

**University of Florida
College of Engineering**

REPORT OF THE AD-HOC MERIT PAY COMMITTEE

June 11, 2004

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The merit pay criteria and procedures described in this document are intended to apply to tenured and tenure track faculty in the College of Engineering.

Purpose of Merit Based Pay Raises

Pay raises based on merit may be used to promote and further various goals of the College of Engineering, including:

1. Advance college mission
2. Improve the quality of college programs
3. Recognize and reward meritorious performance and sustained excellence of faculty
4. Promote retention of the most valuable and productive faculty
5. Improve faculty morale
6. Provide incentives for future faculty efforts
7. Improve college reputation in national surveys

Criteria for Award of Merit Pay Raises

Merit-based pay raises should be based on the quality and quantity of faculty activities in the areas of research, teaching, and service. In consideration of the purposes for merit-based pay outlined above, the importance of research to our mission as a major public research university, and the need to incorporate research advances into coursework and teaching, the ***primary emphasis*** for merit evaluations should be placed on research. Merit-based raises should generally reflect a continuous trend of productivity and excellence over a period of several years, as opposed to being based on achievements during a single academic year. In particular, merit raise judgements should be independent of the current faculty assignment during the period under consideration since these assignments may not reflect the priorities and activities which the college wishes to emphasize and reward.

Merit evaluations should be based on standardized activity reports submitted by the faculty member over the evaluation period, which will serve as the faculty member's 'case for merit'. In addition, merit deliberations may also consider other formal documents prepared during the evaluation period such as: tenure and promotion folders

including external letters, and recent memoranda of understanding written by the chair following an extended discussion with the faculty member.

Metrics

The following metrics should be considered by the departments as evidence of meritorious performance. The relative importance of the metrics will vary among the departments.

Research:

1. Publications
 - a. Peer reviewed
 - i. Journal papers
 1. Journal quality
 2. Journal impact factor
 - ii. Papers in conference proceedings and other refereed volumes
 1. Acceptance rate
 2. Quality
 3. Number of reviewers per paper
 - b. Not peer reviewed
 - i. Advanced level books, texts, and monographs
 - ii. Patents and copyrights
 - iii. Conference papers
 - iv. Other scholarly works
2. Originality and relevance of research
 - a. Citation indices
 - b. External letters
3. Recognition and stature in profession
 - a. Awards, Fellowships, etc.
 - b. Invited talks, Keynote talks
 - c. Other honors
4. Research funding
 - a. Source and type
 - i. Grant vs. contract
 - ii. Research vs. infrastructure
 - iii. Type of peer review
 - iv. Interdisciplinary vs. disciplinary
 - b. Amount
5. Graduate student supervision
 - a. Number and quality of Ph.D supervised/graduated
 - b. Number and quality of Engineer supervised/graduated
 - c. Number and quality of M.S. supervised/graduated
 - d. Student placement

Teaching:

1. Evaluations
 - a. Student

- b. Peer
 - c. Awards
- 2. Level of Effort
 - a. Class size
 - b. Updating of course content
 - c. Laboratory/facilities development
 - d. Introduction of new approaches and new initiatives
- 3. Innovation
 - a. New course development
 - b. Undergraduate and beginning graduate textbook publication
 - c. Other teaching related publications
- 4. Funding
 - a. Teaching related grants
 - i. Source and type
 - ii. Type of review

Service:

- 1. Editorships and editorial board memberships*
 - a. Journal quality
 - b. Journal acceptance rate
- 2. Conference program committee chairmanships and memberships*
- 3. Service to Professional Society – i.e. high ranking officer
- 4. External service recognition, commendations, awards
- 5. Exceptional internal service activities with the potential for significant institutional impact**

* Only highly prestigious, i.e. scrutinized and visible, editorships and conference chairmanships should be counted under this category.

** Examples of internal service activities meeting this standard include service on groups working to establish new academic units or major programs, and leadership of large interdisciplinary initiatives involving faculty from several departments and colleges.

Implementation

Faculty Input

It is the collective responsibility of the faculty in each department to consider the question of “What makes a professor in this discipline renowned, both externally and internally?”, and formulate qualitative and/or quantitative guidelines by which the Chair will evaluate the activity reports provided by the faculty. These guidelines should assign relative importance, emphasis, and/or weighting to be given to the various metrics listed above. To properly calibrate the various metrics, department faculty are encouraged to define “target levels” corresponding to acceptable vs. meritorious performance.

The exact form of these guidelines may vary from department to department. For example, the guidelines could take the form of a highly quantitative “formula” which weights and sums the various contributions and arrives at a composite numerical “score” for each faculty member, similar to that proposed in the April 15, 2004 Report of the Faculty Senate Ad Hoc Committee on Faculty Compensation (See Appendix 1). Other

departments may wish to rank the metrics in order of importance and group faculty members into “bins” or “levels” such as *Excellent, Good, Fair, Poor* for each category of activity. Other departments may rank the relative importance of the various metrics, and provide this ranking and weighting to the Chair to use when making a subjective judgement about the overall quality, quantity, and impact of the faculty member’s activities. Finally, the guidelines and weighting of metrics should be reviewed and updated periodically by department faculty to ensure continued relevance and congruence with the department’s goals and objectives.

Final Evaluation

A merit based pay raise system requires comparative evaluation of departmental faculty. The final evaluation is the responsibility of the Department Chair, who should give due consideration to the guidelines established by the department faculty and may choose to solicit help (i.e. peer evaluation) from the faculty.

Distribution of Merit Pay

1. It is recommended that monies available for merit raises not be distributed “across-the-board” to departmental faculty, as this defeats the purpose of such raises.
2. In making merit pay decisions, the Chair should follow the guidelines established by the department faculty, but may also consider the productivity/merit of faculty members relative to their current level of pay, as well as relative to national norms.
3. Eligibility for, and decisions on merit pay raises should not be influenced by other pay increases due to bonus programs, promotions, or other special programs.
4. In the interests of transparency, it is recommended that the chair inform the faculty regarding the distribution of merit pay. This could be accomplished in the form of a histogram showing the numbers of faculty receiving raises in various ranges of dollar amounts, while still protecting the privacy of individuals.

Appendix 1. (Excerpt from the Faculty Senate Report on Faculty Compensation, April 15, 2004)

6. Merit Based Compensation

The simplest and most transparent raise procedure would be to allocate all raise funds across the board, either as a constant percentage or as a constant dollar amount. We do not recommend doing this. The academic mission of the University of Florida is teaching, research, and service. Further, a stated goal of this university is to rise to the top tier of U.S. universities. To meet this goal the university must reward the faculty who excel in their mission. Therefore, faculty compensation should be merit based, and moreover, the criteria with which that merit is measured should be fair, explicit, and understood by all. Transparency does not require that the criteria be simplistic. Faculty are able to deal with complexity, as long as the rules are available and the procedures for applying them are not hidden. Moreover, part of the complexity of the university is that no rule will be suitable for all colleges and departments. Faculty in all colleges and departments, however, should have confidence that they know what the rules are, how they are implemented, and how and why exceptions are made.

Toward this goal, we recommend that there be two related methods through which faculty are involved, in an advisory capacity as defined in the Senate document on shared governance, in setting compensation. The first is in the process of allocating annual raises. The second is through less-frequent periodic review of the pattern of department compensation.

The annual process should be merit-based. We are not recommending that any department be allowed the right to grant themselves across-the-board raises year after year. After cost-of-living adjustments, raises must reward merit, based on criteria developed by faculty in consultation with administrators. To illustrate how this would work, we have developed an illustrative merit-based compensation plan employing quantifiable metrics. We are not suggesting that any plan be applied rigidly by all departments. We are instead recommending that each department have a set of criteria—mathematical or not; but explicit, detailed, written, and available to all faculty.

These metrics are based on individual faculty contributions to teaching, research, and service. The relative contribution to the academic mission is different for each faculty, department and college. Therefore, the *Merit Raise* plan is weighted by the assigned responsibilities of each faculty in meeting his or her expected relative contribution to the academic mission. In addition, direct financial contributions to the university by Clinical and Extension faculty, and faculty heavily involved in research are compensated through the *Merit Bonus* plan.

Within each part of the academic mission we have incorporated quantifiable metrics. For teaching, these metrics include course evaluations, peer reviews and the contribution due to teaching large classes. For research, these metrics include publications and scholarly works, graduate students supervised, awards, external research support and PhD students graduated. For service, these metrics include committees, editorial responsibilities and election to a society office.

It is expected that contributions and their impact will vary dramatically among departments and colleges. Therefore, these and other faculty contributions are multiplied by an impact factor. The impact factor differentiates the importance of the specific contribution with regard to other similar contributions (publication of a manuscript in a prestigious journal has a greater impact factor than a conference abstract, and a Nobel Prize has a greater impact factor than a best paper award) as well as the importance of that contribution criteria to the academic mission of the department (e.g., a department may decide to use peer evaluations rather than course evaluations assigning an impact factor of zero to course evaluations. In view of these complexities, impact factors will be determined on a departmental and college basis by faculty committees.

If faculty respond to these incentives and if departments implement them effectively, then department rankings should rise consistent with the stated UF goal. Therefore, the *Merit Raise* plan also includes department rankings. The quantitative relationship for this plan is presented below. The more effectively a department advances the university's goal of becoming a top ten public institution, the more its members are to be rewarded by the university.

In many colleges, another component of faculty compensation should be the direct financial resources the faculty bring to the university in excess of their expected contribution to the academic mission. This component should be in the form of an annual bonus as shown in the *Merit Bonus* plan, below.

The *Merit Raise* and *Merit Bonus* plans are intended to provide guidelines for deans and departmental chairs in their allocation of available finances. Implementation under UF's Shared Governance will require creation of a Faculty Senate Compensation Committee, under the auspices of the Academic Freedom, Faculty Quality and Faculty Welfare Policy Council. Deans and chairs will provide raise and bonus data compared against *Merit Raise* and *Merit Bonus* plans for their college and departments to the committee and explain any significant deviations from the plan and/or request modification of the plan for their colleges. The final authority for giving raises rests with the administration. But we urge that the faculty have a strong advisory role, including the right to explanations when their recommendations based on explicit criteria are not followed.

Finally, it is incumbent on the President and the University to make merit based compensation a priority budget item. When cost of living raises are limited by state budgets, other resources must be brought to bear to implement this plan fully and reward our most meritorious faculty.

Merit Raise, Contributions from teaching (T), research (R) and service (S):

$$\text{Merit Raise} = [f_T((\Sigma \text{IF}_{CE} \cdot CE / X_{CE}) + (\Sigma \text{IF}_{PR} \cdot PR / X_{PR}) + (\Sigma \text{IF}_{CS} \cdot CS / X_{CS}) + \text{other...}) + f_R((\Sigma \text{IF}_P \cdot N_P / X_P) + (\Sigma \text{IF}_G \cdot N_G / X_G) + (\Sigma \text{IF}_A \cdot N_A) + (\Sigma \text{IF}_S \cdot N_S) + (\Sigma \text{IF}_D \cdot N_D) + \text{other...}) + f_S((\Sigma \text{IF}_C \cdot N_C) + (\Sigma \text{IF}_E \cdot N_E) + (\Sigma \text{IF}_O \cdot N_O) + \text{other...})] \cdot [(100-DR)/(100-CR)]$$

f_i = Weighting factor from Faculty Assignment Report

Σ = Sum of all contributions in this category

IF_i = Impact factors (0 – 1)
N_i = Number
X_i = Departmental mean
CE = Course evaluations
PR = Peer reviews
CS = Class size
P = Publications, patents, or other scholarly works
G = Graduate students supervised
A = Awards
\$ = External contract/grant research support generated
D = PhD students graduated
C = Committees (departmental, college, university)
E = Editorial board
O = Society officer
DR = Department ranking (1 high, 100 low)
CR = College ranking (1 high, 100 low)

Merit Bonus, Direct external financial compensation:

Annual Bonus = IF • M

IF = Impact factor (0.1 – 1.0). Some departments may wish to modify the calculation of IF to take account of the cost to the university of supporting the revenue-creating activities. Additionally, as we are now in the age of collaborative and team-generated research, impact factors can be used to apportion credit for such activities. Moreover, impact factors can be adjusted to account for

M = Monthly salary generated by external contract/grant research support or clinical work above and beyond academic and fiscal requirements (summer salary for 9 month faculty or annual salary for clinical and extension faculty).

To reiterate, we note that this procedure is illustrative. Many departments will prefer a less mathematical statement of their criteria. Moreover, we recognize that even a formula as full as that given above cannot capture the complexity of faculty contributions. In particular, a major responsibility of departmental compensation committees is to assess the *quality* of faculty contributions. Consequently such explicit formulations are starting points. Faculty committees generating raise recommendations to administrators should first apply the explicit criteria, which should be fully documented and available to all faculty, and then justify their deviations from them.

The second component of faculty involvement should be periodic review of the pattern of compensation in each department, using faculty portfolios and compensation data such as the numbers illustrated in Figures 9 through 13. Every three to five years, varying with department, a faculty committee should assess the existing pattern of compensation, comparing it to each faculty member's contributions to advancing the department's goals. Raise recommendations in that and subsequent years should take account of each person's status relative to the desired pattern.

The first of the periodic reviews should begin as soon as possible. In it each department committee should establish appropriate national comparisons with peer departments to determine the extent to which individual faculty members are undercompensated, taking into account productivity and merit. Part of any new resources should be used to address the most egregious cases where salary clearly fails to reflect the productivity of the faculty member. These people are productive and visible but underpaid, and consequently most at risk of leaving the University. Deans should assess the accuracy of the departments' reviews and be charged with providing the resources to deal with the most urgent cases.

Both the annual raise recommendations and the periodic assessments of the overall patterns of compensation should be reviewed by the Faculty Senate Compensation Committee, which should report annually to the Senate. The annual report should assess implementation of the process by departments and colleges, the allocation of raises, the overall patterns of compensation, and the University's progress in moving toward a level and structure of compensation that is commensurate with its goal of becoming a top ten public institution.