

Micro 291 Fall 2011

Bacteriology and Pathogenesis I

M-F 8:00 AM - 8:50 AM Room 2-201

Course Director: Dr. David McGee

Book: *Microbiology: An Evolving Science* (Slonczewski & Foster)

<u>Day</u>	<u>Lec #</u>	<u>Month</u>	<u>Date</u>	<u>Topic</u>	<u>Lecturer</u>	<u>Chapter</u>
M	1	Sept	26	Bacterial classification, taxonomy, and evolution	Testerman	1, 17, 18
T	2	Sept	27	Structural features of bacteria I - cell envelope	Testerman	3
W	3	Sept	28, 8 am	Structural features of bacteria II - flagella	Testerman	3
W	7	Sept	28, 10am	Structural features of bacteria IV - intern. struct.	McGee	3
TH	4	Sept	29	Structural features - primary literature	Testerman	
F	5	Sept	30	Structural features of bacteria III- pili	Peterson	3
M	6	Oct	3, 8 am	Structural features of bacteria III- pili - primary literature	Peterson	
M	8	Oct	3, 10 am	Bacterial growth and metabolism	McGee	4
M	9	Oct	3, 11 am	Bacterial metabolism and cell division	McGee	5, 13, 14
F	10	Oct	4, 8 am	Antimicrobial peptides	McGee	23
M		Oct	10	Columbus Day Holiday/Study day		
T	11	Oct	11	Antimicrobial peptides - primary literature	McGee	
W	12	Oct	12	Antibiotics I- Introduction & classification	McGee	27
TH	13	Oct	13	Antibiotics II- Modes of action	McGee	27
F	14	Oct	14	Antibiotics III- Resistance mechanisms	McGee	27
M	15	Oct	17	Central dogma I: DNA Replication	Woolard	7, 8
T	16	Oct	18	Central dogma II: Transcription	Woolard	7, 8
W	17	Oct	19	Central dogma III: Translation & Protein processing	Woolard	7, 8
TH	18	Oct	20	Central dogma- primary literature	Woolard	7, 8
F	19	Oct	21	Transport systems I	McGee	8, 25
S		Oct	22	Exam 1 (Lec 1-18) 9 am		
M	20	Oct	24	Transport systems II	McGee	8, 25
T	21	Oct	25	Protein secretion I	McGee	4
W	22	Oct	26	Protein secretion II	McGee	4
TH	23	Oct	27	Bacterial locomotion and chemotaxis	McGee	3

F	24	Oct	28	Protein secretion, transport, or chemotaxis - primary literature	McGee	
M	25	Oct	31	Plasmids	Testerman	7, 9
T	26	Nov	1	Recombination and repair	Testerman	9
W	27	Nov	2	Restriction and modification	Testerman	7, 9
TH	28	Nov	3	Recombination, repair/restriction modification- primary literature	Testerman	
F	29	Nov	4	Gene transfer I	Peterson	9
M	30	Nov	7	Gene transfer II	Peterson	17
T	31	Nov	8	Gene transfer: primary literature	Peterson	
W	32	Nov	9	Phage genetics and transduction	Cardelli	6, 9, 11
TH	33	Nov	10	Phage genetics and transduction - primary literature	Cardelli	
F	34	Nov	11	Bacterial genetics I	Peterson	10, 12
S		Nov	12	Exam 2 (Lec 19-33) 9 am		
M	35	Nov	14	Bacterial genetics II	Peterson	10, 12
T	36	Nov	15	Bacterial genetics III	Peterson	10, 12
W	37	Nov	16	Bacterial genetics - primary literature	Peterson	
TH	38	Nov	17	Regulation of gene expression I	Cardelli	10
F	39	Nov	18	Regulation of gene expression II	Cardelli	10
M	40	Nov	21	Regulation of gene expression - primary literature	Cardelli	
T	41	Nov	22	Metal acquisition and its regulation	McGee	p 125
W	42	Nov	23	Bacterial stress response I	Testerman	5
TH-F		Nov	24,25	Thanksgiving Day Holiday/Study Days		
M	43	Nov	28	Bacterial stress response II	Testerman	5
T	44	Nov	29	Bacterial stress response - primary literature	Testerman	
W	45	Nov	30	Quorum sensing and Biofilms	McGee	10
TH	46	Dec	1	Regulatory RNAs and Riboswitches	McGee	None
F	47	Dec	2	Genomics I	McGee	9, 12
M	48	Dec	5	Genomics II	McGee	9, 12
T	49	Dec	6	Quorum sensing/Regulatory RNAs or Genomics- primary liter.	McGee	
W	50	Dec	7	Mycology	Cardelli	20
TH	51	Dec	8	Parasitology	Peterson	20
F		Dec	9	Study Day		
M		Dec	12	Exam 3 - (Lec 34-51) 9 am		