

# MICROBIOLOGY

<b>Instructor:</b>	Dr. Ronald Sizemore	<b>BIO 425</b>
<b>Office:</b>	Center for Marine Science 1118, Friday 1002A	<b>Fall 2009</b>
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<u>No.</u>	<u>Date</u>	<u>LECTURE</u>		<u>Chapter</u>	<u>LABORATORY</u>	
		<u>Topic</u>			<u>Date</u>	<u>Lab Number</u>
1	Aug 19	Microbiology		1	Aug 20	Lab Protocol
2	Aug 21	History		1		
3	Aug 24	Microscopes		4	Aug 25	1,5
4	Aug 26*	Cell Biology		4	Aug 27	6, 8
5	Aug 28	----		4		
6	Aug 31	Microbial Nutrition		5	Sept 1	10, 11, 12
7	Sept 2	Microbial Metabolism		5	Sept 3	14
8	Sept 4	Microbial Growth		6		
<b>*** Labor Day Holiday - Sept 7 ***</b>						
9	Sept 9	Control of Microbial Growth		20	Sept 8	15, 16, 17
<b>10</b>	<b>Sept 11</b>	<b>TEST I</b>		-	Sept 10	18(demo), 9, 19
11	Sept 14	Control of Growth (contd.)		20	Sept 15	20, 26, 28
12	Sept 16	Molecular Biology		7	Sept 17	26, 28, DNA Extraction
13	Sept 18	----		7		
14	Sept 21	Gene Regulation		8	Sept 22	38, 39
15	Sept 23	----		8	Sept 24	40, Decarboxylase Rx
16	Sept 25	Bacterial Genetics		10		
17	Sept 28	----		10	Sept 29	30
18	Sept 30	Virology		9	Oct 1	31, 32, 34
19	Oct 2	Human-Microbe Interactions		21		
<b>*** Fall Vacation – October 5 -6 ***</b>						
<b>20</b>	<b>Oct 7#</b>	<b>TEST II</b>		-	Oct 8	58
21	Oct 9	Immunology		22		
22	Oct 12	Epidemiology		25	<b>Oct 13</b>	<b>LAB TEST I</b>
23	Oct 14	Person to Person Diseases		26	Oct 15	36
24	Oct 16	----		26		
25	Oct 19	Vector Transmitted Diseases		27	Oct 20	36
26	Oct 21	Diseases (contd.)		27	Oct 22	36
27	Oct 23	Water Treatment & Waterborne Diseases		28		
28	Oct 26	Diseases (contd.)		28	Oct 27	36
29	Oct 28	Food Microbiology		29	Oct 29	DNA ext. & PCR
<b>30</b>	<b>Oct 30</b>	<b>TEST III</b>				

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		<u>Topic</u>			<u>Lab number</u>
31	Nov 2	Microbial Genomics	15	Nov 3	Gel & Gene Clean
32	Nov 4	Genetic Engineering	31	Nov 5	Sequencing
33	Nov 6	Biotechnology	31		
34	Nov 9	Industrial Microbiology	30	Nov 10	47, Seq. Analysis
35	Nov 11	----	30	Nov 12	47, 52
36	Nov 13	Microbial Systematics	11		
37	Nov 16	Metabolic Diversity	17	Nov 17	47, Propagated Epidemic
38	Nov 18	Prokaryotic Diversity: Bacteria	12	Nov 19	33, 46
39	Nov 20	Prokaryotic Diversity (contd.)	12		
<b>40</b>	<b>Nov 23</b>	<b>TEST IV</b>		Nov 24	51, Yogurt prep
<b>*** Thanksgiving Vacation – November 25 - 29 ***</b>					
41	Nov 30	Prokaryotic Diversity: Archaea	13	<b>Dec 1</b>	<b>LAB TEST II</b>
42	Dec 2	Prokaryotic Diversity (contd.)	13		

**\*\*\*\* December 9 – 8 am – FINAL EXAM \*\*\*\***

\* August 26 = Last Day to add or drop without a grade

# October 8 = Last day to withdraw with W

**THE DEPARTMENT OF BIOLOGICAL SCIENCES STRONGLY SUPPORTS  
THE ACADEMIC HONOR CODE AS STATED IN THE STUDENT HANDBOOK AND  
CODE OF STUDENT LIFE AND WILL NOT TOLERATE ACADEMIC DISHONESTY**

**Grading:**

**Lecture Grade:**

<b>Tests (4)</b>	<b>150 points each</b>
<b>Final exam</b>	<b>150 points</b>
	<b><u>Lecture subtotal</u> = 750 points</b>

**Laboratory Grade:**

<b>Lab Tests</b>	<b>100 pts</b>
<b>(2 –50 points each)</b>	
<b>Unknown Culture ID</b>	<b>50 points</b>
<b>Lab Notebooks</b>	<b>50 points</b>
<b>Lab Evaluation</b>	<b>50 points</b>
	<b><u>Lab subtotal</u> = 250 points</b>
<b>TOTAL</b>	<b>100 % = 1000 points</b>

**Total Points for Course**

**Grades:**

**A = 90 – 100 %**

**B = 80 – 89 %**

**C = 70 – 79 %**

**D = 60 –69 %**

**F = > 60%**

**W = < 60 %**

**( +/- Grades will not be assigned in this course)**

**Note:**

1. **Test dates** will not be changed except under extraordinary circumstances (e.g. hurricanes, snowstorms, etc).
2. Copies of the **old tests** are available for viewing on the Internet at <http://people.uncw.edu/sizemorer/rkswww> (this site contains other material relevant to the course).
3. **You are NOT allowed to drop or miss a TEST.** If uncontrollable circumstances prevent you from taking a test, you **MUST** notify me (e.g. telephone and leave a message or email) with an acceptable excuse at or before the time of the test. The instructor reserves the right to define what is an acceptable excuse. General examples: **Simply not being prepared is NOT an acceptable excuse**, while sickness, family emergencies and transportation problems are generally sufficient excuses. If you are excused from taking a test, the 3 remaining tests will count 200 points each (the Final Exam will still count 150 pts). Missing 2 tests is unacceptable.
4. **Attendance** at lectures is strongly recommended but not required. You are required to attend when tests are given. Attendance in **laboratory is mandatory** and any absences could result in a lower lab grade. **Tardiness** is disruptive to the class and could result in lower evaluation scores.
5. A **lab coat** is required for every lab. Safety goggles or glasses will be worn for most labs. A set of colored pencils is needed for laboratory drawings.

**TEXT:**

**Lecture:** M. T. Madigan and J. M. Martinko. **Brock Biology of Microorganisms** (11<sup>th</sup> Edition, 2006)

**Laboratory:** Alfred E. Brown. **Benson's Microbiological Applications** (11<sup>th</sup> Edition, Short Version, 2008). You must buy a new lab manual – used manuals are unacceptable!