

## Department of Mathematics & Statistics

### Annual Performance Review Guidelines

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#### Department Perspective

The following are general guidelines. The Department is made up of individuals with different strengths and interests who may decide to focus their energies on one particular activity at certain times in their careers. In this case the percentage value accorded teaching, research and service may vary from year to year. These guidelines are for use in RPT and annual performance evaluations as required by the Collective Bargaining Agreement; see section 14.4.

#### Evaluation Guidelines

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 work load 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.).

The quality measures are common to all, and an individual’s evaluation will be based on performance in each category according to the workload percentages. Thus, there are different expectations (in terms of “quantity” but not “quality”) for excellence at the 20% level than at the 40% level.

It is recognized that many activities cross over the general rubrics of Teaching, Scholarship and Service. For example, Professional Service is often a good measure of a faculty member’s scholarly stature in their discipline, and therefore should also be taken into account in evaluation under the Scholarship category (notable examples include refereeing or editing for premiere journals, reviewing grants for major agencies, etc.). Likewise, scholarship often has a direct impact on teaching (e.g., the development of new courses and/or new media-based material, research with students, etc.).

In each of the categories: teaching, research/scholarship and service, there are general performance expectations commensurate with the workload, and these general expectations are stated at the outset of each category. The ensuing points are guidelines for assessing the *quality* of performance of those expectations.

#### Teaching

*General Performance Expectations:* The faculty member shall satisfactorily complete the teaching related duties in their workload agreement, and demonstrably contribute to the education of students.

1. To achieve the rating “*consistently exceeds expectations*” in teaching--denoted henceforth as “Excellent” – the chair will seek substantial evidence of quality based on the following indicators. These are not listed in order of importance. Also, this is not an exhaustive list; other indicators of excellence will be considered, as appropriate (and will be specified in the evaluation). As much as possible, any one of the criteria below (including student evaluations) should be used to help assess

the overall quality and educational effectiveness of the instructor's courses, keeping in mind that each of these criteria comprises just one component of the overall assessment. In evaluating teaching, the chair will also consider mitigating factors beyond the control of the faculty member, such as the times and the physical support for lectures (e.g., location of a class, performance of hardware, etc.).

2. The faculty member who consistently exceeds expectations will exhibit many of the following traits:
  - a. Is a well-prepared, engaging and stimulating teacher.
  - b. Effectively encourages independent and creative student thinking, discovery and learning.
  - c. Works to improve courses (incorporates new technologies, incorporates current examples and applications in class, updates topical coverage in courses, etc.).
  - d. Keeps current with teaching resources (such as textbooks and websites) and with scholarly literature on teaching.
  - e. Attends seminars, workshops, sessions at professional meetings meant to improve teaching.
  - f. Maintains high standards for amount, level and quality of work expected from students.
  - g. Receives student evaluations that, in light of both the quantitative "Overall Instructor" and "Course Difficulty" ratings as well as written student comments, indicate that students perceive the course(s) given by the instructor as being excellent.
  - h. Receives excellent peer evaluations (based on class visitations or other forms of assessment).
  - i. Generates feedback from students and other faculty members that is generally highly positive, with significant outstanding comments.
  - j. Is successful in teaching a range of courses---by level or topic---as needed in the Department.
  - k. Is accessible to students outside of class, including during posted office hours.
  - l. Designs and effectively teaches new courses or creates significant changes or innovations to existing courses.
  - m. Designs and effectively implements new or innovative methods for course delivery.
  - n. Cultivates an inclusive and respectful classroom environment
  - o. Takes on additional teaching responsibilities when the need or opportunity arises (e.g., supervises independent study and practicum courses, student research projects, TAP, URECA students, etc.).
  - p. Supervises honors theses, REU, master's theses or doctoral dissertations.
  - q. Supervises student projects or presentations, including accompanying students to conferences.
  - r. Incorporates diversity and inclusion in advising and/or mentoring.
  - s. Communicates to students an interest in them as persons and in their intellectual development.
  - t. Has won a teaching award.
3. To achieve the rating "*meets and in some cases exceeds expectations*" in teaching—denoted henceforth as "Highly Satisfactory" – the chair will seek evidence of quality based on the following indicators:
  - a. Shows marked evidence of success in many of the above-mentioned categories, but generally the quality is less than that of an "excellent" teacher.
  - b. Receives student evaluations that are still very positive but not at same level as an "excellent" teacher.
  - c. Generates feedback that is highly positive but to a lesser degree than for an "excellent" teacher.
4. To achieve the rating "*satisfactorily meets all expectations*" in teaching—denoted henceforth as "Satisfactory" – the chair will seek evidence of quality based on the following indicators:
  - a. Shows some evidence of success in some of the above-mentioned categories, but generally the quality is less than that of a "highly satisfactory or excellent" teacher.
  - b. Receives positive as well as primarily satisfactory student evaluations.
  - c. Generates feedback that is generally positive but to a lesser degree than for a "highly satisfactory" teacher.
  - d. Makes themselves available to students on a basis commensurate with the faculty member's

teaching and advising assignments and maintains office hours reasonably convenient to students.

5. To achieve the rating “*below expectations in many categories*” in teaching, the chair will seek evidence of quality based on the following indicators:
  - a. Shows only marginal evidence of success in the above-mentioned categories, and generally the quality is less than that of a "satisfactory" teacher.
  - b. Receives mostly satisfactory, but a significant number of poor, student evaluations.
  - c. Generates feedback that is generally satisfactory but with some student dissatisfaction or complaints.
  - d. is minimally available to students on a basis commensurate with the faculty member's teaching and advising assignments, and office hours are sometimes insufficient or inconvenient for a significant number of students.
  
6. To achieve the rating “*Unsatisfactory*” in teaching, the chair will seek evidence of quality based on the following indicators:
  - a. Consistently receives mediocre or poor student teaching evaluations.
  - b. Generates feedback from peers and students about teaching performance that is often negative.
  - c. Either does not have appropriate office hours or does not reliably attend scheduled office hours
  - d. Does little to seek to maintain or improve present courses.
  - e. Does little to keep abreast of important general studies, textbooks and pedagogical materials germane to the courses he/she teaches.
  - f. Exhibits inconsistent attendance or frequent tardiness at classes (has substitutes more than a few times).
  - g. Is unresponsive to students’ needs.
  - h. Does not respond to normal student questions or requests in a timely and appropriate fashion.
  - i. Does not adhere to deadlines related to courses and students.
  - j. Is avoided by students as a teacher, advisor, or supervisor (e.g., for required research projects or theses).
  - k. Does not cover required course material.

### **Scholarship and Research**

*General Performance Expectations:* The faculty member shall conduct, stimulate and disseminate research and scholarship that advances the bounds of knowledge or enhances the greater good.

1. The chair will take into account differences of doing research and scholarship in various fields of mathematics and statistics. Each Department faculty member evaluated under this category is expected to maintain and be able to document an active scholarship program that includes some or all of the following:
  - a. Research and writing leading to publication of articles in refereed scholarly journals, books or conference proceedings.
  - b. Funded Research Grants
  - c. Authoring or editing scholarly monographs, textbooks, or reference books that present new ideas or incorporate the faculty member’s scholarly work.
  - d. Delivery of papers at scholarly conferences or in seminars or colloquia at UVM or at other universities or research institutes
  - e. Authored published book or research article reviews.
  - f. Authored software or new media-based scholarly material that is widely disseminated and peer reviewed.
  - g. 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.

2. The role of the faculty member in joint efforts should be established as clearly as possible. Work in progress should be assessed whenever possible for a junior faculty member who may not have an established reputation or track record. Submitted works *may* be indicators that a faculty member's scholarship transcends one of the categories that follow. Again, it is recognized that many research activities cross over the general rubrics of Teaching, Scholarship and Service.
3. To achieve the rating "*consistently exceeds expectations*" in research--denoted henceforth as "Excellent" – the chair will seek substantial evidence of quality based on the following indicators. These are not listed in order of importance. Also, this is not an exhaustive list; other indicators of excellence will be considered, as appropriate (and will be specified in the evaluation).
  - a. Has had articles published in refereed journals that are recognized as being among the leading ones in their field. (The chair shall also take into account that there are different average publication rates for researchers in different areas of mathematics and statistics.)
  - b. Has obtained a significant research grant or contract. (The chair shall take into account the considerable differences in availability and competitiveness of grant funding in different fields of mathematics and statistics. For research-track faculty members, a criterion for excellence is full funding with grants etc. that have significant value to the University and the regional or national community.)
  - c. Delivered papers at scholarly conferences, some by invitation.
  - d. Presented invited seminar or colloquia at distinguished institutions.
  - e. Has had articles published in refereed conference proceedings for major conferences in their field.
  - f. Has edited or written a significant book in an area of mathematics or statistics.
  - g. Can document chapters written for a planned significant book.
  - h. Shows evidence of being well known and respected in her/his field such as being a referee for a journal, acting as a reviewer for a funding agency, being an outside evaluator of a Ph.D. Dissertation at another university or serving on a review panel for the NSF (The chair shall take into account that even if junior faculty members are doing excellent research, they may not yet have established a "reputation" in the field.)
  - i. Undertakes substantial work with others, such as collaboration with other highly respected researchers, supervision of graduate or undergraduates that leads to theses and/or publications, etc.
  - j. Has significant, widely disseminated and peer reviewed scholarly work, such as software, web-based innovative scholarly material, etc.
  - k. Has substantial mentoring and supervision activities, especially as the primary advisor of doctoral or master's theses leading to the successful awarding of the respective degrees.
  - l. Has won a research or scholarship award or recognition.
4. To achieve the rating "*meets and in some cases exceeds expectations*" in research— denoted henceforth as "Highly Satisfactory" – the chair will seek evidence of quality based on the following indicators:
  - a. Shows evidence of success in above mentioned categories, but generally the quality is less than that of an "excellent" researcher (e.g., publication in second tier journals, lower productivity levels than the expectations for an "excellent" researcher in her/his field, less evidence in joint work of substantial mathematical or statistical contributions, etc.).
  - b. Produces work that is known and respected by others in the field, but their reputation is not as high as that of an "excellent" researcher.
  - c. Has articles submitted for publication in refereed journals that are recognized as being among the leading ones in their field.
  - d. Has had articles submitted in refereed conference proceedings for major conferences in their

- field.
- e. Has submitted a significant research grant or contract proposal.
  - f. Helps obtain grants that provide support for other colleagues and students, or equipment for research projects.
5. To achieve the rating “*satisfactorily meets all expectations*” in research—denoted henceforth as “Satisfactory” – the chair will seek evidence of quality based on the following indicators:
    - a. Documents progress in peer reviewed research (articles, substantive book reviews, papers delivered, etc.)
    - b. Has productivity and/or quality level lower than people in the "excellent" and "highly satisfactory" categories.
    - c. Documents research mentoring of graduate or undergraduate student activities.
  6. To achieve the rating “*Below expectations in many categories*” in research, the chair will seek evidence of quality based on the following indicators:
    - a. Shows some evidence of recent work or work in progress on scholarly articles, books, grant proposals, presentations at scholarly meetings, seminars, symposia, or workshops, etc. that will ultimately lead to peer reviewed work. However, the amount or quality of that work is not up to expectations and “needs some improvements”.
  7. To achieve the rating “*Unsatisfactory*” in research, the chair will seek evidence of quality based on the following indicators:
    - a. Shows very little evidence of recent work or work in progress on scholarly articles, books, grant proposals, presentations at scholarly meetings, seminars, symposia, or workshops, etc. that will ultimately lead to peer reviewed work. It must be remembered that this is a three-year window for the faculty member’s research.
    - b. Has no research mentoring of graduate or undergraduate students.
    - c. For research-track faculty members: is not regularly able to obtain full funding to support the FTE percentage of the position.

### **Service**

*General Performance Expectations:* The faculty member shall perform beneficial service for the department, college and university, or for regional, national or professional communities.

1. The chair shall take into account that because junior faculty members are discouraged by the Department from over-involvement in service, they should not be held to the same standards of productivity as tenured faculty.
2. The chair shall also recognize that certain kinds of professional service (e.g., refereeing of research works) are almost exclusively possible only for tenure-track or research-track faculty members.
3. As noted at the outset, measures of quality will take into consideration the scope and intensity of service endeavors. Documentation in this area may include written feedback from leaders of a particular service activity.
4. To achieve the rating “*consistently exceeds expectations*” in service—denoted henceforth as “Excellent” – the chair will seek substantial evidence of quality based on the following indicators:
  - a. An “excellent” faculty member serves effectively in the following areas and takes a leadership role in at least one area. These are not listed in order of importance. Also, this is not an exhaustive list; other indicators of excellence will be considered, as appropriate (and will be specified in the evaluation).

b. *Professional Service:*

- Is actively involved in professional organizations, possibly serving as an officer in the organization.
- Serves as associate editor or editor-in-chief for a major journal in mathematics or statistics
- Serves as a referee or reviewer for major journals, funding agencies, etc.
- Serves on funding panels at NSF, NSA or other funding agencies.
- Writes letters of recommendation for students or faculty members at UVM or other institutions.
- Engages in consulting work in areas of mathematics or statistics which contribute to creative and scholarly work, and to the educational, research and service activities of the University (including as a program reviewer or site visitor).
- Organizes a professional conference, workshop or continuing seminar.
- Speaks in campus colloquia, or to student or community groups.
- Regularly attends and contributes to departmental colloquia, seminars and journal clubs (e.g., by speaking, helping to recruit speakers, etc.).
- Involves in professional services that promote diversity and inclusion.

c. *University and Regional Service:*

- Contributes significantly on standing and ad hoc Departmental, College or University committees, and on search committees.
- Serves occasionally as chair or in a leadership role of such committees.
- Is a Departmental representative to the Faculty Senate.
- Makes unique or innovative service contributions to the Department, College or University.
- Works as an adviser to student organizations (e.g., the Math Club or SSA).
- Speaks in campus events and to student and community groups.
- Participates in College and Departmental professional outreach activities such as the *UVM High School Mathematics Contest*, *MathCounts*, and UVM-based summer institutes for students.
- Participates in University outreach or recruiting activities such as Admissions events (including open houses or admitted student days).
- Undertakes significant Departmental responsibilities to the general fabric of the Department.
- Has obtained significant equipment grants or made substantial efforts to obtain equipment or funding for facilities or students.
- Serves as a Faculty Mentor.
- Contributes to the promotion of cultural pluralism of the University or a professional organization.
- Provides mathematical or statistical expertise to a local school system or other organization.
- Has won a service award or other special recognition.
- Provides services that support diversity and inclusion.

5. To achieve the rating “*meets and in some cases exceeds expectations*” in service—denoted henceforth as “Highly Satisfactory” – the chair will seek evidence of quality based on the following indicators:
- a. Serves effectively in several of the areas listed under "excellent", but not at the same level of quality as the “excellent” faculty member.
6. To achieve the rating “*satisfactorily meets all expectations*” in service—denoted henceforth as “Satisfactory” – the chair will seek evidence of quality based on the following indicators:
- a. Serves in some of the areas listed under "excellent", but their contribution is not as substantial or high quality as the “highly satisfactory” member.

- b. Attends Department, College and University meetings, colloquia, etc., and occasionally participates actively and constructively in them.
  - c. Contributes well, but very rarely in a leadership capacity to departmental, College or University committees.
7. To achieve the rating “*below expectations in many categories*” in service, the chair will seek evidence of quality based on the following indicators:
- a. Serves in some of the areas listed under "excellent", but their contribution is not as substantial or high quality as the “highly satisfactory” member.
  - b. Attends Department, College and University meetings, colloquia, etc., but rarely participates actively or constructively in them.
  - c. Contributes to service activities, but never in a leadership capacity.
8. To achieve the rating “*unsatisfactory*” in service, the chair will seek evidence of quality based on the following indicators:
- a. Provides little or no service to the University, College or Department (e.g., little or no committee service, or merely attends committee meetings with no discernible contribution).
  - b. Is not actively involved in professional organizations and provides little or no service to the profession.
  - c. Consistently fails to attend regularly scheduled Department, College or University meetings, colloquia, etc.
  - d. Is not involved in professionally or departmentally related outreach activities.
  - e. Is not involved in professional service activities.