### POPULATION MEDICINE (POPM)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Offering(s)</th>
<th>Prerequisite(s)</th>
<th>Department(s)</th>
<th>Location(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>POPM*6100</td>
<td>Seminar</td>
<td>Fall Only</td>
<td></td>
<td>Department of Population Medicine</td>
<td>Guelph</td>
</tr>
<tr>
<td>POPM*6200</td>
<td>Epidemiology I</td>
<td>Fall Only</td>
<td></td>
<td>Department of Population Medicine</td>
<td>Guelph</td>
</tr>
<tr>
<td>POPM*6210</td>
<td>Epidemiology II</td>
<td>Winter Only</td>
<td></td>
<td>Department of Population Medicine</td>
<td>Guelph</td>
</tr>
<tr>
<td>POPM*6230</td>
<td>Applied Clinical Research</td>
<td>Winter Only</td>
<td></td>
<td>Department of Population Medicine</td>
<td>Guelph</td>
</tr>
<tr>
<td>POPM*6250</td>
<td>Project in Population Medicine</td>
<td>Summer, Fall, and Winter</td>
<td></td>
<td>Department of Population Medicine</td>
<td>Guelph</td>
</tr>
<tr>
<td>POPM*6260</td>
<td>Placement in Epidemiology</td>
<td>Summer Only</td>
<td></td>
<td>Department of Population Medicine</td>
<td>Guelph</td>
</tr>
<tr>
<td>POPM*6290</td>
<td>Epidemiology III</td>
<td>Fall Only</td>
<td></td>
<td>Department of Population Medicine</td>
<td>Guelph</td>
</tr>
<tr>
<td>POPM*6350</td>
<td>Safety of Foods of Animal Origins</td>
<td>Fall Only</td>
<td></td>
<td>Department of Population Medicine</td>
<td>Guelph</td>
</tr>
<tr>
<td>POPM*6400</td>
<td>Dairy Health Management</td>
<td>Summer Only</td>
<td></td>
<td>Department of Population Medicine</td>
<td>Guelph</td>
</tr>
<tr>
<td>POPM*6510</td>
<td>Health Promotion</td>
<td>Winter Only</td>
<td></td>
<td>Department of Population Medicine</td>
<td>Guelph</td>
</tr>
<tr>
<td>POPM*6520</td>
<td>Introduction to Epidemiological and Statistical Methods</td>
<td>Fall Only</td>
<td></td>
<td>Department of Population Medicine</td>
<td>Guelph</td>
</tr>
<tr>
<td>POPM*6530</td>
<td>Health Communication</td>
<td>Fall Only</td>
<td></td>
<td>Department of Population Medicine</td>
<td>Guelph</td>
</tr>
<tr>
<td>POPM*6540</td>
<td>Concepts in Environmental Public Health</td>
<td>Winter Only</td>
<td></td>
<td>Department of Population Medicine</td>
<td>Guelph</td>
</tr>
</tbody>
</table>

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.

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.

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.

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.

This course introduces students to epidemiology and descriptive epidemiology, causal reasoning and design, interpretation and critical appraisal of surveys, observational studies, field trials, and critical appraisal.

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.

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.

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.

This course introduces students to environmental public health including basic elements of environmental toxicology, risk analysis, air and water quality, food safety, waste, occupational health and eco health.
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 Unspecified [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*6200, POPM*6510, POPM*6520, POPM*6530, POPM*6540, and POPM*6550
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 Unspecified [0.50]
A lecture/seminar course emphasizing the relationship of nutritional, genetic, endocrine, anatomic, 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 Unspecified [0.50]
A lecture/seminar course covering the genetic, endocrine, anatomic 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 Unspecified [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 Unspecified [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 Unspecified [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