1. Will this new course affect a current program?   Yes ☐   No ☒

    If "yes", has a Program Revision Form been submitted concurrently?   Yes ☐   No ☐

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2. Teaching Department:

Chemistry

3. Administering Faculty/Unit:

Chemistry

6. Responsible Instructor

Prof. S. Bohle

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

Downtown

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

Term:

200609

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

Small Molecule Crystallography

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.

Small Molecule Crystallography

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

3

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

Subject/course number: CHEM 533

Course(s) Span:

☒ 1 term

☐ 2 consecutive terms (D1, D2)

☐ 2 non-consecutive terms (N1, N2)

☐ 3 consecutive terms (J1, J2, J3)

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11. Rationale for new course

Crystallography continues to shape all sciences relating to chemistry, materials, and biochemistry. With modern developments even the once most intractable problems such as organic compounds or macromolecules are readily characterized by readily useful techniques. Although macromolecular crystallography is taught as part of a structural biology course taught jointly by the UdeM and McGill's biochemistry departments, there is no course devoted to the very different and now standard problems of small molecule crystallography. At this point there is no other place in the curriculum, either undergraduate or graduate, where this subject is presented in even outline form.

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

Fundamentals of x-ray diffraction related to small molecule structure resolution, space groups, diffraction theory, strategies for structure solution, and refinement will be covered. Students will undertake practical exercises in data collection and solution for real crystals.

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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)

Lecture	Hours per Week		Hours per Week		Hours per Week
	3				

Total Hours per Week: 3

Total Number of Weeks: 13

15. Projected Enrolment:

20

16. Required text and/or preliminary reading list sent to library?

x Yes ☐ No

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

CHEM 355 Molecular properties and structure 2

Or permission of the 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

18. Corequisite(s) Course Number(s):
   Specify course number(s) and title(s):

Or permission of the instructor

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)

Description of Fee
(e.g. screening fee)   Amount

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

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	CE Admin. Unit :
Thesis Component: ☐ Yes ☐ No		CE Non-Grant Courses:
		Flat Rate: CdnFlat Rate: ☐ Yes ☐ N/A

23. Approvals:

Routing Sequence	Departmental Meeting	Departmental Chair	Other Faculty	Curric/Academic Committee	Faculty	SCTP
Name						
Signature						
Date						

Departmental Contact Person (name/phone/email)	