



UNIT STANDARDS REVIEW  
SIGNATURE FORM



Department of:

Mathematical Sciences

Year:

2015-2016

1) Department Chair:

Anil Stone

Signature

12/16/15

Date

2) Dean:

Chopra, C

Signature

12/22/15

Date

3) Chair, UM Unit Standards Committee:

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8/23/16

Date

4) Provost and Vice President for Academic Affairs:

Brian Johnson

Signature

9/1/17

Date

## DEPARTMENT OF MATHEMATICAL SCIENCES

# Unit Standards and Procedures for Evaluation and Advancement

### I. Introduction

The Department of Mathematical Sciences has responsibility for undergraduate education, including many service courses and baccalaureate degrees with various options; graduate education, including master's and Ph.D. degrees; research in mathematical sciences; and professional public service and continuing education in the mathematical sciences. Some of its members provide a substantial amount of consulting service both within and outside the University. Faculty members also contribute to faculty governance, e.g. through service in the Faculty Senate, in University and College of Humanities and Sciences committees, and in the University Faculty Association. The department has different expectations of different people within this overall mission.

These unit standards and procedures are intended to be in addition to and consistent with those provided in the current Collective Bargaining Agreement (CBA), and in the event of any omissions or inconsistencies, the terms of the collective bargaining agreement shall be applicable and shall prevail.

Throughout this document, the term "Chair" refers to the Department Chair unless otherwise specified. The term "faculty" refers to tenure-track faculty, lecturers, and adjunct faculty. The term "non-tenure-track faculty" refers to both lecturers and adjunct faculty unless otherwise specified.

### II. Procedures

#### II.A. General

##### 1. Submission of documentation

During fall term, each faculty member to be evaluated (including lecturers and adjuncts required to be evaluated by the CBA) is responsible for gathering and organizing documentation of performance in teaching, research or creative activities, and service during the previous year(s) to be submitted to the Faculty Evaluation Committee (FEC) and the Department Chair for review and evaluation. The documentation must give clear evidence of claims made and activities or achievements cited; further details are given in section III. The documentation must be in the office and ready for other faculty members to read by October 15. The documentation will form the basis of the review by the FEC.

It will be assumed that the faculty member is applying for a normal raise unless he or she indicates a desire to be considered for a merit or promotion. A probationary (untenured) tenure-track faculty member may also apply for tenure. This can be in addition to application for merit or promotion to Associate Professor. Eligibility for promotion and tenure is governed by the CBA. Additional documentation for probationary tenure-track faculty is specified in section III.B. Outside letters are required for promotion and tenure applications and require earlier notification to the Chair so that these letters can be obtained; see sections III.B and III.C. These letters should be received by October 15 for full consideration, but will be included whenever they are received up to the time the file is forwarded to the Dean (usually December 15).

##### 2. The Faculty Evaluation Committee (FEC)

The FEC consists of all tenure-track faculty members, excluding those on leave and faculty in

their first year of service, as well as the student observer (Chair of the Student Evaluation Committee) who is a non-voting member. The FEC annually elects from its members a Steering Committee of 4-6 members, and the Steering Committee elects from its members the FEC Chair. It is the responsibility of the Steering Committee to schedule meetings, conduct votes, and write the FEC evaluations (or to recruit other FEC members to do so).

### **3. Faculty Evaluation Meeting**

The FEC Chair will schedule a meeting or meetings of the FEC for shortly after the October 15 deadline. The purpose of the meetings is to discuss each faculty member being evaluated. No voting takes place at the meetings. The faculty member being discussed is not allowed to be present during the discussion; however, the faculty member is allowed to make a presentation to the FEC if desired. A faculty member may be nominated for merit or promotion at the meeting (no second is required for a nomination for merit or promotion; self-nominations are allowed). In that case, the nominated faculty member shall be notified of the nomination immediately after the meeting. The faculty member may decline the nomination. If the faculty member accepts the nomination, then he or she must prepare any additional documentation required (if, for example, the merit or promotion nomination covers a longer period than the documentation already submitted).

A faculty member may also be nominated for less-than-normal at this meeting; such a nomination requires two seconds. Further details on the procedure are given in section II.B. A non-tenure-track faculty member may be nominated for non-renewal; such a nomination also requires two seconds. Further details are given in sections II.C.1 and II.C.2. Non-renewal of a probationary tenure-track faculty member is not considered at this meeting and is considered only if the vote for satisfactory-progress-toward-tenure is negative; details are given in section II.C.3. The procedure for dismissal-for-cause of a tenured faculty member is given in section II.C.4.

### **4. Voting**

All voting on faculty is done by secret written ballot and takes place after the faculty evaluation meeting(s). No vote is conducted for nominations for a normal raise. The form of the ballots and the deadline for voting are decided by the FEC. The eligible voters and the requirements for approval of nominations are listed below. In all cases, an abstention is not counted as a vote. The ballots are collected by the department's administrative assistant and counted by the FEC Chair (or his or her designee) together with at least one other member of the Steering Committee. At the counting of the votes, at least two FEC members must be present who are not applying for merit, promotion or tenure. The results, but not the actual vote counts, will be reported to all FEC members. The result of a vote on a faculty member who is not a member of the FEC will also be reported to that individual. A faculty member may request the actual vote count on his or her case and, within 5 working days after the results of the vote are reported, may request a recount in his or her presence. The department administrative assistant will keep all ballots on file in the departmental office for one year after the vote. Any request for access to the ballots other than outlined above will be decided by the FEC.

#### **a. Tenure-track faculty**

All nominations for merit, promotion, tenure, satisfactory-progress-toward-tenure, and

less-than-normal must receive at least 2/3 favorable vote of those voting to be approved. The eligible voters are:

- For merit and less-than-normal: all members of the FEC except the person being considered.
- For promotion: all members of the FEC at or above the rank being applied for.
- For tenure: all tenured members of the department (including those on leave).
- For satisfactory-progress-toward-tenure: all tenured members of the FEC.

b. **Non-tenure-track faculty**

All nominations for merit, promotion, less-than-normal, and non-renewal must receive at least 2/3 favorable vote of those voting to be approved. All members of the FEC are eligible to vote.

5. **Withdrawal of a nomination**

If the vote for merit, promotion, or tenure goes against an individual, the individual may withdraw the nomination, whether the individual was self-nominated or nominated at the FEC meeting. In that case, the FEC Steering Committee and the Department Chair will proceed in writing their recommendations as if the nomination had never been made.

6. **FEC Evaluation**

After the voting, the FEC Steering Committee prepares a written recommendation for each individual department member being evaluated, with a statement justifying the votes for or against promotion, tenure, satisfactory-progress-toward-tenure, merit, and/or less-than-normal, as appropriate. The deadline for completing these statements is given in the CBA (normally, November 15). The Steering Committee Chair will provide a copy of its recommendation to each faculty member no later than when its recommendation is provided to the Department Chair.

To avoid conflicts of interest, the FEC Steering Committee will adhere to the following rules:

- a. The written recommendation of the FEC cannot be drafted, edited, or signed by the faculty member being evaluated. (This does not prevent the FEC Steering Committee from sharing a draft recommendation with the faculty member being evaluated and asking for his or her comments.)
- b. In the case of merit applications, the ranking of the performance of the applicants in each area (normal, above normal, or outstanding) is determined by the subcommittee of the Steering Committee that consists of all members who are not applying for merit. This subcommittee must have at least three members; if not, the FEC must elect additional members to the Steering Committee to assure that at least three Steering Committee members are not applying for a merit. Because the rankings are based on the evaluation of the complete IPR, they may be higher or lower than the FEC rankings from any prior evaluation that is included in the IPR.
- c. Usually, the FEC Chair does the final editing of all FEC recommendations (in consultation with the Steering Committee), and signs each of them. If the FEC Chair is applying for a merit, the Steering Committee appoints a different member, who is not applying for a merit, to perform these duties (final editing and signing) in the case of all merit applications. Similar rules apply if the FEC Chair is applying for tenure, or for promotion to Associate Professor, or for promotion to Professor.

**7. Chair's Evaluation**

The Department Chair reviews each recommendation made by the FEC and by the Student Evaluation Committee (SEC) and prepares the Chair's recommendations. A faculty member may request a private meeting with the Chair before the Chair writes that individual's recommendation.

**8. Submission of documentation and recommendations**

Before the recommendations of the Chair, FEC, and SEC are submitted to the Dean, they are signed by the faculty member concerned to indicate he/she has read those recommendations and to attest to the accuracy of the supporting documents.

**9. Appeals**

The individual faculty member has rights of appeal as specified in the CBA; see, in particular, Sections 10.230, 10.240, 10.270, and 10.280. The faculty member also has rights of appeal within the department as specified in Section II.D.

**II.B. Procedures for less-than-normal**

**1. Non-tenure-track faculty except lecturers**

The voting on a nomination for less-than-normal (section II.A.3) follows the same procedure as for any of the other votes in section II.A.4.

**2. Tenured and tenure-track faculty and lecturers**

If a tenured or tenure-track faculty member or lecturer is nominated for a less-than-normal at the FEC meeting (section II.A.3), the nominator and seconders will present a written summary of the rationale for the nomination to the FEC (including the faculty member nominated for the less-than-normal) within 3 working days following the meeting. Failure to do so will cause automatic withdrawal of the nomination. Within one week after the written summary is presented, a meeting of all members of the FEC except the faculty member in question will be held to discuss the nomination before a vote is taken. The faculty member being discussed will be given the opportunity to address the meeting if he or she desires. A secret written vote on the less-than-normal nomination will be taken after the meeting in accordance with section II.A.4.

**II.C. Procedures for non-renewal and discharge for cause**

**1. Non-tenure-track faculty except lecturers**

The voting on a nomination for non-renewal (section II.A.3) follows the same procedure as for any of the other votes in section II.A.4. A recommendation of non-renewal for the next academic year will be forwarded to the Chair whenever the vote in favor of non-renewal is at least 2/3 of those voting.

**2. Lecturers**

If a lecturer is nominated for non-renewal at the FEC meeting (section II.A.3), the nominator and seconders will present a written summary of the rationale for the nomination to the FEC (and to the lecturer nominated for non-renewal) within 5 working days following the meeting. Failure to do so will cause automatic withdrawal of the nomination. Within one week after the written summary is presented, a meeting of all members of the FEC will be held to discuss the nomination before a vote is taken. The lecturer being discussed will be given the opportunity to address the meeting if he or she desires. A secret written vote on the non-renewal nomination will be taken after the meeting in accordance with section II.A.4. If at least 2/3 of those voting

vote for non-renewal, the Chair will forward the recommendation to the Dean and Provost for action in accordance with university regulations and the CBA.

**3. Probationary tenure-track faculty**

If a vote in either a case of satisfactory-progress-toward-tenure or continuous tenure goes against the candidate, the FEC Steering Committee will, within 5 working days after the voting deadline, present a written summary of the rationale for the vote to the candidate and the tenured members of the FEC. After the written summary is presented, but not more than two weeks after the original meeting, a meeting of all tenured members of the FEC will be held to discuss non-renewal in accordance with the CBA. The faculty member being discussed will be given the opportunity to address the meeting if he or she desires. A secret written ballot will then be held. If at least 2/3 of those voting vote for non-renewal, the Chair will forward the recommendation to the Dean and Provost for action in accordance with university regulations and the CBA.

**4. Tenured faculty**

Discharge for cause is an extraordinary procedure, apart from the advancement process. If it becomes apparent to the Department Chair that a tenured faculty member may have to be terminated for cause the Chair will document the evidence for discharge for cause and call a department meeting to present the evidence. The faculty member involved will have a chance to present his/her case at the meeting. A secret written ballot will be held following the meeting and all tenured members of the department (except the faculty member involved) shall have a chance to vote. If at least 2/3 of those voting support dismissal, the Chair will forward the recommendation to the Dean and Provost for action in accordance with university regulations and the CBA.

#### **II.D. Appeals to the Department**

Within three working days of when the results of a vote are reported by the FEC Steering Committee, a faculty member may make a written appeal of the decision on his or her case to the FEC Chair. The FEC Chair will schedule a meeting of the FEC, excluding the faculty member who appealed, within one week of the appeal. The faculty member who is appealing will be given the opportunity to address the meeting if he or she desires. A revote will be held after the meeting by secret written ballot following the same procedures as the first vote. Every effort should be made to ensure that the appeal process is completed by the date the FEC recommendations are to be forwarded to the Chair as specified in the CBA (usually November 15).

In addition, in accordance with the CBA, within 10 days of receipt of the written recommendation from the FEC Steering Committee, a faculty member has the right to appeal any aspect of the FEC's recommendation or process. Consult the CBA for further details.

### **III. Documentation**

#### **III.A. General**

The documentation for all faculty being evaluated should provide a summary of the teaching, research and service activities during the evaluation period, and should include supporting documents, as appropriate. A current curriculum vitae is required. For departmental review, copies of all publications listed in the FEC documentation should be included in either hard-copy or electronic form. Creditable activities are outlined in section IV. An activity can only be claimed during one evaluation period unless

it is an ongoing activity. A paper may be credited once as either a technical report or “submitted for publication” and once as either “accepted for publication” or “appeared” and should be clearly identified as to which category it belongs. Each accepted (or “appeared”) paper should also be identified as to whether it was subject to peer review. Grants are credited to the period in which they are received, although ongoing grants may be included in subsequent documentation as long as they are clearly identified as such. In other cases where it is ambiguous as to whether an activity can be credited in more than one evaluation period, the faculty member should indicate if the activity was listed in the documentation for a previous evaluation period and what justifies its inclusion in a subsequent evaluation period.

In accordance with the CBA (Section 10.230), the FEC may solicit material from other individuals to aid in its assessment of the faculty member being evaluated. These materials will become part of the evaluation record. Any such material will be made available to the faculty member and the faculty member may prepare a written response for the evaluation record, in accordance with guidelines in the CBA.

For evaluating the progress towards tenure of a probationary tenure-track faculty member, the FEC has access to the documentation for all previous evaluations, covering the entire period since the faculty member started at UM and any years of previous service for which the faculty member was granted credit at the time of hire; the documentation for the previous evaluations will, however, not become part of the IPR.

### III.B. Additional documentation for probationary tenure-track faculty

In addition to the documentation required of all faculty being evaluated, a probationary tenure-track faculty member will include the following items which will become part of the IPR:

1. **A teaching portfolio.** This will include, at a minimum, syllabi and numerical summaries of student evaluations of teaching for all courses taught (except seminars). The portfolio may also include a few selected examples of course materials including links to web pages, examples of student work, letters from former students, peer evaluations, written student comments, etc.
2. **Documentation of teaching assessment activities.** Every probationary faculty member at the Assistant Professor level is expected each year to participate in at least one substantive activity designed to improve the faculty member’s teaching. Possibilities include:
  - A formative assessment activity involving another faculty member or members at UM or at another college or university. Examples include reciprocal classroom visits and follow-up discussion, review of course materials, or implementation and review of a new teaching strategy.
  - A professional workshop or conference on teaching. Possibilities include professional development workshops or workshops associated with professional meetings. The workshop or conference must involve active participation by the faculty member.
  - Any other teaching-related activity approved in advance by the Policy Committee.

The faculty member will include a description of the activity in the portfolio.

3. **Classroom evaluations from the Chair or designee.** Every probationary tenure-track faculty member will be visited at least once each year by the Department Chair or a designee. A report of each visit will be included in the faculty member’s departmental file; the faculty member may

append a response to this report. It is not the faculty member's responsibility to ensure that such a visit is made and a report submitted, however, and the absence of such a report will not be held against the faculty member if it is due to the Chair's neglect.

4. **Current research statement.** The faculty member will describe the direction of his/her research. This statement may describe specific accomplishments, collaborations, the direction of future research, grant proposals (funded, unfunded, and future), etc.

5. **Summary of service activities.** For faculty with significant service activities, a statement describing the nature and extent of these activities and plans for the future.

6. **Outside letters of evaluation for promotion or tenure**

If the faculty member is applying for promotion to Associate Professor (which normally precedes or is concurrent with the application for tenure) or for tenure, outside letters of evaluation are required. The outside letters are particularly important in evaluating the candidate's publication record.

- a. At least four (and usually no more than six) outside letters of evaluation will be solicited from professionals from outside the University who are familiar with the faculty member's research work. These people will be tenured faculty at other universities or professionals at governmental or other organizations engaged in research. At least two of these will be people who are not current collaborators of the applicant nor were faculty members or students at the institution where the applicant earned his or her doctoral degree during the time the applicant was a student there.
- b. By July 1 of the year in which a faculty member is applying for promotion or tenure, the faculty member must submit a list (preferably ranked) of four potential outside letter writers; the list must conform to the provisions in Item a.
- c. The Department Chair will promptly work with the faculty in the applicant's area of research and/or in appropriate cognate areas to determine a list of additional potential outside letter writers. The Chair will discuss these with the applicant, who has the right to exclude one or two of them.
- d. By July 20, the Chair will then select the group of outside letter writers from the two lists. This group must conform to the provisions from Item a, and must include at least the first two people from the candidate's list.
- e. The Department Chair or the Chair's designee will promptly solicit the outside letters of evaluation. Letters must be received by October 15 to be considered fully. If one of the professionals solicited to write an outside letter of evaluation does not agree to write a letter, the Chair will solicit another outside letter of evaluation from one of the other people on the corresponding list (if there are any left).

### **III.C. Additional documentation for promotion of a tenured faculty member to Professor**

For promotion to Professor, outside letters of evaluation are required; the procedure is the same as for the tenure application in section III.B.

## **IV. Performance Activities**

The list of activities which provide evidence of professional excellence are divided into teaching, research, and service, although the divisions between these areas are not always clear and some activities cross the boundaries between them. The lists below should not be considered exhaustive.

#### IV.A. Teaching.

1. Evidence of excellence in classroom teaching can be provided in a variety of ways. Means to document excellence in teaching include:
  - Student evaluations. However, high student evaluations are not by themselves evidence of excellence in teaching.
  - Documented high quality of student work.
  - Peer evaluations.
  - Letters from students.
2. The department particularly values the following teaching activities:
  - Teaching large lecture courses.
  - Creating and revising courses, including General Education mathematics courses.
  - Working with undergraduate and graduate students in independent studies and research projects.
  - Directing Masters' theses and research projects.
  - Service on graduate committees in mathematics and other disciplines.

#### IV.B. Research and Scholarly Activity.

The most important creditable activities are:

- Refereed publications and books. The long delay time between acceptance and publication of refereed material compels consideration of fully accepted, final versions of articles and books as evidence of research. The major factors which will be considered in assessing the candidate's publication record are the number of publications, the number of pages, the quality of the journals, the candidate's contribution to multi-author articles, and the impact of the publications.
- Ph.D. thesis direction. This activity and the preceding one furnish the best evidence of research accomplishment. Ph.D. thesis direction is an important form of scholarship. Much of the work of the student is prompted by and is an extension of the ideas of the thesis advisor. The dissertation should be considered as a major scholarly effort of both the student and the thesis director. Directing a Ph.D. dissertation, though not regarded as a publication, is weighted fully as strongly.
- Obtaining new research grants. Factors considered in assessing the value of grants include the dollar amount, the level of competition (national, state, local, etc.), and the amount of support for students.

Other creditable activities include:

- Directing a student project which results in a publication.
- Giving invited addresses.
- Giving professional talks.
- Maintaining existing research grants, including yearly reauthorizations.
- Organizing or participating in advanced seminars.
- Organizing or participating in professional conferences.
- Providing professional consulting services.
- Publishing non-refereed articles and reviews of books.

- Refereeing for scholarly journals.
- Submitting articles for publication.
- Submitting grant proposals.
- Translating scholarly works.
- Writing course notes, software, or other instructional material.

#### IV.C. Service and other activities.

- Academic advising.
- Activities that involve work with the mathematics teachers of the State of Montana.
- Departmental, College and University committee work.
- Mathematical editing.
- Membership on state and national committees.
- Obtaining non-research grants.
- Teaching Continuing Education courses.
- Other public service of a professional nature.

### V. Criteria

#### V.A. Tenured and tenure-track faculty

##### **1. Satisfactory-progress-toward-tenure**

The basis for determining satisfactory-progress-toward-tenure is whether the performance and growth in performance to the current time is indicative of performance that will meet the tenure criteria at the appropriate time.

##### **2. Tenure**

To apply for tenure, the faculty member must have the appropriate terminal degree and rank of at least Associate Professor (or simultaneous application). A Ph.D. in mathematical sciences is considered to be the normal terminal degree; for a member specializing in Mathematics Education the degree may be a Ph.D. or Ed.D. The overreaching criterion for tenure is a high level of intellectual and professional activity, in particular, teaching and research excellence. Secondary criteria reflect the department's overall mission.

Evidence of excellence in teaching is necessary for a recommendation of tenure. Hence, documentation for a recommendation for tenure must include evidence of such activity.

##### **3. Promotion to Associate Professor**

Except in unusual circumstances, the forms of activity which are considered most important in recommendations for promotion are mathematical scholarship and teaching as detailed in Sections IV.A and IV.B. No one will be promoted to Associate Professor who is not making satisfactory progress toward tenure.

##### **4. Promotion to Professor**

For promotion to full professor, evidence of high performance in each of the three areas of teaching, research and scholarly activity, and service, is required. The character of the performance in rank as associate professor shall be such that there is a clear demonstration of professional growth and an increasingly valuable contribution to the University. No faculty member may be promoted to full professor on the basis of teaching and service alone. Scholarship must be demonstrated by scholarly publication.

## 5. **Merit**

The department has different expectations of different persons. In order to be recommended for a merit raise, a faculty member must have above normal performance in at least two of the three areas: teaching, research/creative activity, or public service; or outstanding performance or special recognition in at least one of these areas, and normal performance in the remaining area or areas of assigned duties.

### a. **Teaching.**

The department strives continually to improve its teaching and to reward outstanding teaching. For creditable activities, see Section IV.A.

### b. **Research and Scholarly Activity.**

Active engagement in mathematical scholarship is indispensable to the department. For creditable activities, see Section IV.B.

### c. **Service.**

To be rewarded, service must be professionally related and meritoriously performed.

## 6. **Less-than-normal**

Poor performance of assigned responsibilities within the scope of employment constitutes grounds for nomination for a less-than-normal increment.

## 7. **Discharge for cause**

The reasons for discharge for cause are outlined in the CBA.

## V.B. Non-tenure track faculty

### 1. **Merit**

The department has different expectations of different persons. In order to be recommended for a merit raise, a non-tenure-track faculty member must have a very strong case in teaching (with further consideration also given for service and scholarship).

### 2. **Less-than-normal**

Poor performance of assigned responsibilities within the scope of employment constitutes grounds for nomination for a less-than-normal increment.

### 3. **Discharge for cause**

The reasons for discharge for cause are outlined in the CBA.

## VI. Evaluation of the Department Chair

- If the Chair is not being evaluated as a regular faculty member, the Chair is not required to submit any documentation to the FEC for the Chair evaluation and the FEC is not required to submit a written evaluation. However, a discussion of the Chair's performance will take place at the FEC meeting. The FEC may, at its option, conduct a vote on the Chair's performance and submit a written report to the Dean.
- If the Chair is being evaluated as a regular faculty member, then the FEC evaluation of the Chair's performance will form part of the overall evaluation of the Chair.

The Chair will be evaluated as a regular faculty member by the criteria listed in section V. In addition, the Chair's performance as Chair will be evaluated by the following criteria:

- Leadership: setting and accomplishing goals, detecting and correcting problems rapidly, efficient utilization of departmental resources.

- Routine Administrative Duties: promptness and efficiency in handling the myriad little administrative details.
- Fairness: ensures that the department's workload is equitably distributed among its members.
- Other: relevant items suggested to the Policy Committee of the Department of Mathematical Sciences by either department members or the administration.