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Imperial Valley College
Fall 2012

Biology 220 (CRN# 10079)
General Microbiology

Course Description: A comprehensive one semester General Microbiology course that provides students with fundamental concepts of structure and physiology of disease- and non-disease producing microorganisms with particular emphasis on bacteria. Includes basic techniques for culturing, staining and identifying microorganisms. The course meets the requirements for general education, nursing and other higher level biology courses.

Lecture : MW: 0835-1000
Lab: MW: 1010-01350
Room: 2712

Add/Drop/Withdrawal dates: Students are responsible for meeting these deadlines.

Attendance and Tardy policy: Class attendance and tardy policy follows the regulations in the IVC catalog. It is appreciated if advance notice of absence can be given. Please make every effort to be on time for the lecture and the lab. **If you have THREE absences Lecture or Lab you will be dropped from the class at the Instructor's discretion.**

Any student with a documented disability who may need educational accommodations should notify the instructor or the Disabled Student Programs and Services (DPS & S) office as soon as possible.

PLEASE NO FOOD OR DRINKS IN THE CLASSROOM AND THE LAB.

PLEASE TURN OFF YOUR CELLPHONES IN CLASS AS A COURTESY TO YOUR CLASSMATES AND THE INSTRUCTOR. (If you are on call please notify me).

Grading Scale: A=90-100%
 B= 89-80%
 C= 79-70%
 D= 69-60%
 F= Below 60%

Grading Policy:

Exams (300Points):

There will be **THREE** exams during the course, each worth 100 points. There will be **NO MAKE-UP EXAMS.**

Final Exam (100 Points): The final exam must be taken as scheduled to receive a passing grade. In case of illness or other valid excuse for which there is a written documentation, please notify me as soon as possible so that I can make suitable arrangements.

Quizzes will be given periodically at the beginning of the class. If you are late, you cannot take the quiz.

Points you earn in the exams, quizzes, class/lab assignments graded by the Instructor will contribute towards your overall grade in the class for the semester. **STUDENTS ARE RESPONSIBLE FOR KEEPING TRACK OF THEIR ACADEMIC PROGRESS DURING THE COURSE.**

Attendance is required. Roll will be taken at the beginning/ end of the class. Students are expected to be in the class until the class is dismissed by the Instructor. **If you have been marked absent, your assignment for that day will not be graded.**

Student Learning Outcomes:

Upon course completion, the successful student will have acquired new skills, knowledge and or attitudes as demonstrated by being able to:

- 1. Explain the basic principles of microbiology, which include but not limited to: structure and functions of Prokaryotic and Eukaryotic cells; microbial metabolism; bacterial/molecular genetics ; pathogenesis; virology and immunology. (ILO 1, ILO2).**
- 2. Devise a dichotomous key to aid in the identification of disease-causing bacteria in the lab and accurately indentify disease-causing bacteria by using the key and experimental procedures. (ILO 1, ILO2)**
- 3. Perform experimental techniques in microbiology correctly to test hypothesis, determine characteristics of microbes and perform diagnostics. (ILO 2).**
- 4. Apply lecture/ lab concepts with critical thinking to explain experimental data and scenarios in microbiology not addressed directly in lecture/lab. (ILO 1, ILO 2).**
- 5. Fully participate in classroom and lab activities. (ILO 3).**

WK	DAY	DATE	LECTURE	LABORATORY	MATERIALS NEEDED
1	Mon	8-20	Introduction; Chapter 1	Ex. 2-1; 3-1	
	Wed	8-22		Ex. 1-2;2-5;3-4	
2	Mon	8-27	Chapter 2	Ex. 3-6;3-8	
	Wed	8-29		Ex. 3-7;3-9	
3	Mon	9-3	Holiday	Holiday	
	Wed	9-5	Chapter 3	Gram Stain Test	
4	Mon	9-10	Chapter 4	Ex. 4-1	
	Wed	9-12	EXAM 1 (Ch. 1-4)	Ex. 4-4;	
5	Mon	9-17	Chapter 5	Ex. 4-6	MINOR UNKNOWN DISTRIBUTED
	Wed	9-19	Chapter 6	Ex. 5-2;5-3;5-4	
6	Mon	9-24	Chapter 6 (Continued)	Ex. 5-5;5-7	
	Wed	9-26	Chapter 7	Ex. 5-8; 5-10;5-11;5-13;5-14;	
7	Mon	10-1	Chapter 7 (Continued)	Minor	
	Wed	10-3	Chapter 8	Minor	
8	Mon	10-8	EXAM 2 (Ch. 5-8)	Minor	
	WED	10-10	Chapter 9	Minor	
9	Mon	10-15	Chapter 10	Ex. 5-12	
	Wed	10-17	Chapter 11	Minor; 5-17; 5-18	MINOR UNKNOWN REPORT DUE
10	Mon	10-22	Chapter 12	Ex. 7-2	MAJOR UNKNOWN DISTRIBUTED
	Wed	10-24	Chapter 12 (Continued)	Major	
11	Tue	10-29	Chapter 13	Chapter 14; Major	
	Thur	10-31	Exam 3 (Ch.10-13)	Major	
WK	DAY	DATE	LECTURE	LABORATORY	MATERIALS NEEDED
12	Mon	11-5	Chapter 15	Chapter 15; Major	

	Wed	11-7	Chapter 16	Chapter 17; Major	
13	Mon	11-12	Holiday	Holiday	
	Wed	11-14	Chapter 17	Chapter 17; Major	
14	Mon	11-19	Eaxam 4 (Ch.15-17)	Chapter 21; Major	
	Wed	11-21	Chapter 21	Chapter 22; Major	
15	Mon	11-26	Chapter 23	Chapter 23; Major	MAJOR UNKNOWN REPORT DUE
	Wed	11-28	Chapter 24	Chapter 24	
16	Fri.	12-6	FINAL EXAMS		
	Sat.	12-8	FINAL EXAMS		
WK	DAY	DATE	LECTURE	LABORATORY	MATERIALS NEEDED
1	Tue	8-23	Introduction; Chapter 1	Ex. 2-1; 3-1	
	Thur	8-25		Ex. 1-2;2-5;3-4	
2	Tue	8-30	Chapter 2	Ex. 3-6;3-8	
	Thur	9-1		Ex. 3-7;3-9	
3	Tue.	9-6	Chapter 3	Ex. 3-10	
	Thur	9-8		NO LAB; Chapter 4	
4	Tue	9-13	Exam 1	Ex. 4-1	
	Thur	9-15		Ex. 4-4;	
5	Tue	9-20	Chapter 6	Ex. 4-6	MINOR UNKNOWN DISTRIBUTED
	Thur	9-22		Ex. 5-2;5-3;5-4	
6	Tue	9-27	Chapter 6 (Continued)	Ex. 5-5;5-7	
	Thur	9-29		Ex. 5-8; 5-10;5-11;5-13;5-14;	
7	Tue	10-4	Chapter 7	Minor	
	Thur	10-6		Chapter 8; Minor	

8	Tue	10-11	Chapter 9	Minor	
	thur	10-13		EXAM 2	
9	Tue	10-18	Chapter 10	Ex. 5-12	
	Thur	10-20		Minor; 5-17; 5-18	MINOR UNKNOWN REPORT DUE
10	Tue	10-25	Chapter 11	Ex. 7-2	MAJOR UNKNOWN DISTRIBUTED
	Thur	10-27		NO LAB; Chapter 12	
11	Tue	11-1	Chapter 13	NO LAB; Chapter 14	
	Thur	11-3		NO LAB; EXAM 3	
WK	DAY	DATE	LECTURE	LABORATORY	MATERIALS NEEDED
12	Tue	11-8	Chapter 15,16	Major Unknown	
	Thur	11-10		Chapter 17; Major Unknown	
13	Tue	11-15	Chapter 18,19	Major Unknown	
	Thur	11-17		Chapter 20;21	
14	Tue	11-22	Chapter 20,21		
	Thur	11-24	HOLIDAY-THANKSGIVING		
15	Fri.	11-29	Chapter 22;23		MAJOR UNKNOWN REPORT DUE
	Sat.	12-1		Chapter 24;25	
16	Fri.	12-6	FINAL EXAMS		
	Sat.	12-8	FINAL EXAMS		

Required Textbook: Microbiology An Introduction; Tortora, Funke & Case (10th Edition): ISBN 0-321-55007-2
Lab Manual : Microbiology Laboratory Theory & Application; Michael J. Leboffe & Burton E. Pierce (Brief Edition)
ISBN 0-89582-705-0

