

Example of Learning Agreement form

BIOC 3620.03: **Experiential Learning in Biochemistry & Molecular Biology**

Course Coordinator: Dr. Melanie Dobson (Dobson@dal.ca) Room 10J, Tupper Building

Student Name: _____ Student Number: _____

Supervisor Name: _____ Dr X _____ Student Email: _____

Term: September – December January –April May-August Year: 2020

Part A should be completed by the Biochemistry & Molecular Biology Department faculty member who has agreed to supervise the student's BIOC 3620 work experience.

Part B must be signed by both the prospective supervisor and the student.

Part A *Learning Activities and Outcomes*

Learning Activities (some examples are given below)

1. Maintenance of an appropriately detailed description of all work undertaken in a hard-cover lab notebook
2. Obtain and read protocols for each procedure prior to commencing the procedure
3. Preparation and sterilization of culture media, flasks and plastic ware
4. Culturing and extraction of plasmid DNA from transformed bacteria
5. Characterization of plasmid DNA by restriction enzyme digestion and agarose gel electrophoresis
6. Transformation of bacteria with plasmid DNA
7. Attendance at weekly lab meeting
8. Participation at lab meetings including provision of feedback to others and presentation of your experimental results if appropriate

Learning Outcomes (biochemistry or molecular biology knowledge and skills that will be learned):

By the end of this work experience you will know how to:

1. Document experimental results
2. Prepare sterile microbiological growth media and standard reagent solutions
3. Perform standard microbiological techniques
4. Perform standard molecular biology techniques, including preparation of plasmid DNA, and characterization of cloned DNA by restriction enzyme digestion and agarose gel electrophoresis

5. Communicate experimental results orally

Criteria for Supervisor's Evaluation

All research activity will be recorded in a hardcover bound lab book using a format for the entries that will be provided and demonstrated in the first 2 weeks. A draft of the final report should be submitted for feedback at or before 10 weeks of work has been completed with the final version due no later than 1 week after the 12 weeks of work has been completed. The format for the report is given in the Bioc 3620 prospectus. See the supervisor's evaluation form for the aspects of the student's performance to be considered in the final evaluation.

Part B Agreement to the Terms of the Work Experience

Work Experience Schedule

Start Date: ___Jan 6, 2020___ End Date: ___Apr. 6, 2020___ Total number of weeks: ___12___

Average hours/week the student is expected to commit for the learning activities: ___7___

(Note: minimum for the class is 72 hours in total, 96 hours is the maximum)

The schedule of work is an average of one 7-hr day in the lab per week for 12 weeks. To maximize efficiency, the hours may be spread across more than one day in a week. For example, bacterial cultures might be inoculated late one afternoon and plasmid DNA extracted from them the next morning, while the analysis of the extracted DNA by gel electrophoresis might be done on a subsequent day. Attendance at a 1-hr weekly lab group meeting is expected as part of the time commitment. Start and end dates will be determined by mutual agreement between the student and Dr. X.

Last date for submission of technical part of final report to supervisor for feedback: **April X, 2020**

Date Final report is due to Coordinator: _____ Apr. 20, 2020 _____

I agree to provide activities that will enable the student to have the opportunity to fulfill the learning outcomes as outlined in Part A, and to monitor and assess the performance of the student during their work experience, including submission of a completed evaluation form to the coordinator.

Supervisor Signature: _____ Date: _____

I agree to undertake the learning activities outlined in Part A and to the terms outlined above including the maintenance of an activity log and completion of a detailed final report on the work experience.

Student Signature: _____ Date: _____

Before the student can register in Bioc 3620, the completed form must be approved by the course coordinator.

Course Coordinator: Dr. Melanie Dobson (Dobson@dal.ca) Room 10J, Tupper Building

Tel: 494-7182

Permission to register: _____