CLASS DESCRIPTION FORM

CL914 Infection and Vector Control

**Class Registrar:** Dr Tara K. Beattie  
**Taught To (Course):** MSc Environmental Health

**Other Lecturers Involved:** Invited Lecturers  
**Credit Weighting:** 10  
**Semester:** 1

**Assumed Prerequisites:** None  
**Compulsory/optional/elective class**  
**Academic Level:** 5

Class Format and Delivery (hours):

<table>
<thead>
<tr>
<th>Lecture</th>
<th>Tutorial</th>
<th>Laboratory</th>
<th>Project</th>
<th>Assignments</th>
<th>Private Study</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td>20</td>
<td>60</td>
<td>20</td>
<td>60</td>
<td>100</td>
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</tbody>
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**Educational Aim**

To give the student an understanding of the common vectors of disease, infections and the principles of control.

**Learning Outcomes**

On completion of the class the student is expected to be able to:

- **LO1** recognise common vectors of disease,
- **LO2** understand the public health and financial significance of disease vectors
- **LO3** understand the concept of control and management of vectors

**Syllabus**

The class will teach the following:

- Introduction to Pest Control - significance, disease, pest control and management, influencing factors, risk assessment.
- Integrated pest management, building design & pest proofing, house keeping, environmental management,
- Control methods – non-chemical, chemical
- Rodents - species, anatomy, physiology, significance and infection, evidence of infestation, control of rodents – rodenticides, treatment.
- Insects - need for control, insect structure, reproduction, growth, functionality
- Flying & crawling insects, cockroaches, bedbugs, stored product pests - anatomy, physiology, life cycle, medical significance, control measures, treatment
- Control of Insects - mechanical, physical and biological measures; insecticide usage; insecticide groups and formulation, general precautions in the use of insecticide formulations.
- Insecticides - history, types, application, formulations.
- Pesticides - storage criteria, safe use of pesticide for non-agricultural purposes, risk assessment, exposure control.
- Birds - species, health hazards, infestations, types and systems of bird control.
- Range of pest, types of pest control, identifying infestations, pest control contractors.
- Other Pests - Nuisance pests - moles, cats, bats, foxes, rabbits; control.
- PPE, pest control contracts, staff awareness and training, reporting and record keeping, inspections
- Invited Presentation from Professional Body/Industry

**Assessment of Learning Outcomes**

Criteria

**Part A – Pest Control**

- **LO1** Recognise common vectors of disease,
  - C1 Identify various vectors of disease, e.g. rats, cockroaches

- **LO2** Understand the public health and financial significance of disease vectors
  - C1 be familiar with diseases caused by common pest species
  - C2 be familiar with problems associated with common vector species, e.g. structural damage, loss of reputation, environmental degradation

- **LO3** Understand the concept of control and management of vectors
  - C1 familiarity with integrated pest management, ERD (exclusion, restriction, destruction) and the importance of
proofing and housekeeping,
C2 familiarity with use of non-chemical and chemical pest control methods

The standards set for each criterion per Class Learning Outcome to achieve a pass grade are indicated on the assessment sheet for all assessment.

12 Principles of Assessment and Feedback
(on Learning & Teaching web pages: www.strath.ac.uk/learnteach/teaching/staff/assessfeedback/12principles/)

Please state briefly how these are incorporated in this class

Students are given simple and clear guidance on performance criteria by reference to the University Guidance on Marking for Undergraduate Courses

Marking criteria are also outlined clearly in the assignment handout and opportunities for clarification are available in class. Expectations in terms of time and effort are communicated via weightings for each assignment. A range of formative and summative assessment methods are used to provide feedback to students, including assignments, group and/or individual presentations. Feedback sheets provide information allowing students to compare their work to the expectations for each assignment and reflect on improvements for future work. Generic feedback is shared with the whole class, to complement individual feedback for each student. The generic feedback is particularly useful inasmuch as any common or recurring difficulties experienced by many in the class could suggest ways in which teaching and guidance could be improved. The individual feedback is directed at how each student can improve. Opportunities are provided to students to close gaps between current and desired performance by the prompt return of feedback on early formative assignments. Formative and summative assessments are aligned by giving students opportunities to gain practice on material that may formally be assessed. Students are given opportunities to engage in optional (research-led) assignments which only count if the contribution of this additional work adds to the student’s overall class mark. This encourages more able students to try to achieve higher overall marks by taking their learning to a more advanced level, while at the same time avoiding overly penalising overloaded and/or less-able students who may be overwhelmed by the additional workload.

Assessment Method(s) Including Percentage Breakdown and Duration of Exams – Part A pest Control

<table>
<thead>
<tr>
<th>L/Outcomes</th>
<th>Examinations</th>
<th>Courseworks</th>
<th>Projects</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Duration</td>
<td>Weighting</td>
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<tr>
<td>LO1, LO2, LO3</td>
<td>1</td>
<td>2 hours</td>
<td>70%</td>
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Indicate which learning outcomes (LO1, LO2 etc) are to be assessed by exam/coursework/project as required.

Coursework / Submissions deadlines:
Semester 1 Week 7 Class test
Semester 1 Week 11 Written assignment

Resit Assessment Procedures:
Resit Examination in August (100%)

PLEASE NOTE:
Students need to gain a summative mark of 50% to pass the class. Students who fail the class at the first attempt will be re-examined during the August diet. This re-examination will consist entirely of exam / coursework as determined by the class registrar.

Recommended Reading

- Killgerm Training Manual

Additional Student Feedback
(Please specify details of when additional feedback will be provided)

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<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Room No</th>
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<tbody>
<tr>
<td>Various TBC</td>
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Session: 2013-14

Approved:

<table>
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<th>Course Director Signature:</th>
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Date of Last Modifications: September 2013

(Updated November 2010)
**CLASS TIMETABLE**

**Class Code:** CL914  
**Class Title:** Infection and Vector Control

**Brief Description of Assessment:**
Class test (7.5%) – 20 MCQs and 15 SAQ  
Assignment (7.5%) – 1500 word essay, choice of topics  
Examination (35%) – 1st Diet Exam in January where students are required to answer three out of five questions in a 2-hour examination

**Assessment Timing:**
Indicate on the table below the Start/Submission dates for each Assignment/Project and the timing of each Exam/Class Test(s).

<table>
<thead>
<tr>
<th>Semester One</th>
<th>WK1</th>
<th>WK2</th>
<th>WK3</th>
<th>WK4</th>
<th>WK5</th>
<th>WK6</th>
<th>WK7</th>
<th>WK8</th>
<th>WK9</th>
<th>WK10</th>
<th>WK11</th>
<th>WK12</th>
<th>Exam Period</th>
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<td></td>
<td></td>
<td>Class test</td>
<td>Feedback</td>
<td>Assign</td>
<td>Assign</td>
<td>2-hour</td>
<td>January</td>
<td>2-hour exam</td>
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