

**University of Toronto**  
**Brief: Closure of an Existing Program (graduate or undergraduate)**

*(This template has been developed in line with the University of Toronto's Quality Assurance Process)*

**Section 1**

<b>Version Date:</b>	<b>November 30<sup>th</sup>, 2010</b>
<b>Faculty / Academic Division:</b>	<b>UTM</b>
<b>Department / Unit (if applicable):</b>	<b>Chemical &amp; Physical Sciences</b>
<b>Closure Proposed:</b> <i>Please specify precisely what is being closed: ie. Graduate diploma, field, certificate, option within a program (eg. Specialist, major, or minor), entire program, or degree (graduate or undergraduate)</i>	<b>Science Education Minor ERMIN0307</b>
<b>Effective date program will be closed to new admissions:</b>	<b>March 2011</b>
<b>Effective date of full closure of program:</b> <i>(date by which students currently in the program will be expected to graduate)</i>	<b>June 2015</b>

**Section 2** *(please feel free to remove the instructions as you complete the template if you wish)*

**1. Brief Summary:**

*Please clarify precisely what is being closed.*

*What is the relationship between what is being closed and any remaining offerings:*

- *If only part of a program is being closed, please clarify the relationship between this and those portions of the program that will remain open.*
- With a lack of student interest and the advent of the Concurrent Teacher Education Program (CTEP) it is no longer viable to continue operation of this minor program in Science Education. The students presently registered will be contacted by the Department of Chemical and Physical Sciences as to the discontinuation of this program and will be notified that they will have an additional 2 to 3 years in order to complete the requirements before the courses are removed entirely.
- No further enrolments will be permitted after the current academic year and a notice will be placed in the UTM Academic Calendar to this effect.

**2. Rationale:**

*Background:*

- *When was the program first created / how long has it been offered. [In this you may wish to refer to the past success of the program.]*

*What has led to the decision to close the program?*

- *Please provide a full academic rationale.*
  - *You may wish to refer to changing enrolment; changing disciplinary landscape; shifting expertise of the professoriate; poor quality of the academic offering; overlap with other existing programs*
  - *Where appropriate, you may want to quote from recent unit or program reviews.*
  - *Explain alignment with the unit's academic plan.*

- The Science Education Minor program was designed back in 2001-2002 by a now-retired professor within the Department of Chemical and Physical Sciences. The aim of the program was to provide courses designed to

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teach background skills necessary for a career in education for the sciences, including formal science teaching, journalism and outreach.

- During the first five years, there was heavy emphasis on marketing the Science Education Minor and, as such, enrolments in science education courses steadily increased. Following the retirement of the creator of the Science Education program, and with the institution of the Concurrent Teacher Education Program (CTEP) enrolments in the Science Education Minor and science education courses steadily decreased.
- Given the lack of viable student interest in the Science Education Minor and the development of CTEP, it is no longer justifiable to operate this program and as such we are asking for the discontinuation of the Science Education Minor (ERMIN0307).

**3. Impact on other programs/units of the proposed closure:**

- *Please provide evidence of consultation with any programs/units/faculties that will be affected.*
- *What are the positive and negative implications that need to be considered in the closure?*
- *Impact on the nature and quality of the division's program of study.*
- *Impact of closure on other units including inter-divisional and inter-institutional agreements/contracts.*
- *Please mention if the courses that supported this degree, program, or program option will continue to be offered.*

- There are no additional programs/units at UTM which will be affected by the closure of this program. The courses supported by this program will continue to be offered for an additional 2-3 years following the discontinuation.
- One of the positive outcomes of the closure is that the students truly seeking a career in Science Education will be funneled into the CTEP stream which offers a far more comprehensive training program.
- One of the negative implications which lead to the closure of this program is that most of the students registered in the Science Education courses were not students who were registered in the Minor.
- Little to no impact will be made to the nature and quality of the division's program of study as the focus has always been and will remain on the core programs in Chemistry, Physics, Earth Sciences and Astronomy.

**4. Student Accommodation:**

*Please include:*

- *Current enrolment showing breakdown by year in program / option being closed*

*Undergraduate*

	Year one	Year two	Year three	Year four
Current enrolment	# 8	# 18	# 13	# 3

*Graduate breakdown N/A*

Current enrolment Masters	N/A	N/A	N/A	N/A	N/A	N/A
Current enrolment PhD	N/A	N/A	N/A	N/A	N/A	N/A

- *Detail concerning how students in progress will be accommodated.*
  - *Will students be allowed to complete their program or transferred to another program. [In the latter instance please comment on the ease with which they can complete the requirements of the new program and show evidence of consultation if relevant.]*
  - *Deadline by which accommodated students must complete the program – if there are grounds for concern, what are their options if they have not completed the program by that deadline?*
  - *Capacity/course availability to accommodate affected students.*
  - *Can inactive students reactivate to the closed program?*
- *How will students be notified of the change?*

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### Appendix B: Deletion of the Minor – Science Education, B.Sc.

- *What will the impact of the proposed closure be on the range of academic options available to students in the future? [i.e. are there other programs or options that will fill the void that may/may not be created by the closure?]*
- All of the active students registered in ERMIND0307 will be grandparented into the program following its discontinuation. The registrations date back to the very onset of the program (summer 2001) and up until the fall 2010. There are presently 3 students in their fourth year of study and we anticipate them to graduate within the next year thereby eliminating them from the list of active students in the program.
- It should be noted that the Science Education Minor is a Type 1 program, meaning that there are no requirements in order to declare this program and as such it is believed that there are a number of students who have added this minor to their student record as a placeholder prior to entering another minor. The department will, however, ensure that all remaining students in this program are notified and provided with the deadlines and timeframes associated with completion of this minor following the discontinuation.
- Due to the number of students still remaining active in the Science Education program we intend to offer the Science Education courses for an additional 2 to 3 years so that students have ample opportunity to complete the requirements for completion of this Minor. The Science Education courses in question which are required for completion are: SCI398Y5 or (SCI395H5 and SCI396H5) and SCI499H5. No further enrolments in the actual program will be permitted after the current academic year and notice will be placed in the UTM Academic Calendar to this effect. All students still active in this program will be sent notification of the impending closure and will be advised to consult with the Department regarding the timing and implications thereof. Students will also be advised of alternative program options if they choose not to complete or are not able to complete the requirements.
- SCI398Y5 has been changed to a combination of SCI395H5 (Science Education: Basic Concepts) + SCI396H5 (Science Education: Special Topics) and as such, maximum enrollment in these two half courses stand at 35 students each. Enrolment in SCI499H5 (Science Education Project) is based on permission of the instructor; there are no limits on enrollment in this course at present.
- Inactive students will not be permitted to reactivate once this program has been discontinued.
- The focus of the Science Education Minor on preparing students for a career as Science educators is very similar to the Concurrent Teacher Education Program (CTEP) with teaching subjects of Chemistry or Math offered here at UTM. Thus, any student with a true avocation in this direction has the CTEP stream as an option.

#### 5. Faculty / Staff Accommodation:

*What is the impact, if any, on faculty and staff of the closure?*

None

#### 6. Resource Implications:

*What impact will the closure of the program have on the unit/department/Faculty?*

None

#### 7. Governance Process:

<b><i>Levels of Approval Required</i></b>
Faculty/Divisional Council
Submission to Provost's Office
AP&P (approval of program closures: undergrad specialists/majors)
Academic Board (approval of degree closures)
Inclusion in Annual report to Quality Council
Inclusion in annual report to MTCU (in case of closure of degree)

*Developed: November 25, 2010*