1. Will this new course affect a current program?  
   Yes ☐  No ☑  
   If "yes", has a Program Revision Form been submitted concurrently?  
   Yes ☐  No ☑

2. Teaching Department:  Biology

3. Administering Faculty/Unit:  Science

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

5. Effective Term of Implementation  
   (Ex. Sept. 2004 = 200409)  
   Term:  200509

6. Course Title (Limit 30 Characters) - required for all courses:  
   Integrated Bioinformatics

7. Course Number(s)  
   Indicate course number & the number of terms spanned:  
   (tick all that apply)  
   Subject/course number:  BIOL 592  
   Course(s) Span:  ☑ 1 term  
   □ 2 consecutive terms (D1, D2)  
   □ 2 non-consecutive terms (N1, N2)  
   □ 3 terms (J1, J2, J3)

8. 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.

9. Credit Weight  
   (or CEU's for non-credit CE courses):  3

10. Schedule Type(s):  
    (Enter all that apply – see form, STVSCHD in Banner for a complete list.)  
    (i.e. Lecture, Labs, Tutorial)  
    | Hours per Week | Hours per Week | Hours per Week |
    |----------------|---------------|---------------|
    | LECTURE        | 3             |               |
    |                |               |               |
    |                |               |               |
    |                |               |               |
    Total Hours per Week:  3  
    Total Number of Weeks:  13

11. Projected Enrolment:  20
12. Prerequisite(s) (Courses or Tests)
Specify course number(s) or name(s) of test(s):

| BIOL 301 or its equivalent, or permission of instructor |

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

13. 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

14. Consultation Reports Attached
☑ Yes ☐ N/A

15. Additional Course Charges (must be approved by the Fee Policy Committee)
Description of Fee (e.g. screening fee) Amount

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

17. Other Information (specify):

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

"Post-genomic" bioinformatics. Concepts behind large-scale computational analysis and comparison of genomes / proteomes (and beyond), and the implications for our understanding of the basic processes of molecular and cell biology and the evolution of those processes.

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

(3) (Fall) (Prerequisites: BIOL 301 or permission of instructor) (Not open to students who have taken or are taking BINF 511)

20. Rationale
The complete sequencing of many genomes has transformed the landscape of biology. This course is designed to present the tools that are under development to mine and to integrate this data landscape, and the application of these tools to the annotation and comparison of genomes. Of central interest is how analysis of whole genomes affects our understanding of gene and protein evolution. This course is not intended for those who wish to learn in great detail the algorithmics of bioinformatical analysis, but for students who want to examine the implications of large-scale genome analysis & comparison for our understanding of molecular, cellular & evolutionary biology.

No program change submitted because this course is not a required part of any program, but a part of a student’s optional area of specialized courses.
<table>
<thead>
<tr>
<th>INFORMATION FOR ADMISSIONS, RECRUITMENT &amp; REGISTRAR'S OFFICE</th>
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<tbody>
<tr>
<td><strong>To be completed by the Faculty</strong></td>
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<tr>
<td>Slot Course: □ Yes □ No</td>
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<tr>
<td>Thesis Component: □ Yes □ No</td>
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<td>CE Admin. Unit:</td>
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<td>CE Non-Grant Courses:</td>
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<tr>
<td>Flat Rate: CdnFlat Rate: □ Yes □ N/A</td>
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21. 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>
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Departmental Contact Person
(name/phone/email)

SUSAN GABE/ 7045/ SUSAN.GABE@MCGILL.CA