



1. Will this new course affect a current program?
If "yes", has a Program Revision Form been submitted concurrently?

Yes No
Yes No

2. Teaching Department:

Biochemistry

3. Administering Faculty/Unit:

Science

6. Responsible Instructor

Jason Young

4. Campus
(Downtown, Macdonald, Off Campus, Distance Ed, Other – specify)

Downtown

5. Effective Term of Implementation
(Ex. Sept. 2004 = 200409)

Term:

Sept. 2008

7. Course Title (Limit 30 Characters) - required for all courses:

Research Lab in Biochemistry

9. Course Title to Appear in the Calendar (optional)
(Limit 59 characters):
Note: This can ONLY be an expansion of word(s) abbreviated in the 30 character course title above.

Research Laboratory in Biochemistry

10. Credit Weight
(or CEU's for non-credit CE courses):

6

8. Course Number(s)
Indicate course number & the number of terms spanned:
(tick all that apply)

Subject/course number: BIOC 462

Course(s) Span:

1 term (FALL)
 2 consecutive terms (D1, D2)
 2 non-consecutive terms (N1, N2)
 3 consecutive terms (J1, J2, J3)

11. Rationale for new course

Professors and students in Biochemistry have requested a fall-term advanced-research course that would be structured differently from, and that would be offered as an alternative to, our current BIOC 460 (Advanced Lab in Biochemistry) course. BIOC 460 rotates students through three different units over the fall term (a fixed laboratory unit that all students take in common, a second one-month laboratory unit taken in the laboratory of a departmental faculty member and a third, literature-based research unit). BIOC 462, by contrast, would allow pairs of students to spend the entire fall semester in a single research laboratory. In order to register for the course, a pair of students will be required to obtain the consent of a Department faculty member to supervise the research project in her/his laboratory.

As indicated in the Course Description, evaluation of the course will be based on the student's performance in the laboratory, on a final report and on a separate literature-based paper prepared over the course of the term, all of which will be assessed by the laboratory director.

12. Course Description
(as it will appear in the Calendar [maximum 50 words]):
(N.B. Faculty of Medicine must append complete course outline)

A laboratory research project and related written review article all performed under the supervision of the same professor.

13. Supplementary information to appear in the Calendar in addition to the course description.
Such as: equivalent course(s), contact hours, enrolment limitations, language of instruction etc.
Please enter the information as it should appear in the calendar notes.

A final detailed written report and a literature-review paper will be prepared. Students must obtain consent of a prospective research director and of the course coordinator in order to register.

14. Schedule Types(s):
(Enter all that apply – see course guidelines for a complete list.)
(i.e. Lecture, Labs, Tutorial)

	Hours per Week	Hours per Week	Hours per Week
Laboratory	<input type="text" value="18"/>	<input type="text"/>	<input type="text"/>
<hr/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<hr/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Total Hours per Week:			<input type="text" value="18"/>
Total Number of Weeks:			<input type="text" value="13"/>

15. Projected Enrolment:

16. Required text and/or preliminary reading list sent to library?

Yes No

17. Prerequisite(s) (Courses or Tests)
Specify course number(s) or name(s) of test(s):

If the student does not have a prerequisite should web registration be blocked?
 Yes No

If "Yes" complete A and B:

A. Indicate minimum grade or test score(s) the student must attain in prerequisite course(s) or test(s):

B. Can the prerequisite course(s) or test(s) be taken in the same term as this course?
 Yes No

18. Corequisite(s) Course Number(s):
Specify course number(s) and title(s):

If the student does not register for the corequisite in the same term should web registration be blocked?
 Yes No

19. Restriction(s):

20. Consultation Reports Attached
 Yes N/A

21. Additional Course Charges (must be approved by the Fee Policy Committee)

Description of Fee (e.g. screening fee)	Amount
<input type="text"/>	<input type="text"/>

22. Requires Teaching, Physical, or Financial Resources Not Currently Available (attach explanation)
 Yes No

INFORMATION FOR ADMISSIONS, RECRUITMENT & REGISTRAR'S OFFICE

To be completed by the Faculty

Slot Course: Yes No

Thesis Component: Yes No

To be completed by ARR

CIP Code

For Continuing Education Use

CE Admin. Unit :

CE Non-Grant Courses:

Flat Rate: CdnFlat Rate: Yes N/A

23. Approvals:

Routing Sequence	Departmental Meeting	Departmental Chair	Other Faculty	Curric/Academic Committee	Faculty	SCTP
Name	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Signature	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Date	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Departmental Contact Person (name/phone/email)

John Silvius (398-7267; john.silvius@mcgill.ca)

Description – Proposed BIOC 462 Course

This course will be offered in the fall semester of each year to students in the Honours program in Biochemistry as an alternative to our existing BIOC 460 course (which will continue). Like BIOC 460, BIOC 462 will offer advanced undergraduate-level training in both literature- and laboratory-based research in biochemistry and molecular biology. However, the format of the two courses will differ.

The present BIOC 460 course comprises three parts:

- An initial two-week rotation in which all students carry out (and prepare a report on) a common set of experiments that provide training in a variety of advanced biochemical and molecular-biological techniques.
- A four-week rotation in which pairs of students carry out a research project in the laboratory of a department faculty member (following which the students prepare and submit a research report in the format of a published scientific article).
- A four-week rotation in which each student prepares a literature-based research paper, in the format of a published review article, under the direction of a faculty member.

The proposed BIOC 462 course will allow pairs of students to work in the research laboratory of a single Biochemistry faculty member for the entire fall semester. During the course of this time the students must prepare a literature-based research paper, covering in depth the state of the field of research in which their work for the course is focused. At the end of the term the students will also prepare a final research report, written in the style of a published research article.

The new course will thus offer many of the elements of BIOC 460 (chiefly excepting the initial ‘common rotation’ described above). However, BIOC 462 will allow a stronger focus in a single research area for the full term, while BIOC 460 will provide greater diversity in the training experiences that students receive. Both students and faculty members in Biochemistry have asked that we offer our Honours students such a choice for their U3 Fall semester.

Biochemistry Honours students who cannot arrange a suitable ‘berth’ in BIOC 462 will be guaranteed one in BIOC 460, as all Honours students are at present.

Method of Evaluation

Literature-based paper: 33%

Final research paper: 33%

Evaluation of laboratory performance: 33%

Participating Faculty

The course will be coordinated by Dr. Jason Young, and any regular or associate member of the Biochemistry department will be able to ‘host’ a pair of students in her/his laboratory.