**New Course Proposal Form**

1. **Will this new course affect a current program?**
   - Yes [ ] No [X]
   - If "yes", has a Program Revision Form been submitted concurrently?
     - Yes [ ] No [X]

2. **Teaching Department:**
   - Biochemistry

3. **Administering Faculty/Unit:**
   - Science

6. **Responsible Instructor:**
   - Dr. Bhushan Nagar and staff

7. **Course Title (Limit 30 Characters) - required for all courses:**
   - Undergraduate Research Project

8. **Course Number(s):**
   - Subject/course number: BIOC 396
   - Course(s) Span:
     - [ ] 1 term (Fall, Winter, Summer)
     - [ ] 2 consecutive terms (D1, D2)
     - [ ] 2 non-consecutive terms (N1, N2)
     - [ ] 3 consecutive terms (J1, J2, J3)

11. **Rationale for new course:**
    BIOC 396 is part of the Faculty of Science initiative to increase undergraduate research opportunities. This course is designed to broaden the scope of research courses, to make them available to more students, and to enhance the undergraduate research component more interdisciplinary. The course would be open to students in any program offered by the Faculty of Science, would be an elective course, could be taken after one term of undergraduate studies, and could be taken by students whose major is outside the offering unit. The course will contain a significant research component that requires substantial independent work by students (which the supervisor will evaluate for 50% of the course mark) and a final report worth 50% of the final grade. Students will not be permitted to take this course under the S/U option.

12. **Course Description**
    (as it will appear in the Calendar [maximum 50 words]):
    (N.B. Faculty of Medicine must append complete course outline)
    Independent research project with a final written report.

13. **Supplementary information to appear in the Calendar in addition to the course description.**
    Such as: equivalent course(s), contact hours, enrollment limitations, language of instruction etc.
    Please enter the information as it should appear in the calendar notes.
    Note that enrollment may be limited. Students are advised to start the application process well before the start of the term and to plan for an alternative course in the case that no suitable project is available. Individual projects will be suggested each term which may have project-specific prerequisites. Some projects may be accessible to students in other disciplines. See http://www.mcgill.ca/science/mrs for more information about available projects and application forms and procedures.
14. Schedule Types(s):
(Enter all that apply – see course guidelines for a complete list.)
(l.e. Lecture, Labs, Tutorial)

<table>
<thead>
<tr>
<th>Project Work</th>
<th>Hours per Week</th>
<th>9</th>
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<tbody>
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</tbody>
</table>

Total Hours per Week: 9

Total Number of Weeks: 13

15. Projected Enrollment:
2 - 5

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):
See attached.

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):

none

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

19. Restriction(s):

- Departmental permission required. Student cannot be supervised by
- Same instructor for two 398 Science courses. S/U option not permitted
- Open to students in programs offered by the Faculty of Science only

20. Consultation Reports Attached
☐ Yes   ☐ N/A

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

<table>
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<tr>
<th>Description of Fee (e.g. screening fee)</th>
<th>Amount</th>
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</thead>
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☐Yes  ☐ No
**INFORMATION FOR ADMISSIONS, RECRUITMENT & REGISTRAR'S OFFICE**

To be completed by the Faculty:  
**Slot Course:** [ ] Yes [ ] No

To be completed by ARR:  
**CIP Code:**

For Continuing Education Use:  
**CE Admin. Unit:**

**CE Non-Grant Courses:**

**Flat Rate: CDN/Flat Rate:** [ ] Yes [ ] N/A

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23. Approvals:

<table>
<thead>
<tr>
<th>Routing Sequence</th>
<th>Departmental Meeting</th>
<th>Departmental Chair</th>
<th>Other Faculty</th>
<th>Curric/Academic Committee</th>
<th>Faculty</th>
<th>SCTP</th>
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<tbody>
<tr>
<td>Name</td>
<td>John R. Silvius</td>
<td>David Thomas</td>
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<tr>
<td>Signature</td>
<td>John R. Silvius</td>
<td>David Thomas</td>
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<tr>
<td>Date</td>
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<td>Sept. 26, 2008</td>
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**Departmental Contact Person**  
(name/phone/email)  
Dr. John Silvius (loc. 7287), john.silvius@mcgill.ca
Prerequisites for BIOC 396:

MIMM 212, BIOL 301, BIOC 300 or an equivalent laboratory course in molecular- and cell-biological methods, at least one term of undergraduate studies, and a CGPA of at least 3.0; or permission of instructor.

A project proposal form must be completed by the student and instructor and approved by the course coordinator or his/her delegate before the start of the term.

Instructors will list project-specific prerequisites with the project description available through the Office for Undergraduate Research in Science (OURS) website.
BIOC 396 Undergraduate Research Project Application Form

INSTRUCTIONS FOR SUPERVISORS
- All fields are required unless indicated otherwise.
- Form available in Word format only.
- Complete Sections A & B-electronically.
- Email to victor.chisholm@mccill.ca who will post as PDF on www.mcgill.ca/science/ours/396/.

INSTRUCTIONS FOR STUDENTS
- All fields are required unless indicated otherwise.
- Download and print this form, Complete Section C and sign.
- See “How students can apply” instructions in Section B.
- Your supervisor will tell you if you are selected for this project. If so, see Ms. Labeque (McIntyre 802) to register for ‘BIOC396’ on MINERVA.

SECTION A: SUPERVISOR INFORMATION

Name: ___________________________________________ Email: ___________________________________________
Phone: ___________________________________________ Website: _________________________________________
Supervisor’s Department or Unit: ______________________ Course Number: BIOC 396

SECTION B: PROJECT INFORMATION

Term: (Indicate Fall/Winter/Summer and year) __________ Start/end dates __________ (one term):

Project title: ___________________________________________ Project description: _____________________________

[Describe the research project, which should require approximately 120 laboratory research hours (3 credits).]

Prerequisites: BIOC 300, BIOL 301, MIMM 212 or equivalent laboratory course in cell/molecular biology, and at least one term completed at
McGill with CGPA ≥ 3.0 or permission of instructor.

Grading scheme: Final grade shall be based on laboratory performance as evaluated by the research supervisor (50%) and the final written
research report (minimum 10 pages) graded by the supervisor and reviewed by the course coordinator or their delegate (50%).

Ethics, safety, and training:
[ ] Animal subjects
[ ] Human subjects
[ ] Biohazardous substances
[ ] Radioactive materials
[ ] Handling chemicals
[ ] Using lasers

For undergraduate students, ethics and safety compliance is the supervisor's responsibility.

How students can apply: After all parts of the application form are completed and signed by the Professor and the Student, bring this application form
and your advising transcript to Prof. Bhushan Nagar during office hours who will sign as the BIOC 396 course coordinator.

EMAIL TO victor.chisholm@mccill.ca WHO WILL POST AT WWW.MCGILL.CA/SCIENCE/OURS/396/.

SECTION C: STUDENT INFORMATION. (1) PRINT CLEARLY AND SIGN. (2) SEE “HOW STUDENTS CAN APPLY” IN SECTION B.

Name: _______________________________ McGill ID: _______________________________
Email: _______________________________ Phone: _______________________________
Program: _______________________________ Level (circle one): U0 / U1 / U2 / U3

I have not applied for another 396 course in this term.

Student signature: _______________________________ Date: _______________________________

SECTION D: APPROVALS, (1) PRINT NAMES & SIGN. (2) NOTIFY OFFICE FOR UNDERGRADUATE RESEARCH IN SCIENCE. (3) GIVE STUDENT CODE TO REGISTER FOR COURSE ON MINERVA.

Supervisor: _______________________________ Date: _______________________________
Course coordinator or designate - I certify that this project conforms to departmental requirements for 396 courses.

Date: _______________________________