Department of Mathematics & Statistics

Evaluation Criteria for RPT of Tenure Track Faculty

Department Approved 11/15/2023 Office of the Provost Final Approval 06/20/2024

In accordance with the "Agreement Between the University of Vermont and United Academics (AAUP/AFT)", dated 5/2/21, this document is developed to provide evaluation criteria for reappointment, promotion and tenure (RPT) for tenure-track and tenured faculty in the Department of Mathematics and Statistics (the procedures for these RPTs are described in separate documents).

The Math/Stat Department supports and strengthens the mission of the University of Vermont towards the provision of innovation in research and scholarship, excellence in instruction, and public service to the citizens of the state, nation and world. The Department aspires to be a center of excellence in teaching mathematics and statistics at all levels, and as a center for excellence in research and graduate education. Furthermore, faculty are expected to serve the Department, University and/or profession in ways to support the various missions and commit to fostering diversity and inclusion in these communities.

Each tenured and tenure-track faculty member is expected to be an effective teacher and an active researcher in their research area. The quality criteria for effective teaching and active research can be found in the Union Contract (Article 14, Section 5.e); however, the Department's perspective regarding teaching and scholarship is amplified further in subsequent sections of these guidelines.

We recognize that in accomplishing our mission, faculty members have different strengths and contributions to the Department, the University, and the profession; therefore, each candidate will be assessed on a case-by-case basis.

The evaluation criteria to be used in RPT decisions rest on the following important principles:

- In each category—Teaching, Scholarship and Service—the *quality* of the faculty member's work will be the primary consideration. Inherent in this consideration are factors such as *productivity* (e.g., the number of courses, advisees, publications, committees, etc.), the *intensity of work* (e.g., the effort and scope of research, the scope and workload of committees, etc.), and the *impact of the work* (assessed if possible by outcomes, e.g., performance of students in subsequent courses/exams or after graduation, citations or adoptions of papers/books, significance of papers, effect of reports/actions of committees on the University or regional community, impact of a project on scientific or health advances, etc.).
- Any candidate for reappointment, tenure, or promotion should be judged with respect to the proposed rank, status, and duties for which the action is contemplated. This implies a progressive transition from promise to performance as candidates are evaluated during their probationary appointments and demonstrated levels of performance for candidates seeking

tenure and/or promotion.

- Within the parameters of the Collective Bargaining Agreement (CBA), reasonable flexibility shall be exercised in considering the qualifications of candidates in the areas of teaching, research and scholarship, and service.
- Each candidate, at any level of consideration, should be expected to be engaged in a program of work which is sound and productive and which can be expected to continue to develop throughout their professional career.
- Each candidate should articulate their commitment to the values of "Our Common Ground" and the development and application of practices that foster diversity and inclusion.

1. Teaching and Advising

Effectiveness in teaching is an essential criterion for reappointment and promotion. The prime indicators of effective teaching include, but are not limited to:

- intellectual competence, integrity and independence
- evidence of knowledge of the field
- evidence of a willingness to consider suggestions that emerge from peer review of one's teaching
- evidence of the ability to work with other faculty members in designing and delivering a curriculum that fosters student learning
- evidence of the ability to present course materials clearly and effectively
- evidence of the capacity to structure the course and its assignments in ways that promote student learning
- evidence of the employment of strategies to assess students' learning and adjust one's teaching in light of the findings of those assessments
- evidence of an ability to stimulate students' intellectual interest and enthusiasm
- evidence of consideration of and/or incorporation of diversity and inclusiveness in the classroom, advising, and/or mentoring, as appropriate.

Evidence for effective teaching may be drawn from:

- Self-reflection
- Peer observations
- Student course evaluations
- Student letters
- o Annual performance evaluations by the Department Chair
- o In instances when teaching has been deemed less than successful, efforts by the faculty member have been made to address any issues.

Academic advising entails advising students about their program of academic study and is an important part of the mission of the University. It includes assisting them in course and program selection, but it does not include supervising instructional academic work, such as independent study, theses, or dissertations. Interest and skill in the general guidance and academic advising of students will be an important consideration for reappointment and promotion.

2. Research and Scholarship

Substantial and sustained research and scholarship of high quality is an essential criterion for

reappointment, promotion and tenure. The quality and significance of the research and scholarship work must be evaluated. Accordingly, the candidate is required to provide evidence of the quality and significance of their scholarly products that includes some or all of the following:

- Research and writing leading to publication of articles in refereed scholarly journals, books or conference proceedings
- Funded Research Grants
- Authoring or editing scholarly monographs, textbooks, or reference books that present new ideas or incorporate the faculty member's scholarly work
- Delivery of papers at scholarly conferences or in seminars or colloquia at UVM or at other universities or research institutes
- Authored published book or research article reviews
- Authored software or new media-based scholarly material that is widely disseminated and peer reviewed
- Mentoring or supervising of student research projects, including doctoral or master's theses, undergraduate honors theses, REU, student research projects (URECA! etc.) and other student research not normally part of coursework

For peer-reviewed journal publications, a common method for evaluating quality of the publication is the journal's impact factor and a common method for evaluating significance of the research is the number of external citations garnered by the publication. In addition, other indicators include h-index, i10 index and number of citations/year. It is recognized that journal impact factors and paper citation numbers are discipline-dependent. For example, these numbers for certain pure math areas are often lower than those in certain applied math and statistics areas. Note that publication in "predatory" journals, i.e journals without legitimate peer review, does not contribute to scholarly output.

The candidate may also provide other information as desired to establish quality and significance of their work, such as acceptance rates and other information on the standards of the journal and its standing in the discipline. For conference proceedings, the candidate is asked to distinguish the level of peer-review (either fully-refereed, abstract-refereed, or non-refereed) and to provide information about the conference acceptance rates, if possible. For monographs and book chapters, the candidate is advised to provide information regarding the review process of the press, and whether or not the work was invited. Candidates should outline the significant contributions of each major publication.

In disciplines in which competitive grant and contract support is available, acquisition of external funding and a record of continuing support may be an indication of recognized research competence and productivity. In some instances, professional activities, such as service as editor or editorial board member of a professional journal or service as a major officer of a professional organization, may be considered as recognition of scholarly achievement. Textbooks, reports, published research on pedagogy in the discipline and similar products connected with teaching or public service may be considered scholarly work insofar as they present new ideas or incorporate the candidate's scholarly research, assuming these contributions are validated through external review.

Publication of any research or other creative accomplishment must be evaluated, not merely listed, in reviewing the performance of a candidate for reappointment, promotion or tenure. In cases involving tenure and promotion to Associate or (Full) Professor, the quality and significance of the work must be evaluated by full-time tenured, tenure-track, and research faculty members of the department as well as the Department Chairperson. In addition, the department must solicit evaluations from acknowledged scholars in the discipline of the candidate at other institutions, nationally or internationally.

Collaborative, interdisciplinary, multidisciplinary, and cross-disciplinary research is encouraged. For joint publications and grants, the candidate should describe their role in, and contributions to, the joint effort. The Chair has the prerogative to contact selected co-authors for comments on the candidate's contribution to the specific collaboration. For interdisciplinary or cross-disciplinary work, the candidate is advised to describe the nature of the publication venue.

Promotion to the rank of (Full) Professor requires a sustained record of excellence in teaching, research, and service, and the candidate should enjoy a recognized national or international reputation in their research field.

3. Service

Candidates must provide evidence of their involvement in service activities to their profession, to the University (including the College, and the Department), and/or outreach service to the community/public in a capacity that reflects the mission of the Math/Stat Department. The expectation for an untenured faculty applying for reappointments should remain modest. Candidates applying for tenure and promotion to Associate Professor should have demonstrated professional, University and/or outreach service that contributes directly to building the candidate's tenure case (e.g. federal agency funding review panel, journal refereeing, etc). For promotion to (Full) Professor, significant involvement and leadership in the Department, College and/or University committees is expected.

The quality of the candidate's service is the important factor. Measure of this quality will take into consideration the scope and intensity of service endeavors. Leadership roles in such services (as committee chair, for example) will also be considered. Documentation in this area may include written feedback from leaders of a particular service activity.

Evidence of the quality of the candidate's service may be drawn from:

- Self-reflection
- o Attends (when able) Department and College meetings
- Serves on Department/College/University committees
- o Professional service (journal refereeing, federal agency funding review panels, journal editorial service, conference organizing, etc.)
- Annual performance evaluations by the Department Chair
- Faculty may also engage in Community Engagement and Outreach (i.e. outreach activities)