

## BIOLOGY 380.3 Project Proposal Form

Student's name: \_\_\_\_\_

Signature: \_\_\_\_\_

Student number: \_\_\_\_\_

NSID: \_\_\_\_\_

Proposed Supervisor: Neil Chilton

Signature: \_\_\_\_\_

Course & CRN#: BIOL 380.3. 28502 Term: Winter 2020

**Proposed Project Title: Genetic characterization of rodent fleas**

**Project Outline:** Please provide a brief outline of the proposed research project. Include any relevant methodology and explain what the student will learn over the course of the project (attach additional pages if necessary).

The objective of the project is to characterize different mitochondrial and nuclear genes in fleas that parasitize Richardson's ground squirrels and thirteen-lined ground squirrels from the Canadian prairies. Each student will learn to use basic molecular techniques (i.e., PCR and sequencing) and the methods used to analyze the data obtained. Each student will be responsible for examining genetic variation in fleas using one gene.

This project is designed for a maximum of 6 students.

**Prerequisites:** Completion of 12 credit units of senior BIOL courses

**Evaluation:** Please indicate when grades will be assigned. Will anyone other than the proposed supervisor be providing any assessment? Yes – Jessica Thoroughgood

Assessment Metric:	Date(s) Grade is to be Assigned:
Practical Research Performance (25%)	10% Feb 28      15% Apr 7
Research Notebook (25%)	10% Feb 28      15% Apr 7
Literature Review (40%)	10% Annotated bibliography Feb 28 30% Term paper Apr 7
Oral Presentation (10%)	TBD but before Apr 7
Total (100%)	

**A copy of the final literature review is to be provided to the Department. The original Research Notebook may be retained by the Course Supervisor depending on intellectual property requirements.**

Approved: \_\_\_\_\_  
(Department Head)

Date: \_\_\_\_\_