### **Minor Program Adjustment**

Faculty: Science		Date: November 20, 2017
Program: Minors in Chemistry and Physics		
Undergraduate: 🔀	Graduate:	

Minor Program Adjustments include: New required courses, Deletion of required courses, Other changes to degree requirements or program learning outcomes, New academic requirements or changes to existing requirements.

Motion: That CPRC approve updates to the current language in the academic calendar for minors in Chemistry and Physics to reflect the new nomenclature and restrictions around double-counting courses.

#### **Proposal Brief**

#### Summary of the proposed change:

We propose changes to our minors in Chemistry and Physics respectively, so that the general requirements of these minors reflect the institutional changes to minor nomenclature and restrictions around double-counting courses. Specifically:

• Remove the requirement that "at least three credit hours must be taken as science electives" (i.e. not be required by the major program), as well as the provision "if all the courses in a minor group are required by the major program, one additional course in the minor subject must be taken to satisfy the elective rule above".

# Description of the ways in which the proposed change will enhance the program and/or opportunities for students

The undergraduate program nomenclature for a minor is as follows:

"An optional secondary area of study requiring a minimum of 18 and maximum of 24 credit hours (including all prerequisites). A student may not declare a major and a minor in the same discipline. The minor appears on the academic transcript, but does not appear on the degree parchment."

As per the nomenclature's restrictions on program elements, a course is considered to be doublecounted "if it is used to satisfy both the requirements for the Major and a Minor". For minors "a maximum of 6.0 credit hours in double-counted courses may be included in the credits used towards a Minor program(s)". As such, the existing requirements stated in calendar for the Chemistry and Physics minors are no longer applicable, and go against the approved institutional nomenclature. The proposed changes will clarify the correct requirements regarding obtaining a minor in either Chemistry or Physics, and ensure that our requirements are aligned with institutional policy and guidelines.

## Process of consultation with other units if the change(s) involves students, staff, and/or faculty from other programs or courses

The Program Nomenclature Guidelines were passed through governance in June 2016, and the restrictions around double counting courses were clarified in June 2017. These changes were communicated to the various Faculty representatives (i.e. Dean, Associate Dean, CPRC representatives, etc.). The changes proposed in this document have been discussed with faculty members through the Faculty level governance process.

#### Analysis of financial and enrolment implications

There are no financial implications to these changes. We do not anticipate any changes to current enrolment numbers in these minors, but do recognize that students may require additional guidance from the academic advisors in determining their major and minor requirements.

## Proposed Implementation Date (state term, e.g. Fall 2017) Fall 2018

#### Transition Plan (include a plan for all current students in the program, by year level)

Students who previously declared a minor prior to the 2017-18 academic year will be able to follow the old requirements for their minor subject. Those students who add(ed) a minor in 2017-18 and onwards will be required to follow the new nomenclature guidelines and double-counting rules. We are recommending that students speak with their academic advisors for clarity and guidance.

## Calendar Copy and/or Program Maps (highlight revisions to existing curriculum)

## **Chemistry minor**

#### General requirements

A student must take a minimum of 18 credit hours in courses with the designation CHEM, of which at least three credit hours must be taken as science electives (i.e. not be required by the major program) and including at least six credit hours must be at the 3000- or 4000-level. If all the courses in a minor group are required by the major program, one additional course in the minor subject must be taken to satisfy the elective rule above. No more then six credit hours can be double-counted towards both major and minor program requirements. A cumulative GPA of at least 2.0 in the minor subject courses is required to successfully complete a minor program.

#### Two mandatory courses:

- CHEM 1010U Chemistry I
- CHEM 1020U Chemistry II

#### Additional courses:

At least four additional courses (12 credit hours) with a designation of CHEM, excluding CHEM 1800U, CHEM 2130U, CHEM 3140U, and CHEM 3830U, of which at least two (6 credit hours) must be at the 3000- or 4000-level.

## **Physics minor**

#### **General requirements**

A student must take a minimum of 18 credit hours in courses with the designation PHY, of which at least three credit hours must be taken as science electives (i.e. not be required by the major program) and including at least six credit hours must be at the 3000- or 4000-level. If all the courses in a minor group are required by the major program, one additional course in the minor subject must be taken to satisfy the elective rule above. No more then six credit hours can be double-counted towards both major and minor program requirements. A cumulative GPA of at least 2.0 in the minor subject courses is required to successfully complete a minor program.

Specific courses are required for the minor in Physics. A list of courses follows.

#### Four mandatory courses:

- PHY 2010U Electricity and Magnetism I
- PHY 2030U Mechanics I

One of:

- PHY 1010U Physics I or
- PHY 1030U Introductory Physics

One of:

- PHY 1020U Physics II or
- PHY 1040U Physics for Biosciences

#### Two additional courses:

Students must take two additional courses selected from any 3000- or 4000-level PHY course.

#### Note:

Some of the selected courses will require an additional PHY or MATH 2000-series course to be taken as a prerequisite.

Attachments

#### **APPROVAL DATES**

Curriculum Committee approval	November 22, 2017
Faculty Council approval	December 6, 2017
CPRC Approval	19 January 2018
Submission to Academic Council	27 February 2018