General Microbiology BSCI 223

COURSE INFORMATION: Summer 2012

Instructor:	John Buchner
Office Hours	Open Door Policy – if my door is open, I should be available (M-F 8am to 4pm)
Office	MICB 1127
Email	jbuchner@umd.edu

Lecture Hall:
MCB 1207 M-F 11am-11:50am

Laboratories: Microbiology Bdg 1201, 1205

Required texts:
Clicker or other device see *www.clickers.umd.edu*
Bauman, Robert. Microbiology with Diseases by Taxonomy, 2011. 3rd ed., Pearson, Benjamin Cummings. ISBN-13_978-0-3-2164043-7 (or E-Book version of this text)

Available via on-line access:
Lab Manual: Exploring New Cultures, Smith, 2010.
The lab manual will be available on line in ELMS course site

Prerequisite: BSCI 105

Course Support:
We have established an on-line learning center for this course. We encourage you to access this center on a regular basis for learning opportunities and course information. This is also a place to communicate with your peers, your TA's and your course instructors. The BSCI 223 on-line learning center can be found in the University of Maryland closed web system -ELMS

Grading: See BSCI223 **COURSE SYLLABUS** for all **DUE DATES**

.	Course Grade - points out of 100%
Exam 1	15
Exam 2	15
Final Exam	20
Assignment 1	10
Assignment 2	10
PAK points	5
Laboratory Reports/Questions/Projects	6
Laboratory Midterm	7
Laboratory Final	10
Clicker Points	2

Assignments: Details for Assignments see the course ELMS space.
Assignments are group assignments and your grade on each assignment will be subject to peer review. You will work with an assigned group to complete Assignments 1 and 2. Each assignment will receive a group grade. Each person in the group will complete a peer review form for each group assignment. If your group members indicate that you have contributed 100% to the group effort, you will receive the group grade. If your group members indicate in the peer review that you have not contributed according to the level decided by the group at the initiation of the assignment, you will receive a percentage of the group grade that reflects your level of participation.

Participation/Applied Knowledge (PAK) Points:
Points will be earned for submission of answers to questions relevant to Case Studies 1, 2 and 3.
The PAK questions and Case Studies are found in ELMS. The links will be available in a time sensitive fashion. See CASE/PAK link. Answers will be submitted on line through a Survey Link available in ELMS. It will be essential that you record your name and section number accurately to receive credit. See Lecture Syllabus for Due Dates for Case study work and PAK question submission.

Clicker Points:
Students are required to purchase a Response Innovations Key pad (Clicker) or other device to respond to clicker questions. Points will be awarded (1 point/lecture) for answering clicker questions in lecture. There will be 25 clicker points available for the semester. 20 clicker points will determine 2% of your total grade. Please register your clicker. See www.clickers.umd.edu.

Laboratory Midterm and Final:
Students are encouraged to prepare for these exams by completing practice quizzes that will be available in ELMS.

Course Grade:
Your course grade will be determined based upon the categories listed in the above chart. The grades will be assigned based upon points earned. See the chart below:

%	100-98	97.9-92	91.9-90.0	89.9-88.0	87.9-82.0	81.9-80.0	79.9-78.0	77.9-72.0	71.9-70.0	69.9-68.0	67.9-62	61.9-60.0	59.9 and below
Grade	A+	A	A-	B+	B	B-	C+	C	C-	D+	D	D-	F

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Policies and Expectations:
UM has a nationally recognized Code of Academic Integrity. The code sets the standards for academic integrity at UM for all undergraduates and graduate students. As a student you are responsible for upholding the standards for this course. It is very important for you to be aware of the consequences of cheating, fabrication, facilitation and plagiarism The Code will be enforced in this course. For more information on the Code of Academic Integrity or the Student Honor Council visit this link: http://www.studenthonorcouncil.umd.edu/whatis.html
Students will be encouraged to write the Honor Pledge on exams.

Acts of dishonesty include:

A. Cheating: Intentionally using or attempting to use unauthorized materials, information or study aids in any academic exercise.
B. Fabrication: Intentional and unauthorized falsification or invention of any in formation or citation in an academic exercise.
C. Facilitating Academic Dishonesty: Intentionally or knowingly helping or attempting to help another to commit an act of academic dishonesty.
D. Plagiarism: Intentionally or knowingly representing the words or ideas of another as one's own in any academic exercise.

Clickers and the Honor Code:
Responding for someone else using their clicker or other response system is a violation of the honor code and will be handled accordingly.

Excused Absences:
Students will not be penalized for absence due to:
Religious observance on University sanctioned days, Illness, when an official physician's note is submitted, Accident, when confirmable proof is submitted or Participation in a University Event, when prior notice is given.
In the event of an absence the student must send an **email to the teaching assistant and course instructor prior to** or on the day of absence (for illness or accident absences) **for approval of the excuse.**

Exam Make-Up Policy:
If a student is aware of a conflict that will prohibit attendance to class on the day of an exam, it is the student's responsibility to contact the instructor as soon as possible to discuss the options for a Make-Up exam. If a student misses an exam with an excused absence the option of a Make-Up exam is available. On the day of the exam, the student must call or email the course instructor. The student must present a written excuse to the course instructor at the first lecture attended after the absence. The student should also make arrangements for scheduling the makeup exam. It is the student's responsibility to contact the instructor to arrange for a Make-Up exam.

Laboratory Attendance: Laboratory attendance is mandatory.
Three absences will result in a grade of "F" for the course. In the event of an excused absence (see above) students will be given the opportunity to submit any work that was due on day of absence. ***If a student misses 2 labs for any reason they are required to meet with Dr. Buchner prior to returning to lab.***

Exam Re-grade Policy:
Request for re-grading of exams or papers must be submitted in writing to your course instructor within seven days from date when exam/paper was returned. The submission must include your rationale for a re-grade.

CORE Applicability:
BSCI 223 satisfies the Life Sciences Lab course requirement of the Distributive Studies area of the COREprogram. Please note course pre-requisite of BSC105

CourseEvalUM:
Your participation in the evaluation of courses through CourseEvalUM is a responsibility you hold as a student member of our academic community. Your feedback is confidential and important to the improvement of teaching and learning at the University as well as to the tenure and promotion process. Please go directly to the website (www.courseevalum.umd.edu) to complete your evaluations. By completing all of your evaluations each semester, you will have the privilege of accessing online, at Testudo, the evaluation reports for the thousands of courses for which 70% or more students submitted their evaluations.

Lecture			BSCI223 Summer 2012 Course Schedule			Laboratory Exercises		
#	date	Topic	Bauman Chapter	Pak Due Dates 11:59 PM	Assignment Due Dates	Lab #	Lab Title	Lab Questions
Module 1								
1	May 29	Introduction/History/ Microscopy/staining	1, 4		Tech Quiz due 5/29 by 11:59pm		Safety	
2	May 30	Cell walls and Taxonomy	1,3		Case One Survey Part I due 5//30 by 11:59pm	1	Leeuwenhoek's Beasties	
3	May 31	Cell Shape	3, 12	Case 1 intro			Leeuwenhoek's Beasties continued	Notebook
4	June 1	Membranes and Motility	5, 6	PAK 1.1 due 6/1		2	Staining and Streaking	
5	June 4	Growth	6, 9				Staining and Streaking continued	Notebook 1 (5 points)
6	June 5	Microbial Nutrition	6	PAK 1.2 due 6/5		3	Morphological Characteristics	
7	June 6	Microbial Metabolism	5		Phylogenetic Report due online at start of lab period	4	Cultivation of Bacteria	Notebook
8	June 7	Microbial metabolism	5	PAK 1.3 due 6/7		5	Bacterial Metabolism	
9	June 8	Microbial Ecology	26		Phenotypic Analysis and Image Check in lab	6	Assignment 1 Work Pipette Exercise	Notebook
10	June 11	Environmental Microbiology	11	PAK 1.4 due in lab	Case One survey Part II due 6/11 by 11:59pm	7	PAK 1.4 Discussion High Temperature	2 (8 points)
Module 2		Antibiotics	10		Asg 1 due 6/12 at 11:59PM		Lab Midterm (Labs 1-6) Asg 2 Introduction	
11	June 12							
	June 13	**Exam 1 (lectures 1-10)**			Assignment II poll due June 13 by 11:59pm	8	Phenotype/Genotype	Notebook
12	June 14	Bacterial Genetics Information flow	7	Case 2 Intro		9	Enzyme Induction	
13	June 15	Bacterial Genetics, Mutation, horizontal gene transfer	7	PAK 2.1 due 6/15	Asg 2 post #1 due June 15th at 11:59PM Assignment 2 - What's your idea?	10	Bacterial Transformation	Notebook
14	June 18	Regulation of gene expression	7		Asg 2 post #2 due June 18th at 11:59PM		Bacterial Transformation	3 (8 points)
15	June 19	Application of Bacterial Genetics	8	PAK 2.2 due 6/19	Asg 2 post #3 due June 19th at 11:59PM Assignment 2 – What are your genes?	11	Controlling Growth Asg 2 discussion	Notebook
16	June 20	Synthetic Biology/ Metagenomics			Asg 2 Response due in lab		Gram Positive Cocci	
17	June 21	Virus Overview	13	PAK 2.3 due 6/21	Assignment 2 – What's cloning strategy?	12	Gram Positive Cocci	Notebook
18	June 22	Bacteriophage/Animal/Plant Viruses	13				Asg 2 Poster work	
Module 3		Host/Microbe Interactions	14	Case 3 Intro	Asg 2 Poster due before 4pm in Dr. Buchner's Office	13	Growth	Notebook 4 (12 points)
19	June 25							
	June 26	**Exam 2 (lectures 11-18)**			Assignment II poll part 2 Due June 26th 11:59pm		Growth	
20	June 27	Epidemiology	14			14	Analysis of Water	Notebook
21	June 28	Host Defenses 1	15	PAK 3.1 due 6/28			Analysis of Water	
22	June 29	Host Defenses 2	16				Analysis of Water	Notebook
23	July 2	Host Defenses 3	17	PAK 3.2 due 7/2		15	Make Yogurt	5 (12 points)
24	July 3	Selected Pathogens	pp535-539				Eat Yogurt	
July 4th Holiday								
25	July 5	HIV and other STD's	Pp564-567, 601-609, 692-695,715-724	PAK 3.3 due 7/5	Course Evaluations due		**Lab Final (All Labs)**	6 (4 points)
	July 6		Final Exam					