

**POSTGRADUATE DIPLOMA IN PESTICIDE RISK MANAGEMENT (DPRM)
(MG021)**

PROGRAMME BROCHURE 2016/2017

Division of Environmental Health

School of Public Health and Family Medicine
[\(<http://www.health.uct.ac.za/fhs/departments/publichealth>\)](http://www.health.uct.ac.za/fhs/departments/publichealth)

Faculty of Health Sciences

University of Cape Town



DEADLINE FOR APPLICATIONS: 30 September 2015

COURSE COMMENCES: February/March 2016

DIPLOMA IN PESTICIDE RISK MANAGEMENT (DPRM) (MG021)

PROGRAMME BROCHURE 2016/17

**Division of Environmental Health
School of Public Health and Family Medicine, Faculty of Health Sciences
University of Cape Town (UCT)**

Programme Convenor:

A/Prof. H-Andrea Rother, Ph.D.

Collaborating Institutions:

United Nations Food and Agricultural Organization (FAO) Swedish Chemical Agency (KemI)

Programme Administrator:

Tel: +27 21 404 7661 / Email: dprm@uct.ac.za

CONTENTS	PAGE
INTRODUCTION	4
1. PROGRAMME OBJECTIVES	4
2. CURRICULUM REQUIREMENTS AND ORGANISATION	5
3. GENERAL INFORMATION	9
4. PROGRAMME CONTENT	11
4.1 CORE COURSES	11
4.1.1 Pesticide Risk Management (PPH4033F/S)	11
4.1.2 Health and Safety Management (PPH4034F/S)	12
4.1.3 Management of Environmental Risk (PPH4035F/S)	12
4.1.4 Alternatives and Risk Reduction Strategies (PPH4051F/S)	13
4.2 ELECTIVE COURSES	13
4.2.1 Containers & Contaminated Site Management (PPH4040F/S)	13
4.2.2 Chemical Conventions (PPH4041F/S)	14
4.2.3 Public Health and Pesticides (PPH4042F/S)	14
5. KEY EXIT COMPETENCIES	14
6. APPLICATION CHECKLIST	15

INTRODUCTION

This brochure provides the detail needed to assist prospective candidates in deciding whether the **Postgraduate Diploma in Pesticide Risk Management** (DPRM) programme suits their needs. Students interested in applying for this course should send an email for instructions to: dprm@uct.ac.za

Students need to apply on-line at: <http://applyonline.uct.ac.za>. General information about the University of Cape Town (UCT) is available at: www.uct.ac.za.

The DPRM programme is structured around the International Code of Conduct on Pesticide Management (the Code - <http://www.fao.org/agriculture/crops/thematic-sitemap/theme/pests/code/en/>) published by **Food and Agriculture Organisation of the United Nations (FAO) and World Health Organisation of the United Nations (WHO)**. The Code offers a holistic and comprehensive guideline for managing all aspects related to pesticides and the DPRM focuses on implementation of the Code particularly for pesticide risk managers and those involved in pesticide risk reduction in developing countries and countries in transition.

The DPRM is a two-year part-time flexible learning programme with a substantial distance learning component using internet based educational technology. **It includes a mandatory two-week residential session at UCT at the beginning of the two-year cycle.** There will be substantial requirements for homework in the form of assignments and project related work, expected self-directed learning and regular distance communication between students and lecturers extending over the two years.

1. PROGRAMME OBJECTIVES

1.1. Pesticide Risk Management

The primary purpose of this qualification is to strengthen regulators and others in their ability and capacity to effectively manage, regulate and reduce pesticide risks as no one discipline covers all the facets of pesticide regulation and management in line with the Code. Therefore, this programme will be multi- and interdisciplinary in its content in order to provide students with the skills and knowledge required for managing and reducing pesticide risks, particularly in difficult pesticide use environments found in developing countries and economies in transition.

Intense global use of pesticides poses a high risk of acute and chronic health effects to the general public and workers, as well as environmental contamination. Key role players in regulating, managing and reducing pesticide risks in African and other developing countries lack the capacity to adequately and effectively regulate and manage pesticides as their training does not cover all of the technical and social aspects required. Some of the consequences of not having specialized training on pesticide risk management for regulators and others, are that workers and vulnerable groups (children, women, immune deficient) are poisoned and/or have long term health effects, the environment is polluted from uncontrolled use and improper disposal, and highly toxic pesticides are used rather than substituted with less toxic alternatives.

Currently, key role players in pesticide risk management in Africa and other developing countries do not have access to postgraduate courses on pesticide risk management that addresses the principal areas covered by the Code.

1.1. Target candidates

The DPRM is **aimed primarily at regulators of pesticides**, inspectors (health, labour, customs and environment), public health pest control managers, disposal and waste management managers, but is also suited for academics, researchers, NGO and United Nations staff and others working in the field of pesticide/chemicals management.

Places are available to students from other countries, particularly in Africa and other developing countries.

Individual courses will be open, subject to any limitation on numbers, to candidates from other postgraduate degrees at UCT and to individuals interested in single semester courses not for degree purposes.

Individuals wishing to complete only one course and not the whole programme may register as an **occasional student**. (<https://www.uct.ac.za/apply/applications/affiliated/occasional/>).

A successfully completed course can be used to fulfil requirements in future should the individual apply to the full programme. Occasional students need to meet the same entry requirements as full programme applicants.

2. CURRICULUM REQUIREMENTS AND ORGANISATION

2.1. Time commitment

This programme is a two-year part-time flexible learning programme with a substantial distance learning component using internet based educational technology. Students should put in at least half an hour a day.

2.2. Entry requirements

- An approved undergraduate degree in agriculture, health, toxicology, chemistry, social science or other relevant field from this University or from another university recognized by the Senate for this purpose.
- Experience in any relevant pesticide, pest or pesticide/chemicals management field; applicants must submit a letter of motivation highlighting these skills and current employment
- Demonstrated fluency in written and spoken English (TOEFL required where appropriate)
- Reliable and continuous computer connectivity; applicants are required to complete Vula exercises to demonstrate their connectivity
- Demonstrated computer literacy; applicants are required to complete Vula tests
- Proven ability in writing technical reports and assessments
- Numeracy literacy (applicants will be required to write a numeracy test), and
- Completion of a chemistry foundation course; applicants will be required to write a chemistry test

2.3. Programme structure

Each student is required to complete **four core courses** and **two electives**. All students must successfully complete the four core courses before completing two electives of their choice. Each course is worth **20 Higher Education Qualifications Framework (HEQF) credits** and students are required to complete a **total of 120 HEQF credits**.

Each course has a theme around which the inputs are organised in relation to aspects of the Code. Teaching inputs are intended to be non-didactic, and to allow student participation

wherever possible. Candidates are expected to undertake substantial homework preparation and activities, as well as self-directed learning. They will be expected to read widely and intensively around topics of the programme, and to contribute to teaching inputs themselves either directly or by way of specially structured interactive debates and discussions in an on-line chat room forum, as well as through posting discussions on-line. The content of these activities will include critical appraisal of the elements of the Code, implementation of the Code; literature on pest and pesticide management, toxicological risk assessment, environmental and impact risk assessment, pesticide policy and politics, international conventions, and the life-cycle analysis; project work, presentations by students as well as assignments relating to the theme of each session within courses.

Practical activities on addressing pesticide occupational and environmental health problems, environmental contamination, management of stockpiles, etc, will take the form of assignments for each course within each course. These assignments are designed to equip candidates with the capacity to implement the Code, pesticide risk management and risk reduction strategies relevant for developing country contexts through exercises, for example, such as developing a needs assessment, health risk assessment, ecotoxicology risk assessment, gap/situation analysis and a stocks/container management inventory.

Final examinations will comprise four written papers covering core modular material. Examinations are open book and count for 40% of the final marks. The rest of the marks arise from continuous assessment by way of assignments tests and student contribution to asynchronous and synchronous learning activities.

2.4. Computer hardware, software and skills required of students

As this course contains a substantial component of online and self-directed learning, it is imperative that the applicant understands the requirements for computer hardware, computer software, computer skills, time spent working on the course while off campus and student participation expectations if accepted into the course.

In short, candidates should have good and easy access to a reliable computer, and have familiarity and facility with computers, email, the internet and the software below.

2.4.1 Computer Hardware Specifications Requirements

- a Windows XP or VISTA or Apple MAC operating system
- At least 1GB RAM and 2GHz processor speed (otherwise pages could be slow to load)
- Sound card with microphone and speakers/headphones
- 48 x CD ROM drive
- Screen resolution should be at least 800x600 and set to a colour depth of at least "High Colour (16 bit)"

2.4.2 Computer software Specifications:

- Microsoft Office software including:
 - Word
 - Excel
 - PowerPoint
- Outlook express or equivalent email handling software
- At least Internet Explorer version 8
- Windows Media Player to run some of the interactive materials
- Have fast broadband access and connectivity to the Internet either at home or at work,

preferably both.

2.4.3 Other computer skills

Students should be able to **type** at a speed of at least 15 words a minute, and if not be prepared to either learn to touch-type (software available to learn on your own computer) or to obtain voice recognition typing software.

2.4.4 Important computer information for Students

- Candidates will have to bear Internet Service Provider subscription costs in order to participate meaningfully in the web based distance learning programme (an online learning environment called VULA) in order to view learning materials, to download these for printing, to participate in asynchronous bulletin board discussions, synchronous chat groups, and to do exercises and online tests from time to time. There will however be savings to students as a result of decreased face to face time in Cape Town which will offset any (smaller) costs of increased internet connect time and printing at home.
- Prospective candidates will have to undergo **tests** which will establish whether they are able to meet all the necessary hardware and software requirements to enable participation in the distance learning aspects of the course. If these are failed, they will be encouraged to upgrade hardware and software and/or learn the necessary computer skills that will be required to enable participation in the distance learning aspects of the course. If the test is not passed and it is not possible to upgrade hardware, software or improve computer skills, it will not be possible to be accepted into the course.

2.5. Assessment of student performance

Formative assessments count 50% and summative assessments 50% of the final course mark. The pass mark for each course is 50%. Candidates are assessed continuously through their active participation (this will be monitored), assignments and examination. As sub-minima, a candidate is required to obtain an overall mark of 45% in semester work assessments, at least 45% in the examination, and at least 33% for participation.

2.5.1 Distinction

The Diploma may be awarded with distinction to candidates who average 75% or above for all courses including the integrated assessment, with not less than 70% for any course, subject to all courses being passed in first attempt.

2.5.2 Minimum requirements for progression and re-registration

A student who fails to meet the following minimum requirements may be refused permission to renew his/her registration for the Diploma (students are required to pass a course with a minimum of 50% before proceeding to the next course):

- a) In each year of study, the student shall pass, with a minimum of 50%, at least half of the courses registered, with the exception of the final year of study, in which the student will be expected to complete the requirements for the Diploma.
- b) Students may be allowed to repeat a course they have failed once, at the convener's discretion. Where a candidate fails any course twice, or fails more than one course,

a recommendation may be made to the Faculty Examinations Committee to refuse readmission.

- c) The student must be able to complete all requirements for the Diploma within three years.
- d) Students shall complete the core courses before progressing to the elective courses.

The programme convener will consider deviations on a case-by-case basis.

2.6. Programme Rules

2.6.1 Entry

- All participants, including non-degree candidates, or candidates for other UCT degrees, must register and pay fees.
- *People may not “audit” courses, i.e. may not “sit in” for non-examination purposes.*
- Participation by non-degree candidates (i.e., occasional students) or candidates for other UCT degrees must be approved in advance by the programme convener, via an application to the administrator. These participants must register and will be billed.

2.6.2 Attendance/on-line participation

As this course contains a substantial component of distance and self-directed learning, it is imperative that students understand the time and participation requirements that will be expected of them. These include:

- Following a set timetable for course preparation by timeously reading materials provided, conducting self-directed learning activities by going beyond the materials provided, and diligent application to the various exercises, tests and project related work that constitutes the course
- Daily accessing (approximately 30 minutes per day) and participating in the UCT VULA online learning environment is required for asynchronous (writing and reading FORUM messages) and synchronous (chat room discussions) learning activities. Turnaround times for email should be not greater than 24 hours and on-line participation is monitored by the course convener, as well as graded.
- Attending the initial two-week session at the Health Sciences Faculty at UCT in Cape Town is compulsory.

2.6.3 Communication

- As the primary communication between students, course convener and section lecturers is through e-mail and Vula it is essential that students ensure the course administrator has the student's current contact details (e-mail and phone) during the full time they are registered as a student. *Skype appointments are also available.*

2.6.4 Assignments and Tests

- There are several assignments, quizzes and tests per course.
- Hand-in deadlines are specified in advanced and late assignments will incur a deduction from the final grade.

2.6.5 Plagiarism

- The University has strict rules against plagiarism (i.e. presenting the work of others, including fellow students, as one's own without acknowledgement).
http://www.uct.ac.za/downloads/uct.ac.za/about/policies/plagiarism_students.pdf
- Candidates will be expected to submit signed declarations with all written work.
- Plagiarised work will earn zero credit, and the student will be reported via the University disciplinary process.

2.6.6 Summarised University Language policy

[\(http://www.uct.ac.za/apply/intlapplicants/degree/applications/language/\)](http://www.uct.ac.za/apply/intlapplicants/degree/applications/language/)

- a recent score (obtained within 3—5 years before application for
- admission) of at least 570 (paper-based test) or 230 (computer-based test) on the Test of English as a Foreign Language (TOEFL);
- a recent overall band score of 7.0 (with no individual element of the test scoring below 6.0) on the International English Language Testing System (IELTS); or, noting that this may only be written at certain designated venues within South Africa, a score of at least 65% on the University's Placement Test in English for Educational Purposes (PTEEP).

2.6.7 The Writing Centre

The Writing Centre at UCT which forms part of the Language Development Group in the Academic Development Programme (Centre for Higher Education Development) offers students assistance with academic writing. Please visit their website: <http://www.writingcentre.uct.ac.za/> Candidates may be referred to the Writing Centre by staff on the basis of performance in written work during the programme. One-on-one consultation sessions with the writing centre staff can also be booked by logging in with your student number to <https://uct.mywconline.com/>

2.6.8 Leave

Notice to Leave: Withdrawal of Registration

Students or their parents or guardians must give notice of intention to discontinue studies in writing by completing the Cancellation of Registration Form and submitting this to the Health Sciences Faculty Office **by registered mail**.

Leave of absence:

Any candidate seeking to break registration must apply for leave of absence in advance to the faculty officer and the programme convenor. This application must be motivated and if accepted will be granted for one year only. Retrospective leave of absence is not granted. In such cases, full payment of fees for any "missed year" is required before re-registration.

3. GENERAL INFORMATION

3.1. Fees (See: <http://www.uct.ac.za/apply/fees/>)

The University's course-based fee structures will enable students to calculate the cost of their academic studies at UCT in 2016 based on 2015 fees (there will be a fee increase of less than 10% so this is just an estimate). Students can use the course codes listed in this brochure to look up the all-inclusive cost of the degree in the 2016 fees booklet. (See: <http://www.uct.ac.za/apply/fees/>) The sum of these costs will give the total

cost for the set of chosen courses.

SADC students are required to pay a Non-refundable administrative service fee of R3 500 for 2016. See:

<http://www.uct.ac.za/usr/finance/fees/2016dates.pdf>

Proforma invoices can also be requested for an estimate of the total cost of the course fees by completing the following:

<http://www.uct.ac.za/usr/finance/fees/feeforms/fee09proform.pdf>

Non-SADC international students will be billed in South African Rand. An ‘out-of-state’ or ‘international levy’ called the International Term Fee, will be charged in addition to the individual fees. Both the International Term Fee plus the individual course based fees must be paid prior to registration. An international student is someone who requires a study permit.

All students from outside South Africa and other SADC countries should refer to fees for international students. Visit <http://www.iapo.uct.ac.za> for more information.

Total Course fees

Please note the fees in the table 1 are for 2015. An increase of approximate 10% for 2016 should be added.

Table 1: Example of DPRM Fees

Student Category	Tuition: Courses <i>Year 1</i> (3 courses X ZAR6190)	Tuition: Courses <i>Year 2</i> (3 Courses + 1 Assessment)	International Admin Fee (non-refundable)	International Term fee	Total
South African	ZAR18570	ZAR18990	n/a	n/a	ZAR37560
SADC region (<i>within Africa</i>)	ZAR18570	ZAR18990	ZAR3275	n/a	ZAR40835
Non-SADC (<i>within Africa</i>)	ZAR18570	ZAR18990	ZAR3275	ZAR34550	ZAR75385
International (rest of the world)	ZAR18570	ZAR18990	ZAR3275	ZAR41970	ZAR82805

Additional costs to budget for:

- Textbooks (cost for 2015 = ZAR1180)
- Two-week on site teaching at UCT:
 - Flights and Transport to and from Airport
 - Accommodation & Daily Subsistence

3. 2 Financial assistance

Every year students are disappointed because they are accepted into the programme and then have to cancel their place as they have not applied for any funding. **It is recommended that students start looking for funding immediately after applying and do not wait until you receive an acceptance letter to investigate your opportunities.**

Some suggestions for bursaries are:

A. Information regarding scholarships and bursaries is available on request from the Postgraduate Funding Office, University of Cape Town.

Tel: +27-21-650 3629

Fax: +27-21-650 4352

Email: pgfunding@uct.ac.za

Website: <http://www.uct.ac.za/apply/funding/postgraduate/notice/>

B. School of Public Health & Family Medicine

http://www.publichealth.uct.ac.za/phfm_funding-opportunities

C. Inquire what bursary options your place of employment offers

D. Contact the British Council and embassies in your country to inquire about educational bursary options

E. Investigate personal loan options from your bank.

4. PROGRAMME CONTENT

4.1 YEAR 1: CORE COURSES

Students are required to complete all Core Courses in order before taking any electives.

Curriculum Outline

<u>Course Code</u>	<u>Course</u>
PPH4033F/S	Pesticide Risk Management
PPH4034F/S	Health and Safety Management
PPH4035F/S	Management of Environmental Risk
PPH4051F/S	Alternatives and Risk Reduction Strategies

And shall choose another two elective courses from the courses below:

PPH4038F/S	Pesticide Storage and Transport
PPH4040F/S	Containers & Contaminated Site Management
PPH4041F/S	Chemical Conventions
PPH4042F/S	Public Health and Pesticides

Please note the following is not a course, but a compulsory final year exam code:

PPH4054S	Integrated Assessment
----------	-----------------------

4.1.1 Core Course 1: PESTICIDE RISK MANAGEMENT (PPH4033F/S)

Course outline: Five (one week each) courses introduce students to the Code, a life cycle analysis approach, pesticide policy, a legal framework for pesticides, international conventions, and how to regulate vulnerable populations and complex use environments. The central management philosophy taught in this course is to regulate, control and

monitor pesticides through a holistic life-cycle approach (from the beginning until the end of a product's life). Students will be introduced to the basic principles of risk, risk assessment, highly hazardous pesticides, ethical pesticide policies, a situation and gap analysis, pesticide management, risk reduction policies, five international agreements (Basel, Stockholm and Rotterdam Conventions, the Code and SAICM), compliance with international commitments and standards, registration issues, pesticide governance, implementation of pesticide legislation, incorporating vulnerability into the registration process and how to design a life cycle management strategy for a particular pesticide. At the end of the course students will have developed an approach to critically analyze pesticide policies and the registration process in order to promote effective regulatory implementation in varying pesticide use contexts (e.g., different climates, populations, legal structures).

4.1.2. Core Course 2: HEALTH AND SAFETY MANAGEMENT (PPH4034F/S)

Course outline: The course provides students with the technical knowledge base and skills to regulate and manage the acute and chronic health effects associated with exposures to pesticides. To promote this understanding, students will receive training in the basic chemistry of pesticides and how to interpret the WHO and GHS hazard classification systems. An introduction to pesticide toxicology, pesticide epidemiology and the principles of risk and hazard assessment provides the technical skills and knowledge base to evaluate the quantitative human risk assessment data in pesticide dossiers. The health consequences of pesticide exposures are covered through an understanding of exposure pathways and multiple exposures, as well as endocrine disruption, neurotoxicity, genotoxicity, immunotoxicity (vital for countries with high immune compromised populations), and reproductive effects. The course also covers ways to interpret strength-of-association in epidemiological studies and to critically appraise the pesticide health literature. Students learn how to assess human risk assessment data submitted as part of a pesticide dossier, and application of the Code and life cycle approach to health risk assessment.

4.1.3. Core Course 3: MANAGEMENT OF ENVIRONMENTAL RISK (PPH4035F/S)

Course outline: This course provides students with an understanding of:

- Principles of environmental risk assessment as used in the pesticide registration process (e.g., predicting environmental concentrations and toxic effects, quantifying risk, tiered assessments);
- Differences between (pre-registration) pesticide risk assessment and (post- registration) pesticide impact studies and the types of impact a pesticide may have (e.g. effects on organisms, environmental contamination, biodiversity, ecosystem services, agronomic productivity, disease vector control);
- Environmental protection goals: determining what needs to be protected and to what extent; linkages with environmental legislation and policy; harmonisation and environmental governance
- Approaches to the assessment of (potential) environmental impact of a pesticide after its introduction for use in a country (e.g., environmental monitoring, incident reporting).
- How basic chemistry of pesticides influences their properties, environmental fate and persistence;
- Assessment of pesticide contamination – basic methodology;
- Sampling for pesticide residues (e.g., methods for organisms, soils, water);
- Influence of temperature and other environmental parameters on environmental fate and persistence of pesticides.

- The principles of ecotoxicology with reference to pesticide use
- Impacts at organism, population and community levels of organization and how ecotoxicology is used in risk assessments, and for the formulation of pesticide policy and registration
- Use of risk assessment data in the decision-making process, how a risk management component is added, measures to mitigate and reduce risk
- The principles and varied methodologies for assessing pesticide impacts in the field
- How pesticides effect non- target organisms and how this can lead to pest resurgence
- How to a develop pesticide resistance management programme

YEAR 2: CORE COURSES

4.1.4. Core Course 4: ALTERNATIVES AND RISK REDUCTION STRATEGIES (PPH4051F/S)

Course outline: The course provides students with the complex and diverse background knowledge required to prevent pesticide exposures (protecting human health and the environment) through various alternatives, control mechanisms and risk reduction strategies. The course presents the methods for a life cycle assessment, needs assessment, and managing exposures. To reduce increased ineffective use of pesticides and associated hazards/risks, students are introduced to alternative approaches to pest management (e.g., IPM, agro-ecology, conservation agriculture, sustainable intensification of production), the implementation of registration as a risk reduction strategy, ways to control distribution and trade, ways to conduct a social impact assessment, and risk communication models, theories and application.

4.2 (YEAR 2): ELECTIVE COURSES (EC)

Students are required to take two electives.

4.2.1. EC 1: CONTAINERS AND CONTAMINATED SITE MANAGEMENT (PPH404F/S)

Course outline: The course will provide the student with systems for the scoping of project components related to contaminated site assessment and management of pesticide containers (legacy stockpiles and new wastes). The course then progresses to the development of operational plans for the implementation of container and contaminated site assessments leading to development of site specific environmental management plans and remediation strategies.

With respect to container management the course makes the distinction between the development and implementation of strategies for addressing existing stockpiles of contaminated materials and the need to develop sustainable container management programmes for the future. The student will be required to demonstrate competence in the development of operational plans for a series of case-study contaminated sites plus develop container management strategies based on a series of hypothetical situations. The student will also be required to look to maximize local treatment of all materials based on assessment of national capacities and application of international best practice / standards for treatment under local conditions.

4.2.2. EC 2: CHEMICAL CONVENTIONS (PPH4041F/S)

Course outline: This course aims to provide students with an in-depth knowledge base of the various international chemical conventions and agreements, and their relevance to managing the risks associated with pesticides. These include the Code, the Stockholm Convention, the Rotterdam Convention, the Strategic Approach to International Chemicals Management (SAICM) and Basel Convention. By the end of the course, students will be able to:

- Describe the detailed requirements of different conventions at each stage in the pesticide life cycle and relate them to national legislation to regulate pesticides;
- Understand how chemical conventions can be implemented at local level in a systematic and synergistic way;
- Critically appraise their own national legislation and assess its compliance with international convention requirements; and
- Identify and use existing information resources about conventions and international initiatives.

4.2.3 EC 3: PUBLIC HEALTH AND PESTICIDES (PPH4042F/S)

Course outline: The course provides the student with the skills for managing public health pest problems and how to implement effective control strategies (e.g. integrated vector management [IVM]) through the life-cycle approach, alternatives and cost-effective approaches. Students examine the World Health Organization models for evaluating and testing pesticides to be used in public health, along with the WHO's strategies, policies and guidelines for using pesticides in public health. On completion of the course students will have knowledge of:

- a holistic approach to public health vector and disease management
- basic vector ecology and biology for major diseases
- WHO global framework for IVM
- IVM for malaria
- IVM for nuisance pest control; and
- How to integrate public health pesticides legislation, develop a reporting system, and assure efficacy and compliance with international conventions.

5. KEY EXIT COMPETENCIES

After completion of the programme, a student will:

- be able to make decisions and give advice as a pesticide risk manager in relation to the full life-cycle of a pesticide and alternative pest control measures.
- understand and apply legal concepts and a legal framework to managing pesticides and implementing risk reduction strategies
 - understand and apply policy relevant concepts, including regulating for vulnerable populations.
 - understand important pesticide related toxicology and ecotoxicology concepts and principles.
- be able to explain the five key international commitments and standards relevant for pesticide risk management/reduction
- be able to describe various risk reduction management strategies and alternatives
 - be able to develop risk reduction management plans that are SMART (specific, measurable, attainable, realistic and timely) and appropriate for country contexts
 - be able to produce high quality policy briefs for various stakeholders.

APPLICATION CHECK LIST

Step 1	Completed UCT on-line application: https://srvslspsw001.uct.ac.za/onapplic/signon.html
Step 2	Send student number to the programme administrator (send to dprm@uct.ac.za)
Step 3	Completed DPRM information form (send to dprm@uct.ac.za)
Step 4	Completed all required tests on Vula
Step 5	Submitted all certified copies of transcripts to UCT
Step 6	Submitted key explaining transcripts' grades/marks
Step 7	Submitted proof of English proficiency (e.g., TOEFL results), if applicable
Step 8	Submitted certified copy of ID or passport
Step 9	Submit all applications/ documents by 30 September 2015