



**FIRST NATIONS UNIVERSITY OF CANADA
SCIENCE LABORATORY INSTRUCTOR
CRITERIA DOCUMENT**

June 2017

**SCIENCE AT THE FIRST NATIONS UNIVERSITY OF CANADA
PREAMBLE**

First Nations people and other Indigenous groups in Canada are severely underrepresented in all areas of science. This situation is highly problematic for these communities that require scientific knowledge and skills as they gain increasing control of their land, resources, and programs related to health, environment, and communication technologies.

In order to alleviate the under-representation of Indigenous people in science, science at the First Nations University of Canada is focused on providing a culturally-relevant, knowledge-inclusive science curriculum that will allow students to learn the latest scientific knowledge in a variety of disciplines while maintaining a strong cultural and linguistic identity.

We believe our culturally inclusive focus depends heavily on our interdependent linkages and partnerships with Indigenous communities, the University of Regina, the scientific community (including the University of Regina), professional organizations, as well as our own internal pool of expertise from various departments.

We recognize the unique place of Indigenous knowledge in post-secondary level science education. Our goal is to provide science programs of the highest standards while ensuring an equal place of Indigenous knowledge in all aspects of teaching, research, and service where appropriate.

We believe that working with Elders, and working with those who have Indigenous knowledge, is the underlying principle of Indigenous epistemologies and pedagogies that reinforce the transmission of Indigenous worldviews and sustainable practices to future generations.

The First Nations University of Canada (FNUniv) and University of Regina Faculty Association (URFA) Collective Bargaining Agreement will be interpreted to include the following information and criteria for review and evaluation of academic staff in science.

Science Laboratory Instructors are expected to review and be familiar with the Collective Bargaining Agreement. This Criteria Document is supplementary to information in the 2015-2018 Collective Agreement. The Collective Bargaining agreement takes precedence, should there be a conflict between this Criteria Document and the Collective Bargaining Agreement.

TRADITIONAL KNOWLEDGE

Science values and respects traditional and Indigenous knowledge of Indigenous people in Saskatchewan, Canada and beyond.

Elders are, of course, the primary resource persons and teachers when it comes to disseminating traditional and Indigenous knowledge and employees are strongly encouraged to involve Elders in the delivery of our programs through consulting with them on curricula and inviting them as guest lectures. Employees will be evaluated on their professional involvement of Elders and not on their personal relationships with Elders.

The criteria in the granting of promotions, permanency, and career growth increments to Laboratory Instructors in science include the following five areas that are outlined in article 18.3 along with articles 19.3.7, 19.3.8, and 19.3.9 of the 2015-2018 Collective Agreement.

1. Teaching Effectiveness;
2. Laboratory Development and Related Professional Activity;
3. Service to the University;
4. Service to First Nations Communities;
5. Working with Elders.

1. TEACHING EFFECTIVENESS

Teaching effectiveness in science is an essential component of permanency, promotion, and career growth increment considerations in all Science Laboratory Instructor ranks.

A full laboratory load is deemed as ten (10) full time laboratories or twenty (20) half time laboratories or combination of laboratories full time and half time not exceeding the full laboratory load per evaluation year with zero (0) Laboratory Teaching Assistant supervision.

A full time laboratory is defined as a laboratory section that has 7 or more laboratories being taught in one semester.

Science Laboratory Instructors will receive one (1) full time laboratory reduction for every 1-3 Laboratory Teaching Assistants being supervised, two (2) full time laboratory reduction for 4-6 Laboratory Teaching Assistants being supervised.

The evaluation year is from January 1st to December 31st.

One-full time laboratory reduction may be granted for any Science Laboratory Instructor who develops a new laboratory or designs an online version of an existing laboratory. Any such reduction would require advance approval from the relevant department head.

Laboratory Instruction at the university level requires more than laboratory performance. All Science Laboratory Instructors are expected to:

- Demonstrate mastery of their subject areas(s) or disciplines
- Be thoroughly prepared for their laboratories
- Communicate effectively with their students
- Present subject matter in a clear and logical manner, commensurate to the academic level of students
- Foster critical thinking and problem-solving skills
- Show willingness to respond to students' questions and concerns
- Exhibit fairness in evaluating students

Evidence for performance in relation to this criterion for effective teaching may include (and not limited to) the following examples:

- Official documentation of student evaluations, in accordance with article 19.3.8 of the 2015-2018 Collective Agreement
- Teaching awards and other forms of official recognition related to laboratory practice
- Integration, wherever possible, of Indigenous knowledge and perspectives into laboratory content and delivery
- Development of new or special teaching methods, especially those appropriate to Indigenous students
- Development of new laboratories or revisions of existing laboratories
- Participation of Elders, past graduates, or role models in laboratories to share their knowledge
- Demonstration of a willingness to respond to students' questions and concerns, and to be available to students outside of regular laboratory times
- Additional voluntary contact hours (e.g. make-up laboratories when possible, tutoring)
- Offering technology-based laboratories
- Participation in events that promote and enhance the work of the department such as professional development in cross-cultural science laboratory teaching, internship seminars related to culturally relevant laboratory development
- Participation in teaching development initiatives

2. LABORATORY DEVELOPMENT AND RELATED PROFESSIONAL ACTIVITY

Laboratory development is an important and necessary function of Science Laboratory Instructors to ensure that the educational goals of the Department of Indigenous Science, the Environment and Economic Development (DISEED) and the University are continually being met. A laboratory program consists of a series of laboratory courses and/or laboratories associated with lecture courses, each with its own set of projects/experiments/exercises/fieldwork/assignments. Laboratory development can take place in relation to the entire laboratory program (e.g. by changing specific goals, or by changing program content in response to changes in class syllabi or class offerings). It also can take place within each course by replacing and/or modifying one or more existing projects/experiments/exercises/fieldwork/assignments. This development may include the selection and/or design, construction and/or assembly, and testing of laboratory related materials (e.g. instructional material, software programs or packages, apparatus, specimen collections, techniques, field locations).

Evaluation of laboratory development should take into account both the scope and nature of the work. Consideration of the scope of the work should include some indication of the relative magnitude of change and the context of what is being changed. For example, was a new project/experiment/exercise/fieldwork/assignment created, or was a small or significant change made to an existing project/experiment/exercise/fieldwork/assignment? Consideration of the scope should also include some indication of the duration of the work (i.e. was the work carried out over a period of hours, days, weeks, months, or even years?). Consideration of the nature of the work should include one or more of the following factors:

- Initiative - Did the initiative to undertake the work originate with the individual, with one or more collaborators or from an outside source?
- Independence - Was this work carried out independently, with one or more collaborators, or with substantial direction and guidance?
- Originality/innovation - Some indication should be given about the originality of the work, and/or to the extent that innovation was involved, as opposed to making use of existing materials.
- Instructional and Information Technology – Use of this technology requires additional effort in the development of laboratory material.

PROFESSIONAL ACTIVITY

Evidence for performance in relation to this criterion for Professional Activity may include (and not limited to) the following examples:

Participation in:

- Conferences, Courses, Seminars, Research and Publications, Memberships in Professional Societies, Presentation of scholarly papers at local, provincial, national, and international events, Attending discipline-related conferences or seminars, in so far as they contribute to professional development, Organizing campus-wide events, symposiums, and other scholarly venues that promote the bridging of Indigenous and Scientific knowledge, Active involvement in recognized scientific organizations related to discipline or area of expertise.

3. SERVICE TO THE UNIVERSITY AND DEPARTMENT

Science Laboratory Instructors are part of a larger university community in which they are expected to participate through service-related activities. External committees should be beneficial directly or indirectly to the department and students.

All Science Laboratory Instructors are encouraged to sit on at least one or more of our own academic committees per year as a criterion for service to the university.

Review of performance in relation to service to the university, department, and unit may include but are not limited to the following examples:

- Involvement in committees with the First Nations University of Canada or the University of Regina

4. SERVICE TO FIRST NATIONS COMMUNITIES

Individual members' public activities contribute to our public image as an academic institution of the highest quality.

Public service for communities and organizations other than First Nations will be considered in the review.

Reviews of performance in relation to this criterion may include and are not limited to the following examples:

- Administering or volunteering in events promoting the First Nations University of Canada such as the Health and Science Camp, Wiseman Math Contest, and Pow Wow
- Service on local, provincial or national committees or associations of a professional (but not necessarily discipline-related) nature
- Engaging in education-related activities for Indigenous students or in Indigenous communities
- Serving on committees within Indigenous organizations, communities and governments
- Volunteer work in the community related to science is important and will be extended to mainstream schools, inner city schools, and band schools

5. WORKING WITH ELDERS

Science Laboratory Instructors are expected to maintain a working relationship with the First Nations Elders. Working with Elders is an expectation for professional and personal development of faculty within science, and it is interwoven with all other criteria for promotion and tenure decisions.

Science Laboratory Instructors' personal spiritual activities are an important part of their growth, but are not activities that need to be reported in a review of professional performance.

Reviews of performance in relation to this criterion may include, but not limited to the following examples:

- Consulting Elders to obtain their guidance in matters pertaining to traditional cultural values and ways of doing things
- Involving Elders in the laboratory in order that students might benefit from their guidance and wisdom
- Involving Elders in departmental or other meetings
- Assisting Elders, when requested by them, in matters pertaining to the affairs of the university

APPLICATION AND INTERPRETATION OF THE CRITERIA

Please see article 19.10.6 of the 2015-2018 Collective Agreement for basis of promotion.

Promotion from one rank to the next is based on evidence that the Science Laboratory Instructor has exhibited continual growth based on the criteria identified in this document.

Application for rank promotion is the responsibility of the Science Laboratory Instructor following the timelines and procedures outlined in the Collective Bargaining Agreement. Science Laboratory Instructors should apprise themselves of all information in the Collective Bargaining Agreement regarding rank promotion.

Expected standards will be progressively higher in applying the criteria at more senior levels. In order to achieve a rank promotion, the number of criteria an individual is actively involved and displays excellence will increase with rank.

Academic staff whose duties and workloads are not consistent with this criteria document will have such assignments agreed to in writing with the department head and approved by the vice-president academic.

DECLARING AND SELECTING AREAS OF PROFICIENCY

In keeping with Article 18.3 of the 2015-2018 Collective Agreement, the primary duties of the Science Laboratory Instructor are to provide support for teaching programs. This includes some or all of the following areas of proficiency: laboratory instruction and related duties; laboratory development and related professional activity; administration and maintenance; public service, especially to First Nations communities; and work with First Nations Elders. While recognizing that duties and workload relating to laboratory instruction and development are assigned by the Department Head following consultation in committee, Science Laboratory Instructors may declare an area in which excellence is demonstrated. For example, one academic staff may select Teaching Effectiveness. However, another academic staff may select Service to First Nations Communities or Working with Elders.

Each employee will also be expected to show proficiency in the other four areas over a four year period. If any area remains unselected, the department head may assist a Science Laboratory Instructor in selecting an area, in order to make it possible for the department to collectively serve all five areas and for individual academic staff to gain the required proficiency in all five areas over a four year period.

A Science Laboratory Instructor who has declared a certain area as an area of proficiency has the right to declare another area in any subsequent academic year. For example, a Science Laboratory Instructor who at one point declared Laboratory Development as an area of proficiency, and who has maintained an appropriate record in that area may select,

for example, Service to First Nations University of Canada and University of Regina at some point in her/his career in order to get a “break” from working on Laboratory Development, etc. and to gain proficiency in another area. The employee should inform the Department Head in a timely fashion about such a shift.

Under special circumstances, and in consultation with the Department Head, a member may be judged on only two criteria areas, as long as the performance in these areas far outstrips what would be normally required.

PERMANENCY

Each Science Laboratory Instructor who holds a probationary appointment may apply for permanency at any time. An appointment will be made permanent at any of the three levels (including progression through the three levels) if the performance of the academic staff meets the criteria determined in article 19.10.3 of the 2015-2018 Collective Agreement.