

## BIOL 4221 - VIEW COURSE PROPOSAL

**Approvals Received:** Department  
on 02-25-08  
by Carol Ford  
(fordcj@umn.edu)

**Approvals Pending:** Curriculum Committee > Campus Assembly > Catalog

**Effective Status:** Active

**Effective Term:** 1089 - Fall 2008

**Course:** BIOL 4221

**Institution:** UMNMO - Morris

**Career:** UGRD

**College:** MDSM - Division of Science and Mathematics

**Department:** 242 - UMM-Sci & Math, Div of-Adm

### General

**Course Title Short:** Genomics: Hosts & Pathogens

**Course Title Long:** Genomics of Host-Pathogen Interactions

**Max-Min Credits  
for Course:** 4.0 to 4.0 credit(s)

**Catalog  
Description:** Analysis of genome, transcriptome, and proteome for genetic regulation during infection, pathogenesis, and defense, for a variety of taxa. Introduces immunology, RNA interference, hypersensitivity, tolerance, and evasion mechanisms. Includes extensive reading and discussion of primary literature.

**Additional Course  
Information  
(for catalog  
production):** <no text provided>

**Grading Basis:** Stdnt Opt

**Honors Course:** No

**Delivery Mode(s):** Classroom

**Years most  
frequently offered:** Other frequency

**Term(s) most  
frequently offered:** Fall

**Component 1:** LEC (no final exam)

**Auto-Enroll  
Course:** No

**Graded** LEC

**Component:**

**Academic Progress Units:** Not allowed to bypass limits.  
4.0 credit(s)

**Financial Aid Progress Units:** Not allowed to bypass limits.  
4.0 credit(s)

**Repetition of Course:** Repetition not allowed.

**Course Prerequisites for Catalog:** 3121, 4312 or #

**Course Equivalency:** No course equivalencies

**Consent Requirement:** No required consent

**Enforced Prerequisites (course-based or non-course-based)** 002651 - prereq 3121, 4312

**Editor Comments:** 02.27.08 - Edited for PSoft. jlm

**Proposal Changes:** <no text provided>

**History Information:** <no text provided>

**Assessment and Goals:** <no text provided>

**Rationale for Changes or Exceptions:** THIS COURSE WILL PROVIDE AN ADVANCED INTRODUCTION (UPPER-LEVEL ELECTIVE) FOR STUDENTS INTERESTED IN THE CONNECTIONS BETWEEN MOLECULAR BIOLOGY AND INFECTIOUS DISEASES. THIS INCLUDES STUDENTS INTERESTED IN HEALTH PROFESSIONS AS WELL AS THOSE INTERESTED IN BIOTECHNOLOGY. THE COURSE COMPLEMENTS UPPER-LEVEL ELECTIVES BIOLOGY ALREADY OFFERS IN AREAS OF ECOLOGY AND ORGANISMAL BIOLOGY. STUDENTS TAKING THIS COURSE ALONG WITH BIOCHEMISTRY (BIO 4111) AND BIO-ORGANIC CHEMISTRY (CHEM 4351) WILL HAVE PARTICULARLY STRONG BACKGROUNDS IN APPLICATIONS OF MODERN MOLECULAR BIOLOGY.

**General Education**

**Faculty Sponsor Name:** Chris Cole

**Requirement this course fulfills:** SCI - SCI Physical & Biological Sciences without Lab

**Provisional Approval:** Not Requested

**Regular Approval:** Requested on Feb 25, 2008

