

DEPARTMENT OF CHEMISTRY STANDARDS FOR TENURE AND PROMOTION

Approved by Senate (January 21, 2022; Originally: June 5, 2015; Revised: February 12, 2016)

PREAMBLE

The Department of Chemistry recognizes that excellence in teaching is of primary importance in achieving this goal. The department also recognizes that research and scholarship are an essential component of undergraduate science education. Finally, the department recognizes the value of service to the university and the community. All faculty members are expected to make contributions in all three areas.

This document describes the criteria used to measure, evaluate, and adjudicate applications by faculty members in the Department of Chemistry for tenure and promotion through the ranks. In accordance with Article 12.7 of the UFV Collective Agreement, “a minimum of 60% of the assessment will be based on teaching, a minimum of 20% on one of service or scholarship, and a minimum of 10% on the remaining component”. Because the extent of individual contributions to these three areas may vary, more limited achievement in one area may be offset by greater achievement in the other two areas.

GENERAL STANDARDS FOR EACH RANK

General standards for each rank are listed below:

(distinctions from the previous rank standards are italicized)

Assistant Professor:

- holds a doctorate in chemistry or a closely related discipline
- has experience and expertise in their sub-discipline (e.g. research and teaching experience, publications), and demonstrates competence in general chemistry
- demonstrates competence in teaching, and dedication to improved teaching practices
learning makes progress towards establishing an original research program that involves student trainees
- begins to make contributions toward curriculum development and revision
- begins to participate in institutional service, especially at the departmental level

Associate Professor:

- holds a doctorate in chemistry or a closely related discipline
- has *substantial* experience and outstanding expertise in their sub-discipline, and competence in general chemistry
- *demonstrates excellence* in teaching and learning
- *has established* a sustainable, original research program that involves student trainees
- makes *significant* contributions towards curriculum development and revision
- has established a record of *sustained and meaningful* institutional service (at the departmental, faculty, or university level) and service to community (regional or professional)

Professor:

- holds a doctorate in chemistry or a closely related discipline
- has *outstanding* experience and expertise in their sub-discipline, and competence in general chemistry
- has a *distinguished record of excellence* in teaching and learning
- has established a sustainable, original research program that *has involved numerous* student trainees and that *has achieved national and international recognition*
- *has contributed significantly and substantially* to institutional service (at the departmental, faculty, or university level) and to community service (regional or professional)
- shows *leadership* at the departmental, faculty, or university levels and is a *mentor* to students and faculty

EXAMPLES OF ACTIVITIES THAT ADDRESS THE ABOVE CRITERIA

Activities that address the above criteria can be, but are not limited to, those listed below.

Teaching and learning

Aspect of teaching	Indicators of success
Excellence in classroom instruction <ul style="list-style-type: none">- Reflective analysis of classroom performance aimed at understanding and improving the educational process.- Innovative teaching, use of various modes of delivery and different types of educational technology, sharing of the best practices in teaching.- Maintenance of academic currency in the subject area and educational methodology, continued professional development.	<ul style="list-style-type: none">- Peer and student evaluations, teaching awards or nominations for teaching awards.- Quality of assignments, course materials, lab manuals, exams.- Educational journal publications, conference presentations, textbook contributions.- Novel programs, courses or their essential new elements, innovative methods of delivery.
Creating positive learning environment outside classroom <ul style="list-style-type: none">- Availability to students outside classroom through office hours, additional study sessions, and participation in chemistry-wide initiatives.- Production of course materials to support self-learning.	<ul style="list-style-type: none">- Peer and student evaluations.- Course materials.- Internal documents, or other evidence of engagement.

Inquiry-based learning <ul style="list-style-type: none"> - Inclusion of inquiry-based learning components into undergraduate curriculum. - Training and mentoring of undergraduate students through delivery of directed studies and undergraduate research courses, and supervision of undergraduate research assistants participating in faculty-led research projects. - Supporting student participation in conferences, poster sessions, UFV Research Day, and other scientific meetings and forums. - Assisting students with their applications for student research grants and graduate school fellowships. - Training and mentoring of graduate students and postdoctoral fellows. 	<ul style="list-style-type: none"> - Successful completion of projects undertaken by student trainees. - Student poster and oral presentations, journal publications co-authored by students, student theses. - Student awards, scholarships, and fellowships. - New courses and course elements using inquiry-based learning.
Curriculum development <ul style="list-style-type: none"> - Creation of new or substantial revision of existing courses or programs. - Development of assignments, laboratory experiments, and course materials reflective of course learning outcomes. - Reviewing new texts for courses, making recommendations for library acquisitions to support curriculum. - Engagement in interdisciplinary course and program development, Integration of inquiry-based learning into course and program delivery. - Course articulation and transfer credit requests. 	<ul style="list-style-type: none"> - Successful implementation of new or revised courses or programs. - Relevant course materials, lab manuals. - Sharing of best practices in curriculum design through workshops, conference presentations, or journal publications. - Internal documents, or other evidence of engagement.

Research and scholarship

Chemistry faculty are expected to involve students in their research projects. With respect to laboratory research, the department recognizes the limitations inherent to conducting research at a teaching-focused undergraduate institution, such as the availability of funding, equipment, and faculty teaching loads.

Scholarly activity	Scholarly products	Indicators of success
Pure and applied research. <ul style="list-style-type: none"> - Experiments or calculations aimed at producing new compounds and systems or studying their properties and transformations. - Literature analysis to support those activities. - Creation of scholarly products described in the next column. 	<ul style="list-style-type: none"> - Peer-reviewed papers, monographs, book chapters, patents, theses, conference presentations, grant proposals. 	<ul style="list-style-type: none"> - Quality of journals, citation index, research awards or nominations for the awards, grants, invitations to present, invitations to adjudicate.

- Supervision of students performing original research (research projects are driven by faculty research interests)	-supervision of directed studies and thesis students	- Student awards and scholarships.
Chemical education. <ul style="list-style-type: none"> - Educational research and reflective analysis aimed at understanding and improving the educational process. - Development of novel programs, cutting-edge courses, and innovative methods of delivery. - Development of novel elements (such as introduction of new experiments or substantial improvement of old experiments) for new or existing courses. - Literature analysis to support those activities. - Creation of scholarly products described in the next column. 	<ul style="list-style-type: none"> - Peer-reviewed papers, monographs, book chapters, theses, conference presentations. - Textbooks. - Novel programs, courses or their essential new elements, innovative methods of delivery. 	<ul style="list-style-type: none"> - Quality of journals, citation index, awards, grants, invitations to present, invitations to adjudicate. - Adoption of a textbook. - Successful implementation of a program, course, or method of delivery.

Service

Aspect of service	Evidence
University community. <ul style="list-style-type: none"> - Student advising. - Course articulation and transfer credit requests. - Department headship or serving in other leadership roles. - Active involvement in committee work at the departmental, faculty, or university level. - Faculty and Staff Association service. 	<ul style="list-style-type: none"> - Writing reference letters for students. - Internal documents, or other evidence of engagement.
Regional community. <ul style="list-style-type: none"> - High school liaison. - Participation in community outreach activities or events. - Expert advice to or research partnership with regional companies or organizations. 	<ul style="list-style-type: none"> - Supervision of high school student projects. - Judging, organizing, or otherwise participating in Science Fair or similar events. - Letters, reports, newspaper articles.
Professional community <ul style="list-style-type: none"> - Support of, and participation in the work of, professional associations. - Organizing conferences, workshops, or other professional meetings. 	<ul style="list-style-type: none"> - Membership in professional associations, executive positions in those. - Peer review, service on journal editorial boards. - Letters of support of peers or other evidence of engagement.