



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:

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

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

Term:

3. Administering Faculty/Unit:

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

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

Subject/course number:

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):

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
Lectures	<input type="text" value="3"/>		<input type="text"/>		<input type="text"/>
	<input type="text"/>		<input type="text"/>		<input type="text"/>
Total Hours per Week:					<input type="text" value="3"/>
Total Number of Weeks:					<input type="text" value="13"/>

11. Projected Enrolment:

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

MATH 235 and MATH 236

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):

C

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)

Computational aspects of modern algebra. Computing in groups: algorithms, algorithmic problems in groups, finitely generated abelian groups, free groups and automata, finitely presented groups. Computing in rings: elementary notions of ring theory, ideals of polynomial rings in several variables, Groebner bases, elements of field theory. Other topics as time permits: elimination theory; applications to cryptography, linear codes, 3-color problem, geometric constructions

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.

(Prerequisites: MATH 235 and MATH 236.) (This course is intended primarily for students in the Major Program in Mathematics and the Joint Major Program in Mathematics and Computer Science.)

20. Rationale

We believe that majors students should have the opportunity to develop their knowledge of algebra beyond what they learn in MATH 235. The course is to be given a computational flavour which makes it quite different from the current honours courses in algebra and should also make it attractive to mathematically inclined computer science students, particularly the students in the Joint Major Program in Mathematics and Computer Science. The course would, at least initially, be taught by recently hired colleagues with a strong interest in computational algebra and would be innovative in nature.

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

21. Approvals:

Routing Sequence

Departmental Meeting

Departmental Chair

Other Faculty

Curric/Academic Committee

Faculty

SCTP

Name

G. Schmidt

K. GowriSankaran

Signature

Date

Departmental Contact Person (name/phone/email)

gschmidt@math.mcgill.ca