RCC Microbiology 1 Laboratory Syllabus:

Dr Lisa (Elisabeth Thompson-Eagle), LS101-B, Phone: (951) 328-3835
Office Hrs: T/Th 10.30-12.30pm, Th 2-4pm. And by appointment M/W/F.
E-mail: Elisabeth.Thompson-Eagle@rcc.edu Website: http://academic.rcc.edu/thompson-eagle/
Required Text: Microbiology Lab Manual, City Campus, RCC & Lecture Textbook.
Optional Text: A Photographic Atlas For the Microbiology Laboratory, 2005.
Required Materials: Lab coat, gloves, safety glasses/goggles, masking tape, Sharpie, colored pencils.

Welcome to Microbiology 1 Laboratory! This course is an introduction to the major groups of microorganisms & the diseases they cause. We will study the general characteristics of microbes including their morphology, metabolism, growth, reproduction and control. We will also explore the role of microorganisms in disease and body defenses. Emphasis will be placed on microbial applications and techniques relevant to the biomedical field for students entering health related professions.

PREREQUISITES: CHE-2A & any ONE of the following: AMY 2A, 2B, 10, BIO1, 2A, 2B, 5, 8, 11, 12 or 34.
PRIOR TO ENTRY to this course, you should be able to:
• Solve basic level problems relating to the metric system, unit conversions and dilutions.
• Relate the principles of chemistry to biological molecules.
• Describe the basic chemical structure and function of biological molecules.
• Relate chemical concepts to physical phenomena in the areas of health, the environment & their everyday lives.
• Describe the nature of chemicals & their properties, chemical bonding, reactions, mixtures, atoms, molecules, acids, and bases.
• Analyze experimental results and utilize scientific method

BY THE END OF THIS COURSE, you should be able to:
• Prepare specimens for microscopic observation and demonstrate the effective use of a compound light microscope.
• Employ proper laboratory procedures, including aseptic technique to ensure safe handling of microbes and equipment.
• Evaluate different staining techniques to investigate morphological characteristics.
• Select and interpret appropriate biochemical tests and chemical stains to identify unknown bacteria.
• Demonstrate the understanding of scientific method by composing scientific papers and evaluating the experimental results.

Your understanding of all concepts, vocabulary, and protocols presented during lab and by your lab book are subject to evaluation. Your success in this class depends on you! Microbiology is an exciting & dynamic field of study - I hope you enjoy this class!

HEALTH AND SAFETY RULES & REGULATIONS:
Eating and drinking is never permitted in lab - you will be handling live microbes and therefore you must always assume that they are potential pathogens. Keep all drinks and food inside your bag/backpack to avoid any possibility of contamination. Protective clothing (safety glasses, gloves, lab coat) must be worn as directed by your professor. Wear appropriate footwear (flip-flops are not permitted). Lab gets very hot, remember to bring plenty of water to drink during our breaks so you do not get dehydrated. Wash your hands frequently but especially at the beginning and end of lab.

GRADES:
Lab Grade: The lab portion of the class is worth 25% of your class grade and will be combined with your lecture percentage to produce your MICROBIOLOGY grade. In lab there will be 2 Practicums (70 - 90
points each), the Unknowns Project (100 points), Quizzes (5 points each) and at least one Written Assignment (10 - 50 points each). Additionally you may be awarded supplemental points for participation, effort and professionalism. Failure to thoroughly clean your microscope, lab area, correctly dispose of cultures & media or to properly store lab equipment may result in deductions.

Special Note: The Unknowns Project: Due to the nature of the lab experiments, students will be expected to come to lab at least twice a week during Weeks 13-16 in order to successfully complete the project. Open hours will be clearly posted for your convenience.

POLICIES:

Attendance & Punctuality: Attendance is mandatory. It is your responsibility to check in on the attendance sheet - this is a legal document and may not be changed after the class ends. I reserve the right to drop you from the course or issue a failing grade if you miss more than 6 hours of lab. Each tardy or early departure will be considered an absence. If you miss lab for any reason, you must make up that lab that week. You must obtain permission from me so that I may obtain permission from the other lab instructor before attempting to make up the lab. Do not show up at another lab section and expect to be allowed into the class. Late students are not permitted to take the lab quiz, so do your best to arrive on time or you are likely to lose points. It is your responsibility to drop yourself if you decide to stop attending the class, don’t assume that I will.

Late Assignments: must be handed in on the correct due date at the beginning of class. No late assignments will be accepted - however you may turn them in early.

Missing a Practicum: will result in an "F" for the class and cannot be made up except under exceptional circumstances with full documentation. (FYI: vacations, birthdays, weddings, and sporting events do NOT count as exceptional circumstances!). You must make every effort to contact me if you have a problem - I expect to be contacted within 24 hours of the exam with full validation of your exceptional circumstances to follow. Talk to me ahead of time and I may be more lenient.

Cell phone/Blackberry use/Beepers & Texting during class: is NOT acceptable; please turn them off or set them to "silent mode" during class or you will be asked to leave the classroom. Deductions for use of electronic devices and other specified infractions will be at the discretion of the professor. You may not use any dictionary, translation devices, or calculators during exams or quizzes.

Policies and Academic Honesty: All exams and assignments must be your own work, original and written in your own words in order to receive credit for the activity. You will be expected to adhere to the College’s policies on academic honesty at all times. Anyone caught cheating, copying or plagiarizing on exams, quizzes, assignments or any other work for this course will be issued a failing grade for the assignment, removed from the classroom and subject to severe institutional disciplinary action according to RCC policy. A failing grade in the course will be issued for a second offense of cheating. A student who has been caught cheating or plagiarizing (or any other instance of academic dishonesty) will become ineligible for any discretionary points retroactive to the beginning of the semester.

ACCOMMODATIONS:

Please keep me informed. If you have a documented physical, psychiatric/emotional, medical, or learning disability that may impact your ability to carry out assigned course work, I urge you to contact the staff in Disabled Students Programs and Services at 222-8060. DSP&S will review your concerns and determine with you what accommodations are necessary and appropriate. All information and documentation is confidential.

Let's have a fun class ok?