

**TOPICS AND LECTURE SCHEDULE FOR GENETICS 320**  
**Spring Semester 1992 MWF Schedule 8:00 AM 1414 Mol-Bio. Bldg.**  
**Dr. Wilmer J. Miller-Instructor/Xiaozhu Duan - TA**

M	20	Jan	1. Introduction
W	22		2. Pre-Mendelian Genetics
F	24		3. Cell Division
M	27		4. Mendel's First Law
W	29		5. Backcross
F	31		6. Partial dominance and lethals
M	3	Feb	7. Heredity and environment
W	5		8. Twins
F	7		9. EXAM
M	10		10. Mendel's Second Law
W	12		11. Dihybrids, trihybrids, and polyhybrids
F	14		12. Genetic interactions - epistasis and its molecular basis
M	17		13. Mimics
W	19		14. Pedigrees
F	21		15. Pedigree analysis, assign homework Problem I
M	24		16. Sex determination
W	26		17. Sex-linkage; Principle of the single active X; autosexing
F	28		18. Multiple alleles
M	2		19. Test of allelism
W	4		20. Quantitative inheritance
F	6		21. EXAM
M	9-13		SPRING BREAK
M	16		22. Probability
W	18		23. $\chi^2$
F	20		24. Mating systems
M	23		25. Population genetics, assign homework Problem II
W	25		26. Selection
F	27		27. Blood groups
M	30		28. MN, Rh, Molecular interactions
W	1	Apr	29. Animal blood groups and why blood groups exist
F	3		30. Linkage and crossing-over
M	6		31. Three point linkage tests
W	8		32. Mapping genes
F	10		33. Recombination in bacteria and phages, transformation, and transduction
M	13		34. EXAM
W	15		35. Chromosomal alterations
F	17		36. Ploidy
M	20		37. Physiological and pharmacogenetics, assign Library Report
W	22		38. DNA chemistry
F	24		39. Replication
M	27		40. Function, RNA - protein synthesis
W	29		41. Gene regulation
F	1	May	VEISHEA
M	4		42. Mutation
W	6		43. Extra-nuclear inheritance, transposons and RFLP
F	8		44. Genetic "Engineering"
	11-15		FINAL EXAM (2/3 comprehensive)