HEALTH SCIENCES
Biochemistry &
Biomedical Sciences

McMaster University

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BIOCHEM Research and thesis Course Quick Guide

What is a Thesis Course?

Thesis courses and research projects are available to Honours Biochemistry students in their third and fourth years. They are independent research projects done under the supervision of a principle investigator (PI). The PI may be a faculty member within the Department of Biochemistry & Biomedical Sciences, or outside the department if their research is relevant or related to biochemistry. Students require pre-approval to work with supervisors that are not members of the BBS department.

A thesis is required of students in Honours Biochemistry - Biomedical Research Specialization (B.Sc. and B.H.Sc.), with and without co-op. Non-specialized (core) Honours Biochemistry students may optionally take a thesis. In both cases a thesis is a challenging and rewarding experience that provides first-hand experience in research.

Courses

Third Year:

BIOCHEM 3A03	BIOCHEM 3R06
• A one term research project • 8 hours per week is expected in lab, on average, over the term. • Evaluated on lab performance and a final report	• A two term project • 8 hours per week is expected in lab, on average, over the year. • Evaluated on laboratory performance and a final report

Fourth year:

BIOCHEM 4Z03	BIOCHEM 4F09	BIOCHEM 4T15
• A one semester senior project • 8 hours per week is expected in lab, on average, over the term. • Evaluated on a final report and lab performance	• A two-term senior project • 12 hours per week is expected in lab, on average, over the year. • Evaluated on a lab performance, a literature review, an oral presentation, and a written thesis	• A two-term senior project • 20 hours per week is expected in lab, on average, over the year. • Evaluated on a lab performance, a literature review, an oral presentation, and a written thesis

Second-year students interested in 3A03/3R06 are recommended to start looking for a position in January. Please note that a third year project is not required, even for specialization students. **Permission forms for third-year projects are not accepted until January.**

Third-Year specialization students are recommended to start their thesis search September/October. Core students are recommended to start their search in January. **Permission forms for core students will not be accepted until January.**

Finding a supervisor

1. **Research** McMaster faculty, find several with research that aligns with your interests
    a. For a list of Biochemistry and Biomedical Sciences faculty members, please see: https://healthsci.mcmaster.ca/biochem/about-us/people
    b. Clinical-based thesis placements are not permitted

2. **Email**
    a. Introduce yourself & explain why you are writing
        i. Use professional tone with interest and appreciation
    b. Explain your qualifications
        i. Knowledge of topics, soft skills
        ii. Highlight ability to contribute and alignment of research goals
    c. Attach your CV & an unofficial transcript (.pdf)
        i. Make reference to attachments in the closer of your email
    d. CC the PI's administrative assistant, if applicable

Tips: Be sincere, be concise. Why are you interested? Look into their research and current work, explain why it is interesting to you.

3. Set a **Meeting/Interview**
    a. Be polite, courteous, and professional
    b. Show enthusiasm for their research & be knowledgeable of their current work
    c. Make sure to thank them before you leave, or send a thank-you email
4. **Follow-up**
5. Complete your **Permission form**
    a. Permission forms may be found at: https://healthsci.mcmaster.ca/biochem/education/undergraduate/forms-and-procedures
    b. Completed permission forms for 3A03/3R06 should be emailed to bbsug@mcmaster.ca. Permission forms for 4Z03/4F09/4T15 should be emailed to bcthesis@mcmaster.ca.

Adapted from the Biochemistry and Biomedical Sciences Society Thesis Guide and Survival Guide & 2019 presentation slides by Nancy McKenzie