## PROKARYOTIC BIOLOGY

MCB 4403 SUMMER 2009, R. H. REEVES MWF, 2:00-3:15; 1024 KIN

## SYLLABUS

LECTURE	DATE	TOPIC	READINGS	
01	MAY 11	INTRODUCTION: HISTORY & SCOPE	CH 1	
02	MAY 13	BIOLOGICAL MACROMOLECULES	APPEND I	
03	MAY 15	MICROSCOPY AND STAINING	CH 2	
04	MAY 18	PROKARYOTES VS. EUKARYOTES	CH 3 & 4	
05	MAY 20	THE BACTERIAL ENVELOPE	CH 3	
06	MAY 22	NUTRITION, GROWTH & CONTROL OF MICROORGANISMS	CH 5 - 7	
	MAY 25	*** MEMORIAL DAY OBSERVED ***		
07	May 27	METABOLISM I	CH 8 - 10	
08	MAY 29	METABOLISM II		
09	JUN 01	GENETICS I	CH 11 & 12	
10	JUN 03	GENETICS II	CH 13	
11	JUN 05	RECOMBINANT DNA TECHNOLOGY	CH 14 - 15	
	JUN 08	REVIEW		
	JUN 10	EXAMINATION # 1 LECTURES 1-11 100 POINTS		
10	JUN 12	VIRUSES I	CH 16 & 17	
11	JUN 15	VIRUSES II	CH 17 & 18	
12	JUN 17	VIROIDS & PRIONS	CH 18.9	
13	JUN 19	TAXONOMY, EVOLUTION, & MOLECULAR PHYLOGENY	CH 19	
14	JUN 22	THE BACTERIA I	CH 22	
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LECTURE	DATE	TOPIC	READINGS	
15	JUN 24	THE BACTERIA II	CH 23, 24	

16	JUN 26		CH 21
17	JUN 29	1ST ASSIGNMENT DUE THE ARCHAEA	CH 20
18	JUL 01	ECOLOGY	CH 28-30
	JUL 03	JULY 4 <sup>TH</sup> OBSERVED	
	JUL 06	REVIEW	
	JUL 08	EXAMINATION # 2 LECTURES 12-20 100 POINTS	
19	JUL 10	HOST-PATHOGEN RELATIONSHIPS THE PATHOGEN	CH 34
20	JUL 13	HOST-PATHOGEN RELATIONSHIPS THE HOST	CH 31
21	JUL 15	IMMUNOLOGY I	CH 32
22	JUL 17	IMMUNOLOGY II	CH 33
23	JUL 20	ANTIMICROBIAL CHEMOTHERAPY	CH 35
24	JUL 22	CLINICAL MICROBIOLOGY & EPIDEMIOLOGY	CH 36 & 37
25	JUL 24	VIRAL DISEASES I	CH 38
26	JUL 27	VIRAL DISEASES II	CH 38
27	JUL 29	HIV-1 AND AIDS  2ND ASSIGNMENT DUE	CH 38.3
28	JUL 31		CH 39
29	JUL 03	BACTERIAL DISEASES II	CH 39
	AUG 05	REVIEW	
	AUG 07	EXAMINATION # 3 LECTURES 21-31 100 POINTS	

## PROKARYOTIC BIOLOGY MCB 4403

PURPOSE: THIS COURSE SERVES AS AN INTRODUCTION TO PROKARYOTIC BIOLOGY FOR BIOLOGY MAJORS AND COVERS THE DESCRIPTION, CLASSIFICATION AND PATHOGENESIS OF THE BACTERIA AND THE ARCHAEA. THE COURSE ALSO INCLUDES MATERIAL ON THE PROPERTIES AND PATHOGENESIS OF THE VIRUSES, VIROIDS AND PRIONS.

TEXT: PRESCOTT/HARLEY/KLEIN'S MICROBIOLOGY, BY WILLEY, SHERWOOD & WOLVERTON  $7^{\text{TH}}$  ED., McGRAW-HILL, BOSTON, 2007.

GRADING: YOU WILL BE GRADED ON THREE EXAMINATIONS WORTH 100 POINTS EACH AND TWO REQUIRED LIBRARY ASSIGNMENTS WORTH 50 POINTS EACH, FOR A TOTAL OF 400 POINTS. IF YOU MISS AN EXAMINATION FOR ANY REASON, YOU WILL GET A

ZERO ON THAT EXAM. IF YOU HAVE A LEGITIMATE EXCUSE FOR MISSING AN EXAM, A PAPER WORTH 100 POINTS WILL BE REQUIRED.

THE FIRST ASSIGNMENT WILL BE DISCUSSED AFTER THE FIRST WEEK, AND THE SECOND WILL BE ASSIGNED AFTER THE SECOND EXAMINATION. THESE ASSIGNMENTS ARE REQUIRED; A COURSE GRADE OF INCOMPLETE WILL BE ASSIGNED IF THEY ARE NOT COMPLETED. THE FIRST ASSIGNMENT WILL BE A BACTERIAL GENETICS PROBLEM, AND THE SECOND WILL BE ON MEDICAL MICROBIOLOGY (BACTERIAL OR VIRAL DISEASES). LATE ASSIGNMENTS WILL BE PENALIZED, 2 POINTS PER WEEKDAY.

THE METHOD OF GRADING WILL BE BASED ON EITHER A PERCENT STANDARD (90-100%=A, 80-89%=B, 70-79%=C, 60-69%=D AND <60%=F) OR A STANDARD CURVE (IF CLASS TEST SCORES ARE LOW; MEAN<75%).

OFFICE HRS: MY OFFICE HOURS ARE 12:30-1:30 MWF, ROOM 1067 KIN, AT OTHER TIMES BY APPOINTMENT (645-8443); reeves@bio.fsu.edu).

REVIEW SESSIONS: REVIEW SESSIONS WILL BE HELD EVERY MONDAY AFTERNOON (3:30-4:30 PM) IN ROOM 1024 KIN.

HONOR CODE: YOU MUST UNDERSTAND AND UPHOLD THE ACADEMIC HONOR CODE, WHICH IS PUBLISHED IN THE FLORIDA STATE UNIVERSITY GENERAL BULLETIN AND IN THE STUDENT HANDBOOK. THE ACADEMIC HONOR SYSTEM OF FSU IS BASED ON THE PREMISE THAT EACH STUDENT HAS THE RESPONSIBILITY TO: (I) UPHOLD THE HIGHEST STANDARDS OF ACADEMIC INTEGRITY IN THE STUDENT'S OWN WORK, (II) REFUSE TO TOLERATE VIOLATIONS OF ACADEMIC INTEGRITY IN THE UNIVERSITY'S COMMUNITY, AND (III) FOSTER A HIGH SENSE OF INTEGRITY AND SOCIAL RESPONSIBILITY ON THE PART OF THE UNIVERSITY COMMUNITY. A STUDENT VIOLATING THE HONOR CODE ON ANY ASSIGNMENT OR EXAMINATION IN MCB4403 WILL RECEIVE A MINIMUM PENALTY OF A ZERO (0) FOR THAT ASSIGNMENT OR EXAM AND MAY RECEIVE A GRADE OF "F" FOR THE COURSE AT THE DISCRETION OF THE INSTRUCTOR.

AMERICANS WITH DISABILITIES ACT: STUDENTS WITH DISABILITIES NEEDING ACADEMIC ACCOMMODATION SHOULD: (1) REGISTER WITH AND PROVIDE DOCUMENTATION TO THE STUDENT DISABILITY RESOURCE CENTER; (2) BRING A LETTER TO THE INSTRUCTOR INDICATING THE NEED FOR ACCOMMODATION AND WHAT TYPE. THIS SHOULD BE DONE DURING THE FIRST WEEK OF CLASS. FOR MORE INFORMATION ABOUT SERVICES AVAILABLE TO FSU STUDENTS WITH DISABILITIES, CONTACT THE STUDENT DISABILITY RESOURCE CENTER.