

MOLECULAR GENETICS OF PROKARYOTES LAB EXAM OUTLINE

MBIO 4600

Date: Tuesday, November 28, 2006
Time: 8:30 am (Lecture slot - 4)
Duration: 1 h 15 min
Location: both sections:
207 Buller - Students with last names starting A-L
312 Buller - students with last names starting M-Z

Policy:

The lab exam is part of the final course exam. In compliance with the Department of Microbiology regulations students may not view their final lab exam.

Format:

- Answer exam questions in pen - NO PENCIL
- Bring a calculator
- Mostly short answer (not multiple choice) to medium length questions.
- answers acceptable in point form
- Same format as sample lab exam at back of lab manual

Information responsible for:

- All information in lab manual (introduction, procedures, and appendix). If a question involved the *E. coli* genomic map, you would be given the map.
- Genetic Nomenclature (lab manual - see introduction section of lab manual)
- All information in lab reports. Similar type of questions that are found in lab reports.
- Responsible for reference material in as far as it helps you understand the theory of each experiment and to write you lab reports.
- All experiment expected results. Exact numbers are definitely not necessary.
- Data analysis. All calculations used in data analysis.
- Solution and media function. Exact composition of reagents, media, and solutions is not necessary but must understand function in experiment procedure. For example, MacConkey agar, you do not need to know all components but you must know why this media does what it does in respect to media composition and phenotypic expression of the *E. coli* strain genotype.
- Must be able to design experiments. For example, outline a procedure to isolated a methionine mutant from wild type *E. coli*. Step by step details are not required but you must include important parameters, such as media composition that selects for a particular *E. coli*, controls, etc. Must state result of experiment.

Any questions? My office is 414B Buller.