

**Syllabus**

rev (1/9/06)

## Nucleic Acid Structure and Biochemistry

## Subject

Mon	1/9	Bases, nucleosides and nucleotides
Wed	1/11	solubility, pKas
Fri	1/13	H-bonding, base pairing & stacking
Mon	1/16	Official school holiday
Wed	1/18	Nucleotide conformation
Fri	1/16	torsions, rotameric states & sugar puckering
Mon	1/23	Nucleotide reactivity
Wed	1/25	depurination, alkylation, metal binding
Fri	1/27	
Mon	1/30	DNA
Wed	2/1	A,B, B' and Z-form helices
Fri	2/3	
Mon	2/6	DNA
Wed	2/8	triplexes, cruciforms, quadruplexes
Fri	2/10	
Mon	2/13	Polyelectrolyte theory
Wed	2/15	
Fri	2/17	
Mon	2/20	Transitions, helix-coil transitions, conformational transitions
Wed	2/22	
Fri	2/24	
Mon	2/27	DNA
Wed	3/1	bending and supercoiling, topoisomerases
Fri	3/3	
Mon	3/6	DNA-interactions
Wed	3/8	ions, drugs & proteins
Fri	3/10	
Mon	3/13	DNA - diagnostics & forensics
Wed	3/15	
Fri	3/17	
Mon	3/20	Spring Break
Wed	3/22	
Fri	3/24	
Mon	3/27	RNA structure
Wed	3/29	tRNA
Fri	3/31	
Mon	4/3	RNA structure
Wed	4/5	motifs: tetraloop, kink-turn, E-loop motif...
Fri	4/7	
Mon	4/10	RNA structure
Wed	4/12	large globular structures
Fri	4/14	
Mon	4/17	RNA Catalysis
Wed	4/19	
Fri	4/21	
Mon	4/24	Special Topics

Wed 4/26  
Fri 4/28





