

Syllabus for PP 610/810: Emerging Threats to Global Food Security

Synopsis: We will explore how emerging pathogens and pests threaten global food security in the 21st century and address the challenge of detecting, predicting and controlling these pathogens and pests. The course will feature invited speakers engaged in topics related to new biotechnology, detection in the field, molecular epidemiology, transgenics and landscape-level controls.

Instructors: David Rasmussen (drasmus@ncsu.edu), Jean Ristaino (jbr@ncsu.edu), Dorith Rotenberg (drotenb@ncsu.edu), Qingshan Wei (qwei@ncsu.edu), Anna Whitfield (awhitfi@ncsu.edu)

Credit: One credit hour

Grading mechanism: Satisfactory/Unsatisfactory. Students must attend seminars and participate in discussion sections in order to receive a grade of satisfactory. Students should also read the assigned material and submit three questions for each speaker on Moodle prior to the seminar.

Schedule: Class meets Thursdays, 3:00 – 3:50pm in Poe 202.

Date	Speaker	Topic
Jan 10 th		Welcome and introductions
Jan 17 th	Jason Delborne (NCSU)	Forest Biotechnology and Public Values
Jan 24 th		Discussion of Jason Delborne's work
Jan 31 st	Jose Ascencio-Ibanez (NCSU)	Plant viruses
Feb 7 th		Discussion of Jose Ascencio's work
Feb 14 th	Erica Goss (Univ of Florida)	The role of gene flow in pathogen emergence
Feb 21 st		Discussion of Erica Goss' work
Feb 28 th	Chris Jones (NCSU)	Spatial epidemiology
Mar 7 th		Discussion of Chris Jones' work
Mar 14 th	Spring Break	
Mar 21 st	Sue Tolin (Virginia Poly.)	Virus disease management
Mar 28 th		Discussion of Sue Tolin's work
Apr 4 th	Liang Dong (ISU)	Remote sensing/detection of pathogens
Apr 11 th		Discussion of Liang Dong's work
Apr 18 th	Dan Bebber (Univ of Exeter)	Climate Change Effects on Emerging Crop Pests and Pathogens
Apr 25 th		Discussion of Dan Bebber's work

Academic Integrity

Students are required to comply with the university policy on academic integrity found in the Code of Student Conduct found at <http://policies.ncsu.edu/policy/pol-11-35-01>

Academic Honesty

See <http://policies.ncsu.edu/policy/pol-11-35-01> for a detailed explanation of academic honesty.

Honor Pledge

Your signature on any assignment indicates "I have neither given nor received unauthorized aid on this test or assignment."

Accommodations for Disabilities

Reasonable accommodations will be made for students with verifiable disabilities. In order to take advantage of available accommodations, students must register with the Disability Resource Office at Holmes Hall, Suite 304, Campus Box 7509, 919-515-7653. For more information on NC State's policy on working with students with disabilities, please see the Academic Accommodations for Students with Disabilities Regulation (REG02.20.01) (<https://policies.ncsu.edu/regulation/reg-02-20-01/>).

Non-Discrimination Policy

NC State University provides equality of opportunity in education and employment for all students and employees. Accordingly, NC State affirms its commitment to maintain a work environment for all employees and an academic environment for all students that is free from all forms of discrimination. Discrimination based on race, color, religion, creed, sex, national origin, age, disability, veteran status, or sexual orientation is a violation of state and federal law and/or NC State University policy and will not be tolerated. Harassment of any person (either in the form of quid pro quo or creation of a hostile environment) based on race, color, religion, creed, sex, national origin, age, disability, veteran status, or sexual orientation also is a violation of state and federal law and/or NC State University policy and will not be tolerated. Retaliation against any person who complains about discrimination is also prohibited. NC State's policies and regulations covering discrimination, harassment, and retaliation may be accessed at <http://policies.ncsu.edu/policy/pol-04-25-05> or http://www.ncsu.edu/equal_op/. Any person who feels that he or she has been the subject of prohibited discrimination, harassment, or retaliation should contact the Office for Equal Opportunity (OEO) at 919-515-3148.