

MCB 421: Tentative Schedule for Fall 2007

A very tentative outline of the course schedule is listed below. Check for schedule changes and announcements regularly at the MCB 421 web site. Click [here](#) for a Word or pdf version of the schedule. Despite the best intentions, there are often changes in the schedule during the course. You ARE responsible for material presented in guest lectures.

- W Aug 22 What Is Genetics and Why Do It?
- M Aug 27 Chromosomes, Plasmids, and Phage; Sources of Genetic Variation; Mutants and Mutations
- W Aug 29 Spontaneous Mutations, Mutator Strains, and Mutagens
- M Sept 3 **Labor Day**
- W Sept 5 Isolation of Mutants: Selections, Screens, and Enrichments
- M Sept 10 Mutants (continued)
- W Sept 12 Reversion and Intergenic Suppression
- M Sept 17 Interaction and Bypass Suppressors
- W Sept 19 Complementation, *cis – trans* tests, Negative Dominance

M Sept 24	Homologous Recombination- Professor Andrei Kuzminov
W Sept 26	Exam #1
M Oct 1	Generalized Transduction
W Oct 3	Generalized Transduction
M Oct 8	Phage, Lytic Growth, Host Restriction-Modification Systems
W Oct 10	Lysogeny
M Oct 15	Site-specific Recombination
W Oct 17	Site-specific Recombination and Specialized Transduction
M Oct 22	Discovery and Properties of Transposons
W Oct 24	Exam #2
M Oct 29	Uses of Transposons
W Oct 31	Operon and Gene Fusions; Reporter Genes
M Nov 5	Site-directed Mutagenesis

W Nov 7 Site-directed Mutagenesis

M Nov 12 Conjugation #1- Dr. Steve Farrand

W Nov 14 Conjugation #2- Dr. Steve Farrand

Nov 16 - 25 **Thanksgiving Break**

M Nov 26 Other Methods

W Nov 28 Developing New Bacterial genetic tools and
Applying Genetics to New Systems

M Dec 3 **Exam #3**

W Dec 5 **Review Session**

M Dec 10 **Final Exam 8:00 to 11:00 AM**