

## Laboratory Syllabus – MICR4453 Fall 2018

**Instructor of Record: Dr. Rosa Maldonado,**

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**Teaching Assistants: Nasim Karimi-Hosseini, Maria Tays Mendes**

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**Office Hours: By appointment and arrangement**

**Lab attendance is required.** Absence from the lab will be excused **ONLY** if notice is given to the instructor 24 hours in advance. Otherwise, you will receive 1 point off your grade for each unexcused lab absence. Make every effort to arrive on time.

	<u>Points</u>
<b>LABORATORY GRADING:</b>	
Lab reports (6):	20
Notebook:	20
Quizzes:	20
Exams 1 and 2:	<u>40</u>
<b>Total:</b>	<b>100</b>

### **LABORATORY REPORT**

The laboratory reports will be prepared in groups. It should contain title, objectives, methodology, results, discussion, and references.

### **LABORATORY NOTEBOOK**

Each student should maintain a detailed lab notebook, which will count 20 points towards the laboratory grade. This lab book is intended to serve as a detailed diary of the protocols, discussions, experiments, and results pertaining to each of the lab exercises performed during the semester. Legibility, neatness, and organization are important. Handouts do not need to be recopied into the lab book but may be cut and pasted or taped into the appropriate section. Work with lab partners to put together findings and other materials **but write up each exercise in your own words. Plagiarism will not be tolerated.** Do not loan out your finished product for others to copy. Lab books will be checked at randomly. Completed lab books are due in class on the last day.

***Read this section carefully. For each lab exercise your notebook should contain the following:***

#### **I. Title**

Brief and descriptive. Example: Lab Exercise # 5 - Handling of Animals, Immunizations

#### **II. Introduction**

It describes the purpose of the lab exercise/experiment and includes background information presented by the instructor or included in the handout. It should have a minimum of 2 paragraphs in length.

Week	Date (week)	Lab #	EXPERIMENT	ASSIGNMENT
1	9/10	1	Laboratory safety	-
2	9/17	2	Pipetting	-
3	9/24	3	Haematocytometer & cell counter	-
4	10/1	4	White cell staining	
5	10/8	5	ELISA	Report 1 (on WBC count)
6	10/15		<b>Exam 1</b>	
7	10/22	6	Phagocytes (might change: cells might not be ready)	Report 2 (ELISA)
8	10/29	7	Start western blotting	Report 3 (Phagocytosis)
9	11/5		Finish western blotting	
10	11/12	8	Bioinformatics' tools for vaccines development	Report 4 (on WB)
11	11/19		<b>Thanksgiving: No labs</b>	
12	11/26	9	Animal handling	Report 5 (on Bioinformatics)
13	12/3		<b>Final Exam (will be confirmed)</b>	

### **III. Materials and Methods**

It should describe the supplies, reagents and equipment used and how the experiment or technique was performed. It should be sufficiently detailed to permit another person to reproduce the work.

### **IV. Results**

A written account of observations, findings, and raw data. The Results section should also include data in the form of drawings, graphs or tables, when appropriate. Drawings, tables, and graphs should be numbered and have their own brief titles.

### **V. Discussion**

A summary of what was learned from both methodological and principle standpoints. Also, you should describe problems encountered and possible solutions.

**QUIZZES:** Before each lab there will be a quiz about the exercise/experiment to be carried out.