



## Course Syllabus

### **MCB 3020**

General Microbiology: T Th 2:00 - 3:15, GL-100A.

### **Dr Murray**

Office HLS-1 room 319B

(305) 348-7318

[Kmurray@fiu.edu](mailto:Kmurray@fiu.edu)

Office hours: Tuesday 4:00 – 6:00 pm and by appointment.

**Course description:** MCB 3020 is a course designed to facilitate an understanding of bacteria, archaea, protista, fungi and viruses. The course will focus on microbial diversity, structure, function and molecular regulation. The course will specifically emphasize bacterial metabolism, biochemistry and ecology. Additionally, the microbe - host interaction will be explored with regard to human disease processes.

Text Book: ***Microbiology an Evolving Science***. J.L. Slonczewski and J.W. Foster. Norton Press. 2009.

**Course Requirements:** This course comprises vast amounts of material. As such, success requires significant extracurricular reading and regular class attendance. Students are responsible for all assigned readings and all material presented in class. Lecture notes (power point slides) will be posted on CE-6 (Blackboard 6) prior to class. Readings will be assigned in class and may also be posted on CE-6. It is your responsibility to check CE-6 regularly for assignments.

Quizzes will be administered randomly throughout the course and will be based on current reading assignments and recent class lectures.

Any and all communications from the instructor to students will be done utilizing the FIU e-mail system. (If you utilize a different e-mail service, it is your responsibility to link your e-mail account to the FIU system).

### **Exams and Grading:**

5 exams and a cumulative final exam

Each exam is worth 100 points.....	500 points
The final exam is worth 150 points.....	150 points
Quizzes and assignments are generally worth 10 points each.....	10X points

Make-up exams will be offered **ONLY** when a verifiable, documented, emergency situation prevents you from taking a scheduled exam. **NO MAKE-UPS ARE GIVEN FOR MISSED QUIZZES... Lo siento!**

### Grading:

90.00 – 100+ .....	A
80.00 – 89.99.....	B
70.00 – 79.99.....	C
60.00 – 69.99.....	D
0 – 59.99.....	F

**Tentative Schedule:**

<b>WEEK</b>	<b>TOPIC</b>	<b>CHAPTER</b>
1	Course Overview, Intro into Microbiology	1
2	Studying Microbes, Cell Structure and Function	2, 3
3	Bacterial Growth and Control	4, 5
4	Intro to Viruses: Structure and function, <b>EXAM I Sept 17th</b>	6
5	Genomes and Gene expression: DNA → protein	7, 8
6	Gene Transfer and Mutation, Molecular Regulation	9, 10
7	Molecular Virology, <b>EXAM II Oct 8th</b>	11
8	Energetics and Catabolism	13
9	Respiration, Lithotrophy and Photolysis	14
10	Biosynthesis, <b>EXAM III Oct 29th</b>	15
11	Microbial Origins and Evolution, Bacterial Diversity	17, 18
12	Bacterial Diversity, Eukaryotic Diversity, Microbial Ecology	18, 20, 21
13	Microbial Ecology, <b>EXAM IV Nov 19th</b>	21
14	Microbes and the Innate Immune Response, <b>Thanksgiving (NOV 26TH)</b>	23
15	Adaptive Immunity, Microbial Pathogenesis, <b>EXAM V Dec 3rd</b>	24, 25
16	<b>FINAL EXAM, TBA</b>	