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Laboratory Schedule Spring 2014

Week	Date	Lab(s)	Day 1	Day 2	Due Dates	
1	Jan 6 – 10	Introduction Lab 1: Irreversible Inhibition	Introduction Lab 1: Irreversible Inhibition		Academic Integrity Quiz (complete by 11:59 pm on Sun, Jan.12) Day 2: Lab 2 Pre-lab Calculations	
2	Jan 13 – 17	Lab 2: Characterization & Classification of Salmonella LPS	Lab 2: Extract LPS, Serum Killing, prepare SDS-PAGE	Lab 2: SDS-PAGE, Analysis of Serum Killing Plates.	Day 1: Lab 1 Summary	
3	Jan 20 – 24	Lab 2: Characterization & Classification of Salmonella LPS	Lab 2: Western Transfer, Silver Stain	Lab 2: Western Detection		
4	Jan 27 – 31	Lab 3: Recombinant DNA Technology	Lab 3: Isolation of Genomic DNA	Lab 3: Quantify DNA, Purity Determination, PCR	Day 1: Lab 2 Summary Day 1: Lab 3 Pre-lab Calculations	
5	Feb 3 – 7	Lab 3: Recombinant DNA Technology	Lab 3: Analysis of PCR, Plasmid preps, Nanodrop, Restriction Digests, Prepare Agarose Gel	Lab 3: Agarose Gel Electrophoresis, Ligation		
6	Feb 10 – 14	Reading Break				
7	Feb 17 – 21	Lab 3: Recombinant DNA Technology Lab 4: Transposon Mutagenesis	Lab 3: Prepare Competent Cells, Transformation Lab 4: Phage Titrating	Lab 4: Analyze Phage Titre Plates Quiz	Day 2: Lab 4 Result Tables	
8	Feb 24 – 28	Lab 3: Recombinant DNA Technology Lab 4: Transposon Mutagenesis	Lab 3: Examine Transformation Plates & Controls, Colony PCR, Prepare Agarose Gel Lab 4: Transposition Mutagenesis	Lab 3: Analysis of PCR by Agarose Gel Electrophoresis Lab 4: Transposition Mutagenesis Spread plates	Day 2: Lab 4 Result Tables	
9	Mar 3 – 7	Lab 4: Transposon Mutagenesis	Lab 4: Analyze Plates, Replica Plating	Lab 4: Grid Plate, Streak Lac ⁻ mutants,	Day 1: Lab 3 Summary Day 2: Lab 4 Result Tables	
10	Mar 10 – 14	Lab 4: Transposon Mutagenesis	Lab 4: Amino Acid Pool Plates, Lac ⁻ Mutants onto Differential Media	Lab 4: Interpret Plates	Day 2: Lab 4 Result Tables	
11	Mar 17 – 21	Lab 5: Intracellular Invasion of Mammalian HEp-2 Cells by <i>E.coli</i>	Lab 5: Invasion Assay & Trypsinization	Lab 5: Count Plates, Look at Cells Quiz	Day 1: Lab 4 Summary	
12	Mar 24 – 28				Day 1: Lab 5 Summary	
13	Mar.31 – Apr.4					
Written Exam – in schedules examination period						

Evaluation

The final mark will be based on:

lab summaries	30%
lab journal	10%
practical assessment	10%
quizzes	15%
final exam	35%

Final grades will be strictly determined as follows:

90.00 – 100%	A+
85.00 – 89.99%	A
80.00 – 84.99%	A-
77.00 – 79.99%	B+
73.00 – 76.99%	B
70.00 – 72.99%	B-
65.00 – 69.99%	C+
60.00 – 64.99%	C
50.00 – 59.99%	D
≤ 49.99%	F

Attendance

Laboratory attendance and punctuality is compulsory. Failure to attend a lab or to arrive on time for a lab without prior arrangement or a written medical excuse may result in the forfeit of all marks associated with the lab. A change of lab section must be arranged with the lab instructor **prior** to the lab period.

Students who miss a lab are responsible for maintaining their lab journal and for obtaining the data in order to write up the lab report. This may involve a student performing the lab once he or she has recovered.

Lab Summaries (30%)

Lab summaries require that you present the results of your experiment and answer the posed questions in a numbered format (not essay format).

Summaries are to be written independently; **collaboration on written work is strictly prohibited** (refer to p.xiv). They are to be type written using 12 point font and double-spaced. Double-sided printing is acceptable. Please check your work for grammatical and spelling errors.

Summaries are due at 4:30 pm (for due dates that fall on a Day 1), unless otherwise stated by the instructor. Late lab reports are penalized **ten percent per day** (24h), and **fifteen percent** for the weekend. Late summaries are to be submitted directly to the lab instructor. No credit will be given for lab reports more than six days late.

An electronic copy of your summary must also be submitted to Turnitin on the due date. Turnitin is a plagiarism prevention and detection service employed by the University. It compares your document to other reports submitted to Turnitin as well as to text found on the web. Turnitin then generates a report which the instructor reviews to identify any cases of non-original work.

Grading queries will not be considered later than one week following the return of the marked report or summary. Any requests for reconsideration of the grade will involve remarking the entire submission. Students will receive the grade assigned upon remarking.

Lab Journal (10%)

Keeping a detailed, accurate, and legible record is essential for recording and documenting experimental procedures and results. An accurate account of the steps you performed and the data you generated is necessary to duplicate results, communicate your discoveries, and patent new products. To give you practice in this skill, you will be required to maintain a lab journal.

The journal will be marked weekly by a teaching assistant (TA) who will look for specific data entries from the previous week(s)/day. Lab journal entries must be entered into a **bound** book, written in **ink** (non-erasable pen) and should include data such as:

- date and title of the experiment
- pre-lab or in-lab calculations
- raw data
- observations
- experimental conditions (*e.g.*, % gel, absorbance λ , incubation conditions...)
- changes to the procedure
- any errors
- unknown numbers and bacterial strains used

Data and calculations must be presented in a manner so that what appears on the page will need no further clarification (e.g. variables are clearly labelled with units and data tables are titled). The TA marking your journal will be justified in taking off marks if they cannot read or interpret your writing, or if they have to search excessively for required data.

Practical Assessment (10%)

The practical assessment will be based on your preparation for labs, attendance, organization, calculations, experimental results, and general lab practice including clean up.

Quizzes (15%)

There are two quizzes per a semester. The format, and the material covered on the quiz will be provided before the quiz date.

University Policy on Academic Integrity

Suspected cases of plagiarism or cheating will be documented and submitted to the Department Chair for penalty assessment as described in the UVic calendar. The following is an excerpt taken from the UVic Undergraduate Calendar, 2013-2014, p.32.

Plagiarism

A student commits plagiarism when he or she:

- submits the work of another person as original work
- gives inadequate attribution to an author or creator whose work is incorporated into the student's work, including failing to indicate clearly the inclusion of another individual's work
- paraphrases material from a source without sufficient acknowledgement as described above
- resubmits their own work that has been used in an identical or similar form to fulfill an academic requirement

Falsifying Materials Subject to Academic Evaluation

Falsifying materials subject to academic evaluation includes, but is not limited to:

- fraudulently manipulating laboratory processes, electronic data or research data in order to achieve desired results
- using work prepared by someone else and submitting it as one's own
- citing a source from which material was not obtained
- using a quoted reference from a non-original source while implying reference to the original source
- submitting false records, information or data, in writing or orally

Cheating on Assignments, Tests and Examinations

Cheating includes, but is not limited to:

- copying the answers or other work of another person
- sharing information or answers when doing take-home assignments, tests and examinations except where the instructor has authorized collaborative work
- having in an examination or test any materials or equipment other than those authorized by the examiners

Note: Students having a cell phone, tablet, or computer on their person during an exam will be assumed to have it for the purpose of cheating.

Aiding Others to Cheat

- helping or attempting to help others to engage in any of conduct described above is an offence

Academic Integrity Assignment

Please read the UVic Libraries' webpage on plagiarism and UVic's Policy on Academic Integrity. Both can be found at: <http://library.uvic.ca/instruction/cite/plagiarism.html>.

Complete the Academic Integrity Assignment on the BCMB301B Coursespaces website.

- Click on the "Quizzes" link under "Course Menu" on the left hand side of the page to find the assignment.
- Exercise is due **Sunday, January 12th by 11:59 p.m.**
- You must obtain a grade of 100% to successfully complete the assignment. However, you may repeat the assignment as many times as necessary in order to achieve this.