Biology 329 Molecular Biology Lecture and Lab Spring Semester 2011 Syllabus and Schedule

Course Name(s)/Number (s): Molecular Biology Lab - 13154 - BIO 329 - 1
Molecular Biology - 13153 - BIO 329 - A

Course Location: Hederman Science Building Room 200

Course Times: Wednesday 1:30-3:30 and Thursday 1:30-4:30

Instructor: Stephanie Carmicle, Ph. D.

Assistant Professor, Department of Biology

MSB 215

(601)-925-3872 carmicle@mc.edu

www.mc.edu/faculty/scarmicle

Office Hours: Office hours are posted on MOODLE.

Prerequisites: Bio 307 or equivalent

<u>Catalog Course Description:</u> Lecture and Lab meet for a total of approximately 6 hours a week. The course is an introduction to the basic concepts and techniques in molecular biology. The laboratory component of the course will consist of completion of an independent research project.

<u>Course Objective:</u> This class will introduce you to the study and manipulation of biological molecules. This class is driven by techniques that are used in the field that allow scientists to study key processes within the cell such as protein transport, and protein and DNA synthesis. This course will provide both theoretical and practical instruction using basic molecular biology techniques, enabling students to then use them in a research project. This course is intended for upper level undergraduates who are interested in exploring research.

<u>Attendance</u>: I will follow the University attendance policy as described in the student handbook, which can be found in The Tomahawk, p.33-34. Please note that students' grades can and will be reduced as a result of excessive absences.

<u>Absence from class:</u> It is <u>your</u> responsibility to obtain missed notes/assignments from another student if you miss class and determine if you need to come in at another time to complete the experiment.

Academic honesty: You are members of an institution that is dedicated to scholarship and spiritual growth. This institution is part of the larger academic community, the foundation of which is based on personal honesty. The success of this community depends on the commitment of both students and faculty to this principle and therefore cheating and plagiarism cannot and will not be tolerated. More importantly, Mississippi College is dedicated to empowering its students to develop the skills necessary for "making responsible, moral choices," and therefore, the University will accept nothing less than scrupulous honesty from its students. We will follow the University policy on Academic Honesty (Policy 2.19), which can be found in the student handbook, http://www.mc.edu/publications/handbook/academic.pdf

Class etiquette: As in any research lab, it is imperative that we work together to keep our laboratory space clean and organized. Let's leave things better than we found them. If you get something out to use, please clean it and return it to its proper place or dispose of it into the proper waste receptacle when you are finished. Do not use your cell phones in class-even if you left your calculator at home. Not only is it impolite, but in a research lab it is unsafe. Ask questions!!!

Evaluation: Students will be evaluated in the following areas:

GRADED ITEM	Percentage
Journal club presentations	25%
Participation/notebook	25%
Quizzes	25%
POSTER	25%

Note: The instructor reserves the right to make changes to the point allocations and categories to enhance the learning environment of the class.

Scale: 90-100% = A, 80-89% = B, 70-79% = C, 60-69% = D, and <60% = F.

Learning Objectives

Upon the completion of this course you will be able to:

- Perform a scientific literature search
- Dissect a peer-reviewed scientific paper
- Perform a basic analysis of nucleotide and protein sequences in silico
- Maintain cells in culture using sterile technique
- Purify DNA
- Transform DNA into prokaryotic cells
- Purify, determine concentration of and demonstrate functionality of recombinant proteins

Important Dates from the Academic Calendar:

Sept. 5: Last day to drop the class with 100% tuition refund.

Sept. 2: Labor Day (No class)

Oct. 7-8: (*No Class*)

Nov 26-Dec 1: Thanksgiving (No Class)

Oct. 25: Last day to drop (zero tuition refund)

ATTENDANCE: Mississippi College requires students to attend 75% of all class meetings for courses they are enrolled in. If a student misses more than 25% the class meetings for a course they are to receive a failing grade based on attendance. Strict adherence to Mississippi College's class attendance policy is as follows: "Any student whose absences, whether excused or unexcused, exceed 25% of the class meetings will receive a grade of "F" in the course." Attendance in class is expected. For excused absences, the student (not the instructor) is responsible alerting the instructor in advance so that arrangements can be made to make-up the bench work, for requesting any instructions, assignments, or work missed during an absence and completing them within a week of the due date. Tests missed during an excused absence must be made up within one week. Tests and or assignments missed during an unexcused absence will not be made up. Refer to the Mississippi College Undergraduate Catalog for clarification of any point in relation to attendance.

LATE ASSIGNMENTS: Turn in your assignments on time. Tardy assignments will be given a 10% penalty per day. Please note that if you are absent and an assignment was due, it is still your responsibility to turn in your assignment by the due date or suffer the 10% per day late penalty. The instructor will not accept assignments that are more than a week late.

ACADEMIC INTEGRITY: All students are expected to complete their assignments based on their own skills and knowledge, unless otherwise directed by the instructor. Studying as groups is highly recommended and suggested. However, exams are not group projects; therefore, any academic dishonesty will be dealt with immediately and at the discretion of the instructor. All instances of academic dishonesty will also be reported to the department chair, the division and as appropriate to the college administration (to include the Dean of Academic/Student Affairs or other administrative officials) as necessary. The instructor also reserves the right to remove a student or students from the class as deemed necessary due to acts of academic indiscretion. Mississippi College students should display academic integrity in all situations. Honesty is expected from all students at all times. Dishonesty, such as cheating, plagiarism, and falsifying information, is a serious offense and is subject to severe penalty. Adherence to the Mississippi College "Honesty Policy" (Mississippi College Undergraduate Bulletin) will be followed. Refer to the Mississippi College Undergraduate Catalog for clarification of any point in relation to Academic Integrity.

LAB ETIQUETTE: If you get something out to use, clean it and put it back up when you are finished with it. If you use any dishes, glassware, or reusable machines or containers, then clean them <u>properly</u> and put away. No eating, drinking, applying make-up or anything else other than performing your assigned task with the utmost diligence and attention while in the lab. <u>Cell</u>

phones are not acceptable in class—even as a timer or calculator. It is an unsafe practice to use them in the lab. Other electronic devices will remain in backpacks, purses, etc. and not be placed on the desk or used during class unless specified by the instructor.

SPECIAL ACCOMMODATIONS AT STUDENT COUNSELING SERVICES: In order for a student to receive disability accommodations under Section 504 of the Americans with Disabilities Act, he or she must schedule an individual meeting with the Director of Student Counseling Services immediately upon recognition of their disability (if their disability is known they must come in before the semester begins or make an appointment immediately upon receipt of their syllabi for the new semester). The student must bring with them written documentation from a medical physician and/or licensed clinician that verifies their disability. If the student has received prior accommodations, they must bring written documentation of those accommodations (example Individualized Education Plan from the school system). Documentation must be current (within 3 years). The student must meet with SCS face-to face and also attend two (2) additional follow up meetings (one mid semester before or after midterm examinations and the last one at the end of the semester). Please note that the student may also schedule additional meetings as needed for support through SCS as they work with their professor throughout the semester. Note: Students must come in each semester to complete their Individualized Accommodation Plan (example: MC student completes fall semester IAP plan and even if student is a continuing student for the spring semester they must come in again to complete their spring semester IAP plan).

Student Counseling Services is located in Alumni Hall Room #4 or they may be contacted via email at: mbryant@mc.edu or rward@mc.edu or by phone at 601-925-7791.

A copy of this statement is attached on the following page and will be turned into the instructor:

policies outlined in this syllabus. I un acknowledgement, I am required to adhere period of my enrollment in this course. I accordance with these policies, I have the department chair, the division and as appro	have read and had explained all of the information and inderstand that as a student, that by signing this is to the policies outlined in this syllabus during the If at anytime I feel that I have not been treated in a right as a student to meet with the instructor, the opriate with the college administration (to include the irs or other administrative officials) to rectify this
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Course Number:	
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