

DEPARTMENT OF MATHEMATICAL SCIENCES

FACULTY PERFORMANCE METRIC

12/11/02

Over an academic year, each faculty member will have agreed fractional contributions to workload for each of the three principal academic activities, namely teaching, research/scholarship and service. The means of assigning these fractions must be in accord with the current Collective Bargaining Agreement between the University and the A.A.U.P. The expectations of workload will be described in a separate document, the Department of Mathematical Sciences Faculty Workload Agreement.

Separate scores between 0 and 10 will be awarded by the Chairperson for each of the three principal activities. For each faculty member, a single composite performance score P , between 0 and 10, will be calculated as the weighted average of the three contributing scores, with weights equal to the agreed fractional contributions. The merit-based raise will be directly proportional to the performance score and directly proportional to the faculty member's current adjusted salary. The adjusted salary will be the midpoint of the actual salary and the departmental median salary. These principles, along with the constraint of a predetermined total pool, uniquely determine the allocation formula.

Faculty will be expected to update the filed copy of their curriculum vitae, and to submit by end of January, a standard annual appraisal form containing details of meritorious work and of self-improvement.

TEACHING EVALUATION

In every case, the Chairperson will take account of students' evaluations of teaching for each of the classes within the individual's departmental workload. These classes do not include those funded by programs outside of departmental control, for example those paid by supplementary sessions accounts. In the interpretation of students' evaluations, some comparison will be made with evaluations of other faculty who have taught the same or similar subjects. The Chairperson will take account of other available evidence, including unsolicited compliments and substantiated complaints by students. Impacts, both positive and negative, on the teaching effectiveness of colleagues, will be considered.

Faculty are encouraged but not required to submit other evidence of teaching effectiveness. This may include any of the following:

A teaching portfolio, including truly representative samples of presented material and assessment tasks.

A summary of steps that have been taken to improve teaching effectiveness or to improve the curriculum since the previous evaluation.

A report from a fellow faculty member who has observed the faculty member teaching and who can identify particular areas of strength or recent improvement, and who can suggest aspects for future improvement.

Having taken account of any of the above evidence, the Chair will assign a teaching score out of 10, except if there is an agreed teaching contribution of zero. A score of 5 will be given if the individual barely meets expectations. A score of 6 will signify at least some above-minimum effort to improve quality of learning. A score of 8 will indicate a teaching performance that is clearly above expected levels. A score of 9 or above will be given only if teaching has been clearly inspirational.

RESEARCH/SCHOLARSHIP EVALUATION

Quantity of research and scholarship activity will be judged by outputs in the form of

(a) papers in scholarly journals (paper or electronic) that show advances or insightful reviews in mathematical science or in mathematical teaching or in understanding of mathematics learning

(b) theses, dissertations, books or book chapters that show similar outputs to (a)

(c) supervision of research theses to completion

(d) papers in edited (and preferably refereed) conference or study group proceedings that show similar outputs to (a) and which are likely to be read by some who did not attend the meeting.

(e) favorably reviewed grant proposals to agencies that require competitive written proposals evidencing scientific merit.

(f) invited conference and colloquium presentations with external funding,

(g) innovative published curriculum materials in mathematical sciences that are likely to be widely used, with some users outside of the university.

(h) acknowledged significant contributions to published reports of inquiries instigated by government bodies or professional associations.

(i) mathematical science software that is widely used, with some users outside of the university.

(j) public presentation of works of art that required significant mathematical input by the faculty member.

The above outputs must be listed on the faculty member's curriculum vitae, which is kept on file in the department.

The quantity of research output will not be measured by number of articles alone, but by the amount of work that they necessitated. This work may have included computation, protracted logical reasoning, guidance of collaborators, learning from collaborators, and lengthy write-ups.

Some assessment will be made of the quality of the outputs. Evidence of quality will include amount of external funding, externally judged honors, prestige and acceptance rate of the publishers, novelty of the work, and degree of difficulty of the work, for example whether it solves a well-known problem.

If none of the above outputs have occurred, then the faculty member must be able to demonstrate new learning and milestones achieved towards such outputs. Within the category of new learning, recognition will be made of the value of high-risk research ventures that did not yield desired results.

The chairperson will give a rating of research/scholarship performance between 0 and 10, except if the agreed fractional contribution is zero.

A score of 5 will be given if the individual is barely maintaining the expectations of the workplace agreement. A score of 6 will indicate some effort to improve quality of outputs beyond the minimum. A score of 8 will indicate a level of research output in both quantity and quality that would even improve on the department's past strong reputation. A score of 9 or above would require world-class achievements.

SERVICE EVALUATION

Service adds value to the academic enterprise by ensuring effective decision-making and efficient operations within the Department, College, University, Profession and Community. The forms that such service may take will be written in the Faculty Workload Agreement. The Department may receive added value or savings in the form of efficiency, internal harmony, curriculum innovations, student retention, attraction of new enrollments, new productive collaborations, prestige within the discipline, attraction of good new hires, goodwill from other parts of the university and community, and departmental grant income. Except when the agreed fractional contribution is zero, the chairperson will assign a rating between 0 and 10, based on a qualitative judgment of net value added. A score of 5 would indicate barely meeting one's fair share of service contribution. A score of 7 would require some additional positive service contribution that required good judgment by the applicant. A score of 8 would indicate a service contribution clearly beyond expectations. A score of 9 or above would befit an irreplaceable contribution.