POPULATION MEDICINE

The Department of Population Medicine is an international leader in discovering and disseminating knowledge to optimize the health of animal and human populations in their environments. We embrace a holistic definition of health that includes physical health, welfare, and productivity of animals and the physical, mental, and social well-being of humans. We help students build foundational knowledge and skills while fostering continuous self-directed and collaborative learning and discovery. We answer the call of society for advice and action in our areas of expertise.

MSc, PhD and DVSc degrees are offered in the following fields:

- Epidemiology (MSc, PhD)
- Theriogenology (MSc, DVSc)
- Health Management (MSc, DVSc)
- Public Health (MSc, PhD)

The Department also offers a Master of Public Health (MPH) (calendar.uoguelph.ca/graduate-calendar/graduate-programs/public-health/) program.

Our research mission is to discover and disseminate knowledge regarding the management of health and productivity of animal populations, the health of human populations, and the interrelationships of animals with humans and the environment (i.e., One Health). In support of this mission we rely on a variety of quantitative and qualitative methods and knowledge synthesis tools to conduct observational studies, and clinical trials, simulation studies, and reviews of human and animal health research.

Our teaching/learning mission is to guide students as they obtain an essential knowledge base and develop the necessary communication, analytical and problem-solving skills to integrate and apply this knowledge; and to instill the appropriate attitudes and abilities required for life-long learning.

Administrative Staff

Chair
Todd Duffield (2536 Stewart Bldg., Ext. 54057) tduffiel@uoguelph.ca

Graduate Program Coordinator, Admissions and Administration
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Graduate Program Coordinator, Exams
Olaf Berke (Stewart Bldg. 2505B OVC, Ext. 58924) oberke@uoguelph.ca

Graduate Program Assistant
Kaite Brown (2509 Stewart Bldg., Ext. 54005) popmgrad@uoguelph.ca

Graduate Faculty

This list may include Regular Graduate Faculty, Associated Graduate Faculty and/or Graduate Faculty from other universities.

Cathy A. Bauman
DVM, MPH, PhD Guelph - Assistant Professor
Graduate Faculty

Olaf Berke

Dipl. Statistics, PhD Dortmund Germany - Associate Professor
Graduate Faculty

Theresa M. Bernardo
Assoc. of Music, DVM Guelph, M.Sc. Prince Edward Island - Contractually Limited Faculty, Population Medicine, University of Guelph
Associated Graduate Faculty

Colleen Best
B.Sc., DVM, PhD Guelph - Contractually Limited Faculty, Population Medicine, University of Guelph
Associated Graduate Faculty

Carolee Carson
B.Sc., DVM, PhD Guelph - Veterinary Epidemiologist, Public Health Agency of Canada
Associated Graduate Faculty

Tracey S. Chenier
DVM, D.V.Sc. Guelph, Dip ACT - Associate Professor
Graduate Faculty

Katie M. Clow
B.Sc., DVM, PhD Guelph - Assistant Professor
Graduate Faculty

Jason B. Coe
DVM, PhD Guelph - Associate Professor
Graduate Faculty

Ashlee Cunsolo
BA, M.Sc., PhD Guelph - Director, Labrador Institute of Memorial University
Associated Graduate Faculty

Catherine E. Dewey
DVM, M.Sc., PhD Guelph - Professor
Graduate Faculty

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Graduate Faculty

Jessica L. Gordon
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Graduate Faculty

Amy L. Greer
B.Sc., Mount Allison, M.Sc., Trent, PhD Arizona State - Associate Professor
Graduate Faculty

Michele T. Guerin
DVM, M.Sc., PhD Guelph - Associate Professor
Graduate Faculty

Derek B. Haley
BHK Windsor, M.Sc. Guelph, PhD Saskatchewan - Assistant Professor
Graduate Faculty

Sherilee L. Harper  
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University of Alberta  
Associated Graduate Faculty

Andria Q. Jones Bitton  
DVM, PhD Guelph - Associate Professor  
Graduate Faculty

David F. Kelton  
DVM, M.Sc., PhD Guelph, Dip ABVP - Professor  
Graduate Faculty

Deep K. Khosa  
B.Sc., D.V.Sc., PhD Murdoch - Assistant Professor  
Graduate Faculty

Stephen J. LeBlanc  
B.Sc. McGill, D.V.Sc. Guelph - Associate Professor  
Graduate Faculty

Scott A. McEwen  
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Graduate Faculty

Jennifer E. McWhirter  
B.Sc., PhD Waterloo - Assistant Professor  
Graduate Faculty

Paula I. Menzies  
DVM Guelph, MPVM California - University Professor Emeritus  
Associated Graduate Faculty

Victoria Ng  
B.Sc. New South Wales, PhD Australian National - Senior Scientific  
Evaluator, Public Health Agency of Canada  
Associated Graduate Faculty

Lee E. Niel  
B.Sc. Simon Fraser, PhD British Columbia - Assistant Professor  
Graduate Faculty

Terri L. O’Sullivan  
DVM, PhD Guelph - Assistant Professor  
Graduate Faculty

Andrew Papadopoulos  
B.A.Sc. Ryerson, MBA York, PhD Guelph - Associate Professor  
Graduate Faculty

Jane Parmley  
DVM Saskatchewan, PhD Guelph - Associate Professor  
Graduate Faculty

David L. Pearl  
B.Sc. McGill, M.Sc. York, DVM, PhD Guelph - Associate Professor  
Graduate Faculty

Peter W. Physick-Sheard  
B.V.Sc. Bristol, Dip Vet Surg, M.Sc. Guelph, FRCVS (UK) - Professor  
Emeritus  
Associated Graduate Faculty

Zvonimir Poljak  
DVM Croatia, M.Sc., PhD Guelph - Associate Professor  
Graduate Faculty

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B.Sc. Western Ontario, DVM, D.V.Sc. Guelph - Veterinary Epidemiologist,  
Public Health Agency of Canada  
Associated Graduate Faculty

David L. Renaud  
B.Sc., DVM, PhD Guelph - Assistant Professor  
Graduate Faculty

Jan M. Sargeant  
DVM, M.Sc., PhD Guelph - Professor  
Graduate Faculty

Lise Trotz-Williams  
BVetMed London, M.Sc. Liverpool, PhD Guelph - Epidemiologist,  
Wellington-Dufferin-Guelph Public Health  
Associated Graduate Faculty

Anita L. Tucker  
B.Sc., M.Sc., PhD Guelph - Assistant Professor  
Graduate Faculty

Jeffrey Wichtel  
B.V.Sc., PhD Massey - Professor and Dean, Ontario Veterinary College  
Graduate Faculty

MSc Program

The department offers:

MSc by thesis in the fields of:

1. Epidemiology;  
2. Theriogenology;  
3. Health Management; and  

MSc by course work and major research paper in the fields of:

1. Epidemiology; and  

Admission Requirements

Students admitted must have an honours or DVM degree (or its equivalent). In addition, the department considers the applicant’s special circumstances and the referees’ comments. Since the core of the MSc in Population Medicine in the fields of epidemiology or public health builds on knowledge of various analytic techniques, students entering the program should possess knowledge of basic statistical methods and their application.

All applicants should submit a one-page statement of research interests and career goals to assist in the identification of a faculty advisor who has the funding necessary to support the research. Students may be admitted into the Fall, Winter or Summer semesters.

Program Requirements

Students enroll in one of two study options:

1. thesis, or  
2. course work and major research paper.
Thesis
The prescribed studies are a minimum of four courses (at least 2.0 course credits) appropriate to the discipline. POPM*6200 Epidemiology I is a required course for students in epidemiology and public health; students in health management and theriogenology must take either POPM*6200 Epidemiology I or POPM*6230 Applied Clinical Research. A minimum of ‘B’ average is required in the prescribed studies. The department seminar course, POPM*6100 Seminar, is also required but does not count as one of the four courses. A thesis must be completed and successfully defended.

Course Work and Major Research Paper/Practicum
Epidemiology
For the MSc by course work and major research paper or practicum in the field of Epidemiology, no fewer than eight courses (at least 4.0 course credits) will be taken. These must be approved by the departmental Graduate Program Committee. Each student in the program will take three core courses (including POPM*6250 Project in Population Medicine or POPM*6260 Placement in Epidemiology, which is equivalent to two courses), and at least four additional courses. The department seminar course, POPM*6100 Seminar, is also required but does not count as one of the eight courses. Normally, the prescribed courses for the MSc in Population Medicine (Epidemiology) by course work and major research project or practicum will include:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>POPM*6200</td>
<td>Epidemiology I</td>
<td>0.50</td>
</tr>
<tr>
<td>POPM*6210</td>
<td>Epidemiology II</td>
<td>0.50</td>
</tr>
<tr>
<td>POPM*6250</td>
<td>Project in Population Medicine</td>
<td>1.00</td>
</tr>
<tr>
<td>OR</td>
<td>Placement in Epidemiology</td>
<td>1.00</td>
</tr>
<tr>
<td>POPM*6260</td>
<td>Project in Population Medicine</td>
<td>1.00</td>
</tr>
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Additional Courses
Select four courses. 1

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PABI*6550</td>
<td>Epidemiology of Zoonoses</td>
<td>0.50</td>
</tr>
<tr>
<td>POPM*6230</td>
<td>Applied Clinical Research</td>
<td>0.50</td>
</tr>
<tr>
<td>POPM*6290</td>
<td>Epidemiology III</td>
<td>0.50</td>
</tr>
<tr>
<td>POPM*6350</td>
<td>Safety of Foods of Animal Origins</td>
<td>0.50</td>
</tr>
<tr>
<td>POPM*6950</td>
<td>Directed Studies in Population Medicine</td>
<td>0.50</td>
</tr>
<tr>
<td>STAT*6920</td>
<td>Topics in Statistics</td>
<td>0.50</td>
</tr>
<tr>
<td>POPM*6520</td>
<td>Introduction to Epidemiological and Statistical Methods</td>
<td>0.50</td>
</tr>
<tr>
<td>POPM*6700</td>
<td>Swine Health Management</td>
<td>0.50</td>
</tr>
<tr>
<td>POPM*6400</td>
<td>Dairy Health Management</td>
<td>0.50</td>
</tr>
</tbody>
</table>

The four courses selected will depend upon the student’s background, specialty, interest and area of research. Additional courses other than those listed above may be deemed suitable for the student’s program by the Departmental Graduate Program Coordinator after recommendations are received from the Advisory Committee.

At least three semesters of full-time study will be required for completion of the MSc program by course work and major research paper option; two of these semesters must be at the University of Guelph. Normally, however, students take 4-5 semesters to complete the program.

Public Health
For the MSc by course work and major research paper in the field of Public Health, no fewer than eight courses (at least 4.0 course credits) will be taken. These must be approved by the departmental Graduate Program Committee. Each student in the program will take three core courses (including POPM*6250 Project in Population Medicine, which is equivalent to two courses), and at least four additional courses. The department seminar course, POPM*6100 Seminar, is also required but does not count as one of the eight courses. Normally, the prescribed courses for the MSc in Population Medicine (Public Health) by course work and major research project will include:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>POPM*6200</td>
<td>Epidemiology I</td>
<td>0.50</td>
</tr>
<tr>
<td>POPM*6550</td>
<td>Public Health Policy and Systems</td>
<td>0.50</td>
</tr>
<tr>
<td>POPM*6250</td>
<td>Project in Population Medicine</td>
<td>1.00</td>
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</table>

Additional Courses
Select four courses. 2

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PABI*6500</td>
<td>Infectious Diseases and Public Health</td>
<td>0.50</td>
</tr>
<tr>
<td>POPM*6210</td>
<td>Epidemiology II</td>
<td>0.50</td>
</tr>
<tr>
<td>POPM*6290</td>
<td>Epidemiology III</td>
<td>0.50</td>
</tr>
<tr>
<td>POPM*6510</td>
<td>Health Promotion</td>
<td>0.50</td>
</tr>
<tr>
<td>POPM*6540</td>
<td>Concepts in Environmental Public Health</td>
<td>0.50</td>
</tr>
<tr>
<td>POPM*6580</td>
<td>Public Health Leadership and Administration</td>
<td>0.50</td>
</tr>
<tr>
<td>POPM*6950</td>
<td>Directed Studies in Population Medicine</td>
<td>0.50</td>
</tr>
<tr>
<td>EDRD*6100</td>
<td>Disaster Planning and Management</td>
<td>0.50</td>
</tr>
<tr>
<td>POPM*6520</td>
<td>Introduction to Epidemiological and Statistical Methods</td>
<td>0.50</td>
</tr>
<tr>
<td>EDRD*6690</td>
<td>Program Evaluation</td>
<td>0.50</td>
</tr>
<tr>
<td>POPM*6600</td>
<td>Applied Public Health Research</td>
<td>0.50</td>
</tr>
</tbody>
</table>

The four courses selected in this category will depend upon the student’s background, specialty, interest and area of research. Additional courses other than those listed above may be deemed suitable for the student’s program by the Departmental Graduate Program Coordinator after recommendations are received from the Advisory Committee.

At least three semesters of full-time study will be required for completion of the MSc program by course work and major research paper option; two of these semesters must be at the University of Guelph. Normally, however, students take 4-5 semesters to complete the program.

PhD Program
Admission Requirements
A PhD program is offered in the fields of Epidemiology and Public Health. Admission into this program is usually granted to holders of an MSc or MPH degree who have demonstrated superior performance, or to master’s students who have not completed their program but wish to transfer to the PhD program and have performed exceptionally well in courses, shown exceptional aptitude and skill in research, and whose research is suitable for expansion to the doctoral level. For transfer, a thesis proposal and strongly supportive letters of reference are required. Infrequently, well qualified DVM or honours degree holders may be accepted directly into the PhD program.

All applicants should submit a one-page statement of research interests and career goals to assist in the identification of a faculty advisor who...
has the funding necessary to support the thesis research. Students may be admitted into the Fall, Winter or Summer semesters.

**Program Requirements**

The major emphasis in the PhD program is on the preparation of an acceptable thesis. There are no specific course requirements other than POPM*6100 Seminar which must be completed twice. However, PhD students who have taken the course or its equivalent previously as an MSc student will only be required to take the seminar course once. Students are also expected to have taken POPM*6200 Epidemiology I (F) and POPM*6210 Epidemiology II, or their equivalent, in their master's program. In addition, students in the Public Health field are expected to have taken POPM*6550 Public Health Policy and Systems or its equivalent. It is usual for students, in consultation with their advisory committee, to select a suitable program of prescribed studies and additional courses. Course selection takes into account the student's background, research area, career aspirations, and need to prepare for the qualifying examination.

Courses should normally be completed before the qualifying exam is attempted. The written component of the examination is followed by an oral component (two to four hours), usually one week later. Master's holders must complete the qualifying examination by the end of the fifth semester. Students transferring from their master's program and those who enter the program directly after their honours or DVM degrees (or their equivalents) must complete the examination by the end of the seventh semester. In addition, the advisory committee is required to confirm that the student has demonstrated ability and promise in research. The PhD program is completed by the successful defence of a thesis.

**DVSc Program**

The Department of Population Medicine participates in the DVSc program with recognized fields in health management and theriogenology. The normal basis for admission to DVSc studies as a regular or a provisional student is a DVM or equivalent degree that would allow the applicant to be eligible for licence to practice veterinary medicine in Ontario. The applicant must have achieved high academic standing as set out in the Admission Requirements in the DVSc program (calendar.uoguelph.ca/graduate-calendars/graduate-programs/veterinary-science/)

**Health Management**

Candidates must have a DVM or equivalent degree, appropriate clinical experience, cumulative average of at least a "B", and be licensed or eligible for licensing to practice veterinary medicine in Ontario. One position in ruminant health management and one position in swine health management are available during most academic years, and they normally start in May or September. It is a three-year program, which will provide training and experience in applied health management and clinical research. Approximately one-third of the time will involve clinical training, teaching final year veterinary students and service duties (including on-call), one-third course work and one-third research. Service duties in ruminant health management are with the Ruminant Field Service clinic of the Veterinary Teaching Hospital. In swine health management, clinical experience and advanced academic activities will be appropriate for a candidate preparing for board certification in Swine Health Management by the American Board of Veterinary Practitioners. The candidate will be required to complete a substantive thesis research project, related to an applied aspect of production medicine. The DVSc degree requirements include successful completion of 2.5 credits of prescribed graduate level courses, a qualifying examination in the student's discipline area, and a successful defence of a thesis. A faculty member(s) in the Department of Population Medicine will supervise each candidate for the Health Management DVSc position.

**Theriogenology**

The Department of Population Medicine offers the Doctor of Veterinary Science (DVSc) degree in the field of Theriogenology. Prerequisites include a DVM or equivalent degree, one or two years of practice experience/internship, cumulative average of at least a “B”, and eligibility for licensure to practice veterinary medicine in Ontario. The DVSc program provides rigorous advanced academic preparation in the discipline of Theriogenology with a view to preparation for Board Certification by the American College of Theriogenologists. The Theriogenology field at the Ontario Veterinary College is multi-species, with emphasis placed on a candidate’s specific areas of interest. The DVSc differs from PhD training by emphasizing the development of both research and applied clinical skills. It is a three-year program, with approximately one-third of the time involving clinical duties within the Veterinary Teaching Hospital, including assisting in teaching of final year veterinary students. The remainder of effort is directed towards a substantive thesis research project in Theriogenology and coursework. The DVSc degree requirements include successful completion of 2.5 credits of prescribed graduate level courses, a qualifying examination and successful defense of a thesis. A faculty member(s) in the Department of Population Medicine will supervise each candidate for the Theriogenology DVSc position.

**Interdepartmental Programs**

**Food Safety and Quality Assurance**

The Department of Population Medicine participates in the MSc program in food safety and quality assurance. Those faculty members whose research and teaching expertise includes aspects of food safety and quality assurance may serve as advisors for MSc students. Please consult the Food Safety and Quality Assurance (calendar.uoguelph.ca/graduate-calendar/graduate-programs/food-safety-quality-assurance/) listing for a detailed description of the MSc program.

**Collaborative Specializations**

**International Development Studies**

The Department of Population Medicine participates in the International Development Studies MSc course work/PhD collaborative specialization. Those faculty members whose research and teaching expertise includes aspects of international studies may serve as advisors for MSc course work/PhD in International Development Studies students. Please consult the International Development Studies (calendar.uoguelph.ca/graduate-calendar/collaborative-specializations/international-development-studies/) listing for a detailed description of the collaborative specialization.

**One Health**

The Department of Population Medicine participates in the collaborative specialization in One Health. Master’s and Doctoral students wishing to undertake thesis research or their major research paper/project with an emphasis on one health are eligible to apply to register concurrently in Population Medicine and the collaborative specialization. Students should consult the One Health (calendar.uoguelph.ca/graduate-calendar/collaborative-specializations/one-health/) listing for more information.
Neuroscience

The Department of Population Medicine participates in the Neuroscience MSc/PhD collaborative specialization. Those faculty members whose research and teaching expertise includes aspects of neuroscience may serve as advisors for MSc/PhD in Neuroscience students. Please consult the Neuroscience (calendar.uoguelph.ca/graduate-calendar/collaborative-specializations/neuroscience/) listing for a detailed description of the collaborative specialization.

Courses

POPM*6100 Seminar Fall Only [0.00]
A practical course that utilizes tutorials, workshops, self and peer reviewed assessment to help participants develop skills in public speaking and presentation of scientific data. Each student presents at least one seminar on an approved subject during the departmental seminar series.
Department(s): Department of Population Medicine
Location(s): Guelph

POPM*6200 Epidemiology I Fall Only [0.50]
This course covers concepts, principles and methods of basic and applied epidemiology, including the following topics: sampling, measuring disease frequency, clinical epidemiology, descriptive epidemiology, causal reasoning and design, interpretation and critical appraisal of surveys, observational studies, field trials, and critical appraisal.
Offering(s): Also offered through Distance Education format.
Restriction(s): Restricted to Public Health and Population Medicine students.
Department(s): Department of Population Medicine
Location(s): Guelph

POPM*6210 Epidemiology II Winter Only [0.50]
Advanced study design and analytic methods for the analysis of data from observational studies and surveys.
Department(s): Department of Population Medicine
Location(s): Guelph

POPM*6230 Applied Clinical Research Winter Only [0.50]
This course is designed to help clinical researchers design, fund, and analyze their clinical research. Emphasis is placed upon planning a well-designed clinical trial and writing a well-organized grant proposal.
Department(s): Department of Population Medicine
Location(s): Guelph

POPM*6250 Project in Population Medicine Summer, Fall, and Winter [1.00]
Collection and analysis of field data and the preparation of a written report suitable for publication, and oral presentation of the findings to the graduate faculty. This course is part of the MSc program by course work in population medicine.
Restriction(s): Restricted to coursework students in the MSc Population Medicine program.
Department(s): Department of Population Medicine
Location(s): Guelph

POPM*6260 Placement in Epidemiology Summer Only [1.00]
In this one-semester course, students apply skills and integrate knowledge gained via coursework in a workplace setting by actively conducting and managing clinical trial research. Over a 12- to 16-week period, students work at an academic institute, human or veterinary hospital, government organization or company routinely conducting clinical trial research. The course culminates in the completion of a major research project.
Restriction(s): Instructor’s signature.
Department(s): Population Medicine
Location(s): Guelph

POPM*6290 Epidemiology III Fall Only [0.50]
This course gives an overview of advanced methods for the analysis of data of clustered/correlated data as opposed to independent data. Special emphasis is on spatial, longitudinal, survival, and time series data.
Prerequisite(s): POPM*6210
Department(s): Department of Population Medicine
Location(s): Guelph

POPM*6350 Safety of Foods of Animal Origins Fall Only [0.50]
The detection, epidemiology, human health risk, and control of hazards in food of animal origin.
Offering(s): Offered through Distance Education format only.
Department(s): Department of Population Medicine
Location(s): Guelph

POPM*6400 Dairy Health Management Summer Only [0.50]
This course stresses a population-based, herd-level approach to dairy herd health management, in which optimizing the efficiency of the dairy enterprise is the overall goal. The biological and economic impacts of disease and management deficiencies on herd performance will be discussed as they relate to design and implementation of herd health programs. The course will emphasize the critical role of record keeping, data analysis and monitoring on program success.
Offering(s): Alternate years
Department(s): Department of Population Medicine
Location(s): Guelph

POPM*6510 Health Promotion Winter Only [0.50]
This course introduces students to health promotion and health behaviour theory and practice. Example topics include: social determinants of health, health promotion theories, health behaviour change, campaign planning, and social marketing. Students will apply their knowledge by creating a public health promotion campaign.
Department(s): Department of Population Medicine
Location(s): Guelph

POPM*6520 Introduction to Epidemiological and Statistical Methods Fall Only [0.50]
This is a 0.5 credit introductory graduate course for MPH students and students interested in epidemiology. The course will provide an introduction to research design, grant proposal writing, and critical appraisal, as well as survey (questionnaire) design and basic statistical methods for epidemiological studies.
Co-requisite(s): POPM*6200
Department(s): Department of Population Medicine
Location(s): Guelph
This course introduces communication theory, best practices, and skills related to public health. Students will learn about the written, oral, and visual communication of health information for professional, peer, and lay audiences. Students will apply their knowledge by creating a portfolio of health communication materials.

**Restriction(s):** Restricted to Public Health students.

**Department(s):** Department of Population Medicine

**Location(s):** Guelph

**POPM*6540 Concepts in Environmental Public Health Winter Only** [0.50] This course covers the main concepts of environmental public health including basic elements of environmental toxicology, risk analysis, air and water quality, food safety, waste, occupational health and eco health.

**Department(s):** Department of Population Medicine

**Location(s):** Guelph

**POPM*6550 Public Health Policy and Systems Winter Only** [0.50] This course covers concepts and principles of public health policy and systems including: public health systems, their structure, funding and governance and their integration into the healthcare system; evolution of public health policy; models of policy development and analysis; stakeholder analysis; and, public health ethics.

**Department(s):** Department of Population Medicine

**Location(s):** Guelph

**POPM*6560 Public Health Practicum Unscheduled** [1.00] In this 1.0 credit course, students will synthesize theoretical concepts, learned via prior coursework, with public health practice. Students will work in a host public health agency for a 12- to 16-week period, focusing on a major project of significance to the host organization.

**Prerequisite(s):** POPM*6560

**Restriction(s):** Restricted to Public Health students.

**Department(s):** Department of Population Medicine

**Location(s):** Guelph

**POPM*6570 Public Health Capstone Fall Only** [0.00] This course serves as a capstone for students in the Master of Public Health program to reflect on, interpret, and present their practicum work in a variety of formats, including public presentation, to enhance their communication skills and abilities.

**Prerequisite(s):** POPM*6560

**Restriction(s):** Restricted to Public Health students.

**Department(s):** Department of Population Medicine

**Location(s):** Guelph

**POPM*6580 Public Health Leadership and Administration Fall Only** [0.50] This course will teach students to develop, implement and improve public health programs. Understanding an organization’s mission and priorities, and developing business plans is critical for an effective administrator. Furthermore, it introduces theories and effective components of leadership and describes the practical role of the leader.

**Department(s):** Department of Population Medicine

**Location(s):** Guelph

**POPM*6590 Public Health Practicum II Winter Only** [1.00] This course allows students in the Master of Public Health program to undertake an optional second practicum experience. They will work in a host public health organization or agency for a 12- to 16-week period, focusing on a major project of significance to the host organization.

**Prerequisite(s):** POPM*6560

**Restriction(s):** Restricted to Public Health students.

**Department(s):** Department of Population Medicine

**Location(s):** Guelph

**POPM*6600 Applied Public Health Research Summer, Fall, and Winter** [0.50] Students will undertake a supervised research project on a public health issue or problem. The project will involve analysis and interpretation of public health information and the findings will be presented in a written report.

**Prerequisite(s):** POPM*6560

**Restriction(s):** Restricted to Public Health students.

**Department(s):** Department of Population Medicine

**Location(s):** Guelph

**POPM*6610 Theriogenology of Cattle** [0.50] A lecture/seminar course emphasizing the relationship of nutritional, genetic, endocrine, anatomical, and environmental factors with the reproductive health of cattle. Application of reproductive technologies will also be covered.

**Offering(s):** Alternate years

**Department(s):** Department of Population Medicine

**Location(s):** Guelph

**POPM*6630 Theriogenology of Horses** [0.50] A lecture/seminar course covering the genetic, endocrine, anatomical and environmental factors that affect reproductive performance and health of horses. Breeding management, including recent technologies, and management of the infertile animal will be included.

**Offering(s):** Alternate years

**Department(s):** Department of Population Medicine

**Location(s):** Guelph

**POPM*6650 Theriogenology of Dogs and Cats** [0.50] A seminar/lecture series that includes the theory and management of clinical reproduction for the dog and cat, including use of developing technologies.

**Offering(s):** Alternate years

**Department(s):** Department of Population Medicine

**Location(s):** Guelph

**POPM*6670 Theriogenology of Small Ruminants** [0.50] A seminar/laboratory course emphasizing advanced reproductive management of sheep, goats and farmed deer/elk, with the emphasis on a sheep production model. New reproductive technologies will be included.

**Offering(s):** Alternate years

**Department(s):** Department of Population Medicine

**Location(s):** Guelph

**POPM*6700 Swine Health Management** [0.50] Diseases of swine are studied with particular emphasis on preventive medicine and herd-health management.

**Offering(s):** Alternate years

**Department(s):** Department of Population Medicine

**Location(s):** Guelph
POPM*6800  Infectious Disease Modeling  Winter Only  [0.50]
This course serves as a basic introduction to mathematical modeling of infectious diseases using examples from public and veterinary health. Students completing this course will have the ability to critically appraise published mathematical models, and to build, parameterize, and analyze simple compartmental models.
Prerequisite(s): POPM*6200
Restriction(s): Instructor consent required.
Department(s): Department of Population Medicine
Location(s): Guelph

POPM*6950  Directed Studies in Population Medicine  Unspecified  [0.50]
Assigned reading and/or special projects selected to provide in-depth study of topics appropriate to the specialized interests of individual students. Courses offered under this title have included Special Topics in Public Health; Ecology and Health; Systems Approaches; and Animal Welfare. Different offerings are assigned different section numbers.
Department(s): Department of Population Medicine
Location(s): Guelph

POPM*6960  Systematic Reviews and Meta-Analysis  Winter Only  [0.50]
This course covers the use of systematic reviews in animal and public health, the steps in conducting a systematic review, and quantitative synthesis of research results from multiple studies (meta-analysis). The course combines didactic lectures and videos with practical exercises during class time.
Prerequisite(s): POPM*6200 and POPM*6520
Department(s): Department of Population Medicine
Location(s): Guelph