Applied Biological Safety Course
University of Manitoba, Department of Microbiology
Interdisciplinary Undergraduate Course, 3 Credits,

Contact:
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Applied Biological Safety Course:

This course is designed to meet the needs of Microbiology undergraduate students for a comprehensive overview in the historical, theoretical, and practical aspects of applied biological safety in research and industrial environments. The course consists of lectures and practical hands-on components (dependent on class size).

The lecture component of this course will include topics in:
- Principles of containment laboratories
- Select agents
- History of Infectious disease
- Diagnostic evaluation of infectious disease
- Applied biosafety research principles
- Research principles for Biosafety
- Containing infectious disease outbreaks
- Biological safety principles
- History of Argo/Bioterrorism

Course Components:

Classes will consist of lectures and hands-on work (dependant on class size) or demonstrations using biological safety equipment. Each participant will be part of a group project on either practical or theoretical aspects of applied biosafety principles; or an assignment covering theoretical aspects of applied biosafety principles. All Exams will be long answer
Proposed Objectives:

1. To provide a comprehensive overview of select agents, infectious diseases, applied biosafety research, and containment laboratory issues.
2. To understand the underlying causes of laboratory acquired infections, the need for a safety program and the administrative, engineering controls and personal protective equipment measures available to maintain biological safety.
3. To provide a better understanding of current and new technologies and procedures used for decontamination in the laboratory environment.
4. To provide the students with the opportunity to learn about alternative career choices in the area of health and safety.

Course breakdown

<table>
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<tr>
<th>Course</th>
<th>Date</th>
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<tbody>
<tr>
<td>Group project/Assignment</td>
<td>25% TBA</td>
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<tr>
<td>Midterm</td>
<td>25% TBA (In Class)</td>
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<tr>
<td>Final exam</td>
<td>50% TBA</td>
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Guidelines:

3. Laboratory Biosafety Guidelines, Health Canada, 1990

Textbooks: