomy, patient complications for each surgery, as well as the requirements for client education. Supplementary surgical lectures provide information about other small and large animal surgeries commonly performed in clinical practice.

Prerequisite(s): (DVT*3050 or DVT*2210), DVT*2320
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DVT*4060 Externship S,W [0.00]

The Externship is a four week, 160 hour training and evaluation period in which senior students in their last semester enter veterinary practices away from the Ridgetown Campus. The location must be one in which they have not worked or volunteered previously. Students are required to perform many of the duties that are commonly performed by graduate technicians, and are assessed by veterinarians or graduate technicians in the work setting. Students are required to keep a journal, as well as a check list of the skills they are performing. At the completion of their externship, they will complete a report on their practice location. They will also be assessed by the practice. If the externship is not completed satisfactorily, it will have to be successfully repeated before the student can graduate. **A pass/fail grade will be assigned upon completion of the course.**

Prerequisite(s): Registration in DVT with 9.0 credits or DVTA program with 8.75 credits
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DVT*4070 Animal Dentistry II S,W (1-3) [0.50]

This course builds on the fundamentals of small animal oral health with emphasis on the prevention of oral disease. Using models and live patients, students continue to utilize and develop the proper techniques involved in performing a complete dental prophylaxis.

Offering(s): First offering - for Conventional Program: Winter 2019 First offering - for Alternative Program: Summer 2020
Restriction(s): Registration in the Associate Diploma in Veterinary Technology Conventional or Alternative program.
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DVT*4080 Vet. Tech. Practical Applications S,W (1-3) [0.50]

This course is a comprehensive overview of applied, practical skills to enhance the ability of students to work in the veterinary industry. Students will be provided with the opportunity to integrate and apply knowledge and technical skills through case studies, independent study units and laboratory exercises.

Offering(s): First offering - for Conventional Program: Winter 2019 First offering - for Alternative Program: Summer 2020
Restriction(s): Registration in the Associate Diploma in Veterinary Technology Conventional or Alternative program.
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown

DVT*4090 Laboratory & Exotic Animal Science S,W (4-0) [0.50]

This course familiarizes students with the husbandry, handling and veterinary care of common nondomestic species in the research laboratory, veterinary clinic and natural environments. Regulations, ethics and protocols surrounding the use of animals within scientific research will be discussed.

Offering(s): First offering - for Conventional Program: Winter 2019 First offering - for Alternative Program: Summer 2020
Restriction(s): Registration in the Associate Diploma in Veterinary Technology Conventional or Alternative program.
Department(s): Dean's Office, Ontario Agricultural College
Location(s): Ridgetown