

**Plant Pathology 5300**  
**Current Topics in Molecular Plant Pathology**  
**Spring Semester 2015**

**Course schedule & location:** TBD (1 credit)  
491 Borlaug Hall

**Course instructor:** Dr. Jim Bradeen  
Department of Plant Pathology  
495 Borlaug Hall; 625-9736  
jbradeen@umn.edu

**Office hours & location:** By appointment  
495 Borlaug Hall

**Course description:**

Current Topics in Molecular Plant Pathology is a highly interactive class in which students read, discuss, and critique pivotal publications in the field of molecular plant pathology. Specific topics will change from year to year, but will generally include subjects such as plant-microbe communication, diversity and evolution of plant-microbe associations, genomic analysis of pathogens (symbionts) and plant host responses, and mechanisms of pathogenicity.

**Prerequisites:**

Introductory courses in plant pathology or microbiology; genetics; molecular biology or genomics; or consent of instructor.

**Course goals:**

By the end of the semester, students will have developed a deeper understanding of molecular methods and research topics relevant to molecular plant pathology through readings, writing assignments, and in-class discussions. Each week, students focus on one important topic or methodology and examine it from several different dimensions (underlying principles, experimental strategies, data analysis and interpretation, and impact on the broader discipline). To facilitate discussion and enhance the long-term impact of the course, students will develop relevant written materials in a wikipedia-style format that will be presented in class. Written resources will include annotated bibliographies and encyclopedia-style entries defining key molecular plant pathology terms, concepts, and techniques.

**Expectations & classroom conduct:**

Each Current Topics course meeting will be comprised of student or instructor led group discussion on assigned and optional readings. The classroom will operate in an informal manner and each individual is encouraged and expected to participate fully. Assigned course readings must be completed before each class period. Participation will include asking questions as needed, providing feedback to instructor or student led discussions, and providing leadership in discussions of particular figures, tables, etc. associated with assigned readings. The instructor of PIPa 5300 reserves the right to modify course structure, schedule, or assignments at any time during the semester as required.

**Student Diversity:** Students enrolled in PIPa 5300 are expected to conduct themselves in a respectful, professional manner at all times. Dissent and differences of opinion relevant to the content of this course are fair topics of discussion. At no time should any student or instructor be made to feel inferior or intimidated for any reason. The University of Minnesota nondiscrimination policy will be observed at all times.

**Accommodations for Students with Disabilities:** Students with any type of disability will be accommodated. For assistance, please contact University Disability Services (624-4037) or the course instructor.

**Reading materials:**

There is no textbook for PIPa 5300. Assigned and optional readings will include review and research articles published in peer-reviewed journals available from the University of Minnesota library system. These will generally be available on-line or through the Plant Pathology Library. Access to on-line resources through the UM Library System requires authentication (UM username and password).

If you need assistance accessing the UM Library System or locating required readings, please contact the course instructor. Please plan ahead! Difficulties downloading or printing files are NOT acceptable excuses for coming to class unprepared.

**Technology enhancement:**

- The course will make extensive use of on-line resources and journal article PDFs.
- The course instructor may make periodic announcements via email. Please check your UM email account regularly.

**Grading:**

Grading will be done on a Satisfactory (S) / Non-satisfactory (N) basis.

**Policy on Class Absences and Late Assignments:**

Students are expected to attend class regularly and complete assignments at the scheduled times. Unavoidable absences must be explained in writing to the instructor. Whenever possible, students are encouraged to inform the instructor ahead of time of he or she plans to miss any class period.

**Statement on Academic Integrity:**

Academic integrity is essential to a positive teaching and learning environment. All students enrolled in University courses are expected to complete coursework responsibilities with fairness and honesty. Failure to do so by seeking unfair advantage over others or misrepresenting someone else's work as your own, can result in disciplinary action. The University Student Conduct Code defines scholastic dishonesty as follows:

SCHOLASTIC DISHONESTY: submission of false records of academic achievement; cheating on assignments or examinations; plagiarizing; altering, forging, or misusing a University academic record; taking, acquiring, or using test materials without faculty permission; acting

alone or in cooperation with another to falsify records or to obtain dishonestly grades, honors, awards, or professional endorsement.

Within this course, a student responsible for scholastic dishonesty can be assigned a penalty up to an including an "Unsatisfactory" for the course. If you have any questions regarding the expectations for a specific assignment or exam, please ask the course instructor. Additional information is available at:

[regents.umn.edu/sites/regents.umn.edu/files/policies/Student\\_Conduct\\_Code.pdf](http://regents.umn.edu/sites/regents.umn.edu/files/policies/Student_Conduct_Code.pdf)

**Grade Disputes:**

All grade disputes should be submitted in writing to the course instructor within one week of receiving the grade. The instructor and the student will then meet to discuss the grade in question and will seek a resolution of the matter. If the dispute is not resolved to the student's satisfaction, external input from additional UM faculty will be sought.

**Senate Student Academic Workload Policy:**

For undergraduate courses, one credit is defined as equivalent to an average of three hours of learning effort per week (over a full semester) necessary for an average student to achieve an average grade in the course. For example, a student taking a three credit course that meets for three hours a week should expect to spend an additional six hours a week on coursework outside the classroom.