Pesticide Impact on Human and Environmental Health

(3.0 credits)

Normally Offered:  Fall every year. By Albert Ayeni, George Hamilton, Mark Robson, Jerry Baron.

Pre-requisites and other registration restrictions:

Junior/Senior status or a graduate student at Rutgers University; A commitment to attend ALL class sessions

Format:  Two 80-minute lectures

Description:

This 3-credit colloquium aims at bringing to the fore the historical, current and future roles of pesticides in human life globally, the current status of their management in the developed and developing countries, mitigating the risks associated with their use and finding alternatives. The colloquium brings together world class experts in different areas of pesticide manufacture, handling, use, regulation and enforcement who will interact with students and share personal experiences that are germane to the understanding of the place for pesticides in human life now and in future. It is targeted at seniors and graduate students who are considering a future career in pesticide related disciplines. Class presentations on specified topics are key components of the colloquium. When feasible, students have an opportunity to visit sites that perform functions that relate to pesticide manufacture, handling, application, regulation, enforcement, etc. in the Mid-Atlantic.

Learning Goals:

• Understand what pesticides are and their role in human life and the environment globally
• Understand the advantages and disadvantages of pesticides in human life and the environment
• Learn how to make reasonable decisions regarding pesticide use

Measures of Assessment:

• Three class exams (60%)
• A class presentation (power point) on an approved topic on pesticides or related subjects (30%)
• Class participation (attendance and contribution to class discussions) (10%)

Course Website:
Rutgers eCompanion or Sakai
Topics:
- Pesticides: definition, characteristics, and mode of action
- Pesticides: Environmental impact assessment (risk/benefit analysis)
- Pesticide regulation & enforcement
- Pesticide handling and use (manufacturing, transportation, storage, application)
- Pesticide management policy options (developed vs. developing countries)
- Pesticide alternatives
- Class presentation on pesticides and related subjects

Required and Recommended Course materials:
The colloquium will draw on expertise from various backgrounds in the pesticide industry, relevant textbooks, recent reviews and articles from the scientific literature, as well as articles from the popular and business press. Student knowledge and understanding will be assessed through the oral presentations and the final exam as well as a research paper developed around a topical issue in pesticide management. Rather than simply testing student knowledge, exams will be designed to allow students to demonstrate how well they understand the complexity of pesticide management issues and the factors that guide good policy decisions in pesticide manufacture, handling and use in developing and developed countries.

Policies for Exams, Assignments, Attendance, and Grading
Class attendance is required in this course. A student may miss up to three classes without special permission or reason. Any subsequent absences without a reason attested by a recognized Rutgers authority will attract penalty by way of losing scores attached to class participation up to a maximum of 10% of total score for the course. Score is broken down as follows: Class exams 60%; Class presentation 30%; class participation (attendance and contribution to class discussions) 10%. Student grade will follow Rutgers letter grade classification based on total score out of 100 points. None

Other Information:
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