

# Genetics 3063 Laboratory Schedule

BC Central Campus

Session 1 Spring 2019

01/014/2019 – 04/22/2019

All required readings should be completed before coming to the lab.

Lab coats, closed toe shoes and eye protection are required for all laboratories.

| Dates        | Lab # | Lab Title   |
|--------------|-------|---|
| 01/14        | 1     | Introduction: Safety and Scientific Method<br>Pipetting technique, bacteria plating and proper dilution protocol                                  |
| <b>01/21</b> |       | <b>College Closed: MLK Day</b>  |
| 01/28        | 2     | HIV disease transmission model and the use of ELISA assays  |
| 02/04        | 3     | pGLO™ Bacterial Transformation Part I   |
| 02/11        | 4     | pGLO™ Bacterial Transformation Part II<br>Speaker: Prof. S. Ponukumati. “ <b>BLAST</b> : Basic Local Alignment Search Tool”                       |
| 02/18        | 5     | GMO Investigator Part I<br>Student food sample prep and PCR set up<br><b>Quiz # 1</b><br><b>BLAST Assignment Due</b><br><b>Lab Packet # 1 Due</b> |
| 02/25        | 6     | GMO Investigator Part II<br>PCR product electrophoresis and write up of analysis  |
| <b>03/04</b> |       | <b>College Closed: Spring Break</b>   |
| 03/11        | 7     | GMO Investigator Part III<br>Student food sample prep, RT-PCR prep and cycle run  |
| 03/18        | 8     | GMO Investigator Part IV<br>RT- PCR sample product electrophoresis and write up of analysis   |
| 03/25        | 9     | GMO Investigator Part V<br>Repeat of PCR or RT-PCR experiment if need be  |
| 04/01        | 10    | Western Blot Technique Part I<br><b>Quiz # 2</b><br><b>Lab Packet # 2 Due</b>   |
| 04/08        | 11    | Western Blot Technique Part II<br>Protein Fingerprinting  |
| 04/15        | 12    | Fingerprint Analysis, Blood Typing and PTC testing<br><b>Quiz # 3</b><br><b>Lab Packet # 3 Due</b>  |
| 04/22        | 13    | <b>Lab Cumulative Final Exam!</b>   |

**The instructor reserves the right to change the lab schedule**  
**CHECK D2L AND LAB MATERIALS BEFORE COMING TO CLASS!!!!!!**