



NEW COURSE!

GENES & GENOMES

Topics in Molecular Evolution

Biology 407

Satisfies Required Upper-Division Units:

Molecular Biology & Biotechnology Concentration

Elective Units for Other Concentrations

Schedule # 58528 (3 Units)

TuTh 1-2:15 MH287

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This course emphasizes a molecular biology approach to investigating the evolution of genes and genomes. Genomics has provided numerous new opportunities to combat disease and genetic defects, to grow crops with targeted pest control, to reconstruct the ancient history of life's diversification, and to understand the evolution of proteins and other molecules that are essential for everything from regulating gene expression to destroying genomic parasites. Can genomics be used to identify that virus you just picked up? Can it improve a breast cancer victim's chance of survival? Can it be applied to grow fuel for cars?

The course is discussion-based with both textbook and primary literature emphasis. There are many really great recent examples related to the evolution of genes or genomes in the scientific literature, in the news, or even on youtube. This course will provide you with practical understanding of the patterns and processes underlying molecular evolution and of the potential for exciting new applications.

http://biology.fullerton.edu/people/faculty/doug-eernisse/courses/biol_407/Web/