Syllabus: Biology 3100 Microbiology Spring 2012

Grading and assignments: Lab

Late assignments:

All assignments need to be in my office by 5pm on the due date.

Cheating/plagiarism:

Cheating and plagiarism will absolutely not be tolerated! Although you will be doing work in groups and with a lab partner, you must write-up your work in your own words; this is the only way to assess your learning. If I get two lab reports that look identical or nearly identical, both parties will fail the assignment. You must also be diligent in citing all of your references, including websites. Paraphrasing does not mean changing a word or two; if you are taking the bulk of someone else's words, you must quote them. The best way to ensure that you do not plagiarize is to read the material, then step away from it for a day or two, and then begin writing. This method also allows you to gauge your understanding of the material.

Classroom/Laboratory conduct:

Turn off your cellphones and be respectful of others. Disruptive behavior will not be tolerated. Anyone who is disruptive will be asked to leave the classroom and/or laboratory, and will be counted as absent. If the disruptive student does not leave, the instructor will contact campus police to have them removed from the class. In addition, lab aprons will be provided and must be worn during the lab. Sandals, flip-

| | of macromolecules | |
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| M1/16 | MLK holiday | |
| W1/18 | domains and evolution of life | Ch. 2, 16, 20 |
| W1/18lab | lab safety rules, media preparation, handwashing, instructions for water collection for M1/23lab | handouts |
| F1/20 | domains and evolution of life | Ch. 2, 16, 20 |
| M1/23 | eukaryotic microbes - protists | Ch. 20, 34.5, 35.6 |
| M1/23lab | aseptic technique, streak plate and most probable number with collected natural water sample | handout, Ex. 9, 10, 59, must have natural water sample for most probable number and streak plate |
| W1/25 | eukaryotic microbes - protists | Ch. 20, 34.5, 35.6 |
| W1/25lab | most probable number cont., evaluate streak plate and restreak, microscope rules | Ex. 59, 9, 10, handout |
| F1/27 | eukaryotic microbes - fungi | Ch. 20, 26, 34.8 |
| M1/30 | bacteria and archae cell structure | Ch. 3 |
| M1/30lab | most probable number cont., streak plate cont., simple stain of teeth and gums, pondwater microscopy | Ex. 59, 9, 10, 11, 12, 6 |
| W2/1 | bacteria and archae cell structure | Ch. 3 |
| W2/1lab | stock unknown, simple stain and wet mount of yeast and bacteria mixture, fungal culture | Ex., 11, 12, 8 |
| F2/3 | bacteria and archae cell structure | Ch. 3 |

- M2/6 bacteria and archae cell structure
- M2/6lab mold microscopy (at least two different molds, be sure to

W2/8

W2/8lab

F2/10

| F2/2 M3/5 | gene unit, transcription translation, archae and eukaryotic molecular biology | Ch. 6 |
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| M3/5lab | motility, culturaMCID 11 BDC q30.84 359.95 76 | .: |
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| W3/7 | | |
| W3/7lab | | |

F3/9

| W3/28 | prokaryotic genetics | Ch. 10 |
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| W3/28lab | effectiveness of alcohol, antibiotics and antiseptics cont., ligation of PCR product into vector, dialyze ligation, run PCR gel | |
| F3/30 | prokaryotic genetics | |

| W4/25 | adaptive immunity, immunological techniques | Ch. 28, 29, 30, 31 |
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| W4/25lab | oral presentations, ELISA worksheet | |
| F4/27 | host-microbe interactions | Ch. 27 |