AC-05-11
New Course Proposal Form
(07/2004)

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:  
   School of Computer Science

3. Administering Faculty/Unit:  
   Faculty of Science

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

5. Effective Term of Implementation  
   (Ex. Sept. 2004 = 200409)  
   Term:  
   200609

6. Responsible Instructor  
   Martin Robillard

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

8. Course Number(s)  
   Indicate course number & the number of terms spanned:  
   (tick all that apply)  
   Subject/course number:  COMP 529
   Course(s) Span:  
   ☑ 1 term  
   ☐ 2 consecutive terms (D1, D2)  
   ☐ 2 non-consecutive terms (N1, N2)  
   ☐ 3 consecutive terms (J1, J2, J3)

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.  
   Software Analysis

10. Credit Weight  
    (or CEU's for non-credit CE courses):  
    4

11. Rationale for new course  
    Very little software is actually written from scratch. Instead, software projects usually rely on existing libraries, frameworks, and components. Such building blocks must be carefully verified and integrated to ensure that the resulting applications are robust and maintainable. The necessity to integrate, reuse, and maintain large collections of software components has led to important challenges for computer scientists which, in turn, resulted in the elaboration of various component models and integration mechanisms. As the overall size and complexity of software systems continues to increase, so does the level of technological sophistication required to maintain the integrity of the systems. Since graduating computer science students are likely to join existing projects, it is important that they acquire the concepts and techniques that will enable them to easily understand, analyze, maintain, and improve the architectural integrity of the systems they encounter.

12. Course Description  
    (as it will appear in the Calendar [maximum 50 words]):  
    (N.B. Faculty of Medicine must append complete course outline)  
    Development, analysis, and maintenance of software architectures, with special focus on modular decomposition and reverse engineering.

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

<table>
<thead>
<tr>
<th>Lecture</th>
<th>Project</th>
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<tbody>
<tr>
<td>3</td>
<td>3</td>
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Total Hours per Week: 6

Total Number of Weeks: 13

15. Projected Enrolment:
20

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):
- COMP 303 Programming Techniques
- COMP 304 Object-Oriented Software Design

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)

<table>
<thead>
<tr>
<th>Description of Fee</th>
<th>Amount</th>
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<tbody>
<tr>
<td>(e.g. screening fee)</td>
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22. Requires Teaching, Physical, or Financial Resources
Not Currently Available (attach explanation)

- Yes
- No
## INFORMATION FOR ADMISSIONS, RECRUITMENT & REGISTRAR'S OFFICE

<table>
<thead>
<tr>
<th>To be completed by the Faculty</th>
<th>To be completed by ARR</th>
<th>For Continuing Education Use</th>
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<tbody>
<tr>
<td>Slot Course: ☐ Yes ☐ No</td>
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<td>Thesis Component: ☐ Yes ☐ No</td>
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<td>CIP Code</td>
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23. Approvals:

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<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>
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Departmental Contact Person (name/phone/email) Judy Kenigsberg ext. 00895

INFORMATION FOR ADMISSIONS, RECRUITMENT & REGISTRAR'S OFFICE

To be completed by the Faculty
To be completed by ARR
For Continuing Education Use

Slot Course: ☐ Yes ☐ No

CIP Code

Thesis Component: ☐ Yes ☐ No

CE Admin. Unit:

CE Non-Grant Courses:

Flat Rate: Cdn Flat Rate: ☐ Yes ☐ N/A