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: Computer Science 
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: Distributed Data Management 

7. Course Number(s) 
Indicate course number & the number of terms spanned: 
(tick all that apply) 
Subject/course number: COMP 614 
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): 4 

10. Schedule Type(s): 
(Enter all that apply – see form, STVSCHD in Banner for a complete list.) (i.e. Lecture, Labs, Tutorial) 

<table>
<thead>
<tr>
<th>Hours per Week</th>
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<tbody>
<tr>
<td>Lecture</td>
<td>3</td>
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<tr>
<td>Project</td>
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The large research oriented project including two reports and a presentation, goes beyond the usual workload of a course and justifies 4 credits. 

11. Projected Enrolment: 

| 10 |
12. Prerequisite(s) (Courses or Tests)
Specify course number(s) or name(s) of test(s):

COMP-421, and one of COMP-435 or COMP-535 or COMP-512, or equivalent

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)

Architecture and examples of distributed information systems (e.g., federated databases, component systems, web databases). Data consistency (consistency models, advanced transaction models, advanced concurrency control, distributed recovery). Data replication and caching. Distributed queries, Schema Integration. Advanced Topics.

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.

20. Rationale

The prevalence of distributed infrastructure even in smaller companies, and the advanced electronic communication between different organizations, has rapidly lead to the development of new forms of distributed information systems. Data and applications within an organization are distributed and replicated over many computers, organizations expose data or services to outside users, e.g., through web based interfaces, and individuals provide data and services to the rest of the world, as is done, e.g., in music sharing environments. These new developments require sophisticated solutions to provide data consistency, easy, efficient and authorized access to data, and data availability despite failures. This course will discuss the state-of-the art in distributed data management, providing a good introduction to the challenges found in distributed data management, and discussing recent advances in research and industry.
### INFORMATION FOR ADMISSIONS, RECRUITMENT & REGISTRAR'S OFFICE

<table>
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<th>To be completed by ARR</th>
<th>For Continuing Education Use</th>
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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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</thead>
<tbody>
<tr>
<td>Name</td>
<td></td>
<td>Denis Thérien</td>
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<td>Signature</td>
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Departmental Contact Person (name/phone/email)

Judy Kenigsberg  ext. 00895