BIOL 124L-504 <u>Biology for Health Related Sciences Lab</u> Spring 2016 Syllabus

Class:	Tuesday 3:00 – 5:45 p.m. Academics Building, Room 135
Instructor: Email:	Kirsten Cruz-McDonnell kcruzmc@unm.edu
Office Hours:	Tuesday 11:00 – 12:00 in classroom 135 in the Academics Building, or by appointment

Required Lab Manual: <u>Thinking About Biology, An Introductory Lab Manual</u>, 5th edition by Bress and Weisshaar. ****You will need to bring the lab manual to class each week*.

Course Webpage: This course will use UNM Learn (learn.unm.edu) for a variety of materials. Login using your UNM user name and password. You are responsible for all material and announcements distributed on the webpage.

Course Description: This course is an overview of biological principles and laboratory techniques important for health science majors and non-majors. *Credit is not applicable toward biology major or minor*. Pre or co-requisite: BIOL 123.

Student Learning Objectives: At the completion of this course the student will be able to:

- Demonstrate the correlation of lecture concepts with laboratory exercises.
- Use a compound and dissecting microscope to identify microscopic structures.
- Explain and illustrate concepts of cell biology including: function and properties of cells, diffusion and osmosis, organic molecules (carbohydrates, proteins, lipids, nucleic acids), enzyme structure and function, molecular genetics, mitosis and meiosis, and human genetics.
- Relate the structure of tissues and organs to its function.
- Identify gross anatomy of a fetal pig.

Laboratory Policies:

- 1. No food or drink is allowed in the laboratory.
- 2. Turn off cell phones during lab. DO NOT TEXT MESSAGE DURING CLASS. Any sight of a cell phone during exams or quizzes will result in an automatic fail for that assignment.
- 3. Clean-up is the student's responsibility, including returning all equipment to its proper storage area and wiping down lab tables with disinfectant when needed. Lack of proper clean-up can result in loss of points associated with a lab.

- 4. You are expected to come to lab ready to participate and learn.
- 5. Disruptive or disrespectful behavior will not be tolerated and may result in loss of all points associated with that week's lab.

Grading Policy:

The course grade will be determined as follows:

Attendance	10%
Lab Assignments	30%
Quizzes (5 of 6)	20%
Midterm Exam	20%
Final Exam	20%

Grades earned will be based on percentage as follows:

97 or higher – A+	77-79.9 – C+
93-96.9 – A	73-76.9 – C
90-92.9 – A-	70-72.9 – C-
87-89.9 – B+	60-69.9 – D
83-86.9 – B	below $60 - F$
80-82.9 – B-	

Attendance: Attendance is required. Each absence will result in a 10% loss of your attendance grade.

Lab Assignments: Lab assignments are designed to complement and enhance your understanding of the lecture material through practical application of the biological concepts. The lowest assignment score will be dropped for your final grade. Laboratory exercises cannot be made up under any circumstances.

Quizzes: Quizzes will be given to assess your comprehension of material covered in the previous weeks. The lowest quiz score will be dropped for your final grade. Quizzes are given during the first 5-10 minutes of the lab period. If you arrive late to lab, you will miss the quiz.

Exams: There will be 2 lab practical exams; a mid-term and a final.

Missed exam/quiz policy: Missed quizzes and exams cannot be made up! There are no make-up exams or quizzes allowed in this course.

No extra credit will be offered.

Withdrawal: If you drop the course after the drop deadline, you will receive a grade of W if withdrawn by April 8, 2016. After that date withdrawal requires approval of Student Services.

Special Needs: Qualified students with disabilities should contact the instructor by the end of the 1st week of the semester to ensure that your needs are met in a timely manner.

Biology 124 laboratory schedule:

Date	Lab Exercise	Activities	Quiz
01/19/16	Lab Intro / #1 Scientific Method	1, 2, 3, 4, 5, 6	
01/26/16	#7 Organic Molecules	1, 2	
02/2/16	#2 Microscopy #3 Cell Biology	1, 3, 4, 5, 6 1, 3, 4	Quiz #1
02/9/16	#4 Diffusion and Osmosis	1, 3, 4 1, 2, 3, 4	
02/16/16	#8 Enzymes	1, 3	Quiz #2
02/23/16	#9 Molecular Genetics	1, 2, 3, 4, 5	
02/29/16	#10 Mitosis	1, 2, 3, 4	Quiz #3
03/08/16	Midterm Exam (Exercises 1-4, 7-10)		
03/15/16	SPRING BREAK (NO CLASS)		
03/22/16	#11 Meiosis and Genetics	1, 2, 3, 4, 5, 6, 7	
03/29/16	#12 Human Genetics	1, 2, 3, 5	Quiz #4
04/05/16	#14 Tissues and Organs	1, 2, 3, 6, 7	
04/12/16	#15 Cardiovascular System	1, 2, 3, 4	Quiz #5
04/19/16	#16 Fetal Pig I	1, 2, 3, 4, 5, 6	
04/26/16	#17 Fetal Pig II	1, 2, 3, 4, 6	Quiz #6
05/03/16	Final Exam (Exercises 11, 12, 14-17)		