BIOCHEM Research Project and Thesis Courses

FAQ

What is a thesis course?

Thesis courses and research projects are available to Honours Biochemistry students in their third and fourth years of study. They are independent research projects done under the supervision of a principal 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.

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

Third-Year Courses

*In cases where there are discrepancies between this information and the current course outline, the course outline prevails.*

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| **Course Code** | **Length** | **Details** |
| BIOCHEM 3A03 | One term (Fall, Winter, Spring or Summer) | * Expectation is 8 hours per week towards project work (Fall or Winter) or 14 hours (Spring or Summer) * Evaluations: Lab Performance, Final Report * Biochemistry wet-lab projects or dry-lab projects in biochemistry fields of research (i.e. bioinformatics) |
| BIOCHEM 3R06 A/B | Two terms (Fall/Winter or Spring/Summer) | * Expectation is 8 hours per week towards project work. * Evaluations: Lab Performance, Final Report * Biochemistry wet-lab projects or dry-lab projects in biochemistry fields of research (i.e. bioinformatics) |
| BIOCHEM 3R03 | One term (Fall, Winter, Spring or Summer) | * Expectation is 8 hours per week towards project work (Fall or Winter) or 14 hours (Spring or Summer) * Evaluations: Lab Performance, Final Report * Clinical research projects only, such as evaluating intervention-related health outcomes. * *Biochemistry research topics that would otherwise be approved for BIOCHEM 3A03/3R06 would not be approved for BIOCHEM 3R03.* |

Fourth-Year Courses

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| **Course Code** | **Length** | **Details** |
| BIOCHEM 4Z03 | One term (Fall or Winter) | * Expectation is 8 hours per week towards project work. * Evaluations: Lab Performance, Final Report * Biochemistry wet-lab projects or dry-lab projects in biochemistry fields of research (i.e. bioinformatics) |
| BIOCHEM 4F09 A/B | Two terms (Fall and Winter) | * Expectation is 12 hours per week towards project work. * Evaluations: Literature Review, Lab Performance, Final Written Thesis, Oral Presentation at Thesis Symposium * Biochemistry wet-lab projects or dry-lab projects in biochemistry fields of research (i.e. bioinformatics) * Clinical Research is not approved |
| BIOCHEM 4T15 A/B | Two term (Fall and Winter) | * Expectation is 20 hours per week towards project work. * Evaluations: Literature Review, Lab Performance, Final Written Thesis, Oral Presentation at Thesis Symposium * Biochemistry wet-lab projects or dry-lab projects in biochemistry fields of research (i.e. bioinformatics) * Clinical Research is not approved |

Can I work with [supervisor] for [course code]?

Students are automatically approved to enroll for BIOCHEM 3A03, 3R06, 4F09, 4T15 , or 4Z03 under the supervision of a researcher in the Department of Biochemistry and Biomedical Sciences. This includes researchers listed on the “About Us > People” section of the website under the Faculty, Associate Faculty, and Joint Members tab.

For supervisors outside of the Department of Biochemistry and Biomedical Sciences, inquire with [bbsug@mcmaster.ca](mailto:bbsug@mcmaster.ca). We **may** request you complete the Research Project Approval Request form.

All BIOCHEM 3R03 projects require the Research Project Approval Request Form.

When should I start looking for a project supervisor?

If you are a specialization student in third year, you should start looking in September or October for your senior thesis supervisor. For all other situations, starting your search between October – January is reasonable.

What is the deadline for submitting a permission form?

Forms are **due March 31st** for projects starting in September, with exceptions. The **last-call deadline** is the first day of the term in which the project will take place, if you know your project is approved.

How do I find a project or thesis 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://biochem.healthsci.mcmaster.ca/about-us/people>. Clinical-based thesis placements are not permitted.
2. **Email**

* Introduce yourself & explain why you are writing.
  + Use professional tone with interest and appreciation.
* Explain your qualifications.
  + Knowledge of topics, soft skills
  + Highlight ability to contribute and alignment of research goals.
* Attach your CV & an unofficial transcript (.pdf)
  + Refer to attachments in the closer of your email.
  + 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.*

1. Set a **Meeting/Interview** 
   1. Be polite, courteous, and professional.
   2. Show enthusiasm for their research & be knowledgeable of their current work.
   3. Make sure to thank them before you leave, or send a thank-you email.
2. **Follow-up**

I found a supervisor / had my project approved. Now what?

Submit a permission form signed by your supervisor to [bbsug@mcmaster.ca](mailto:bbsug@mcmaster.ca) or [bcthesis@mcmaster.ca](mailto:bcthesis@mcmaster.ca), following the instructions on the top of the form. Forms are on the Department of Biochemistry and Biomedical Sciences Website:   
Education > Undergraduate > Forms and Procedures

<https://biochem.healthsci.mcmaster.ca/education/undergraduate/forms-and-procedures/>