

**Office of the Dean**

College of Engineering
Akron, OH 44325-3901
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MEMORANDUM

Date: February 9, 2007

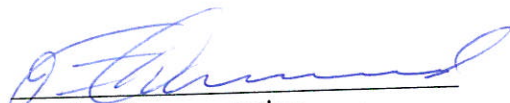
To: Elizabeth J. Stroble
Senior Vice President, Provost and Chief Operating Officer

From: George K. Haritos
Dean, College of Engineering


Subject: Merit Salary Guidelines and Criteria

The attached merit salary guidelines and criteria have been approved by the Faculty of the Department of Mechanical Engineering on February 8, 2007. I have approved all attached guidelines and criteria.

If you concur, we ask that you also approve the guidelines and criteria.


Faculty Representative


2/8/07
Date


Department Chair

2/08/07
Date


Dean

12 Feb 2007
Date


Senior Vice President, Provost and
Chief Operating Officer

Feb. 15, 2007
Date



Department of Mechanical Engineering

College of Engineering
Akron, OH 44325-3903

(330) 972-7731 Office
(330) 972-6027 Fax

Date: February 8, 2007

To: Dr. George Haritos, Dean, College of Engineering

From: Dr. Jerry Drummond, Chair, Mechanical Engineering
Merit Raise Committee

Subject: Revision of Merit Raise Formulation for the Department of Mechanical Engineering

As per the comments received from Dr. Tom Dukes, and Mrs. Nancy Stokes, the Department of Mechanical Engineering has revised the document describing our Merit Raise Formulation. The specific points raised by the Provost's Office are addressed, and changes have been made to a cover sheet and instruction sheet that will accompany the three evaluation sheets.

Comments from the Provost's Office:

Point 1: *Point was made concerning the non-probationary (tenured) faculty to add a sentence such as, "The non-probationary faculty who are interested in using the flexible weights for Teaching, Research, and Service must consult with the Chair who has the final decision."*

Such a comment has been added to the instruction sheet that will accompany the merit raise forms.

Point 2: *Are the teaching criteria reasonable? Is the current formulation checked against the past data?*

The criteria are reasonable. In the past, the department used the following formulation for the merit raise and it included a majority of the components proposed in the new formula:

Perf. Measure = (Unit / 2 journal) * (number of journal papers published) +
(Unit / 4 conference) * (number of conference papers published) +
(Unit / 4 report) * (number of reports submitted) +
(Unit / 4 book chapter) * (number of book chapters) +
(Unit / book) * (number of authored books) +
(Unit / 2 proposal) * (number of proposals submitted) +
(Unit / 60K) * (external funding in K\$-matching fund K\$) +
(Unit / 120K) * (internal funding in K\$) +
(Unit / 4 MS projects) * (number of MS projects finished) +
(Unit / 2 MS theses) * (number of MS theses finished) +*

(Unit / 0.5 Ph.D.) * (number of Ph.D. graduated) +
 (Unit / 12 credit hours teaching) * (number of credit hours) +
 (Unit / 3) * (average evaluation of all courses) +
 (Unit / editor) * (number of journal editorship) +
 (Unit / 2 associate editor) * (number of journal associate editorship) +
 (Unit / 4 technical committees) * (technical committee membership) +
 (Unit / 2 course, lab development) * (course, lab development) +
 (Unit / 5 seminar, workshop etc)* (number of seminars, workshops) +
 (Unit / 5 internal committees) * (number of internal committees) +
 (Unit / Award) * (number of awards) +
 (Unit / patent) * (number of patents received) +
 (Unit / 4 competitive student projects) * (comp. student proj. conducted)+
 (Unit / Ph.D. or Master student supported) * (number of supported students)

* Two journal papers correspond to one unit, four conference papers correspond to one unit, etc., etc.

Point 3: *Are all definitions, processes, timelines, criteria for college lecturers and instructors, three year rolling average, appeals consistent with contract language?*

Yes, they are to the best of our knowledge.

Point 4: *Does the document guide the chair's discretion in individual faculty weightings?*

Such direction has been added to the instruction sheet that will accompany the merit raise forms.

Point 5: *Do the guidelines allow the chair to have discretionary judgment?*

Appropriate comments related to such discretion have been added to the instruction sheet that will accompany the merit raise forms.

Point 6: *Are the criteria differentiated so that there is quantifiable difference between the ratings 1 through 5?*

Since we have not yet applied the criteria, we are not sure if the differentiation is clear. The sample cases used to illustrate the use of the forms seems to show adequate differentiation.

Point 7: *Is there language to account for FIPL and other leaves?*

Language on the cover sheet will request the faculty member use the three-year average that includes the time of the leave. That means that there may be some categories that use a 2-year or 2 ½ -year average for the evaluation.

Point 8: *Is the department allowing reappointment to automatically grant satisfactory rating for merit?*

No. That statement is not in our formulation.

POINT 9: *Is there a cover sheet which provides for appropriate approval signature lines?*

A cover sheet has been added to the packet.

Department of Mechanical Engineering
Merit Raise Evaluation Form

Name _____ ID# _____ Date _____

Scoring

Teaching x T-weight Research x R-weight Service x S-weight Total
 (Total = Teaching*T-weight + Research*R-weight + Service*S-weight)

Score							
\$\$ across the board							
Merit							
Total Merit Raise							

Teaching

Scholarship

Service

Recommendations

Note: As the faculty contract specifies, if you disagree with the above assessment, you are entitled to submit a written response to my attention within two weeks from the date of this evaluation. Your rebuttal shall be attached to this evaluation and forwarded to the College Dean for his resolution.

Signatures

 Employee Date

 Department Chair Date

 Dean Date

 Provost Date



Department of Mechanical Engineering

College of Engineering
Akron, OH 44325-3903

(330) 972-7731 Office
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To: Mechanical Engineering Faculty

Subject: Merit Raise Forms and Documentation

The enclosed packet includes the forms that need to be completed for the Merit Raise evaluation. Please read the comments below to clarify the information to be included on the forms. Note that activity in each area is to be evaluated using a three-year rolling average. That three-year average that includes the time of the leave, and so there may be some categories that use a 2-year or 2 ½ -year average for the evaluation.

1. On the teaching table, a description of each factor used in the evaluation is shown below the table. The score in each category must be multiplied by the weighting factor for a final score.
2. The research table is set up in much the same way and the weighting factors must be applied to each category.
3. The service component of merit shows three groupings of information. The first grouping is for the activity of an individual. The second group shows the weighting factor based on the priority of the function along with the base or expected activity. The third area will contain the final score for the category. The "Credit Distribution" area in the center grouping shows the "Credits," or the 1 - 5 ranking available for service activities, based on the service score achieved. This translates to the following:

Score = 0	Credits = 1 (unsatisfactory)
$0 < \text{Score} \leq 0.75$	Credits = 2
$0.75 < \text{Score} \leq 1.5$	Credits = 3
$1.5 < \text{Score} \leq 2.25$	Credits = 4
Score > 2.25	Credits = 5

The service component is set up in an Excel spreadsheet format.

In addition to the attached forms, the three categories may be weighted as follows:

For probationary faculty:

Teaching	- 40%
Research	- 40%
Service	- 20%

For non-probationary faculty:

Teaching	- 30% minimum weight
Research	- 30% minimum weight
Service	- 10% - 20% weight

Non-probationary faculty who are interested in using the flexible weights for Teaching, Research, and Service must consult with the Chair who has the final decision.

Along with the forms, the faculty member should attach his/her resume or a listing of activities and documentation included in the three-year averages.

The scores from the calculations on the merit raise forms will be the basis for determining the raise assigned for each faculty member. For probationary faculty who have been at The University of Akron for less than one year, it will be left to the discretion of the Department Chair to raise the total score to 2 if the actual score is lower. The Department Chair will also have discretion to qualitatively adjust the total score in each category. These adjustments will be limited to no more than one (1) point in each category.

Merit Criteria - Teaching

New Category [Factor]	Weight	Score = [Factor]*Weight	
$\frac{\sum [\text{Eval}_{\text{UG}} * 1.2 + \text{Eval}_{\text{Gr}} + \text{Eval}_{\text{peer}}]}{(N_{\text{ugeval}} + N_{\text{geval}} + N_{\text{peer}})(0.7)}$	30 %		
$N_{\text{credit hrs}}$	20%		
$(N_{\text{masters}})/0.5$	15%		
$2*(N_{\text{PhD}})/0.5$	15%		
$N_{\text{courses dev}} + N_{\text{lab dev}}$	10%		
$N_{\text{comp. st. proj}}$	10%		
Total	100%		

For New Factors:

Eval_{UG} - Under grad evaluation scores

Eval_{Gr} - Grad evaluation scores

N_{ugeval} - Number of undergrad evaluations over 3 years

N_{geval} - Number of grad evaluations over 3 years

$N_{\text{credit hrs}}$ - Avg Teaching hours/sem over 3 years

N_{masters} - Total master's degrees finished over three years

N_{PhD} - Total Ph.D. degrees finished over three years

$N_{\text{courses dev}} + N_{\text{lab dev}}$ - Total lab & courses dev over 3 years

$N_{\text{comp. st. proj}}$ - Total Comp. student projects over 3 years

$\text{Eval}_{\text{peer}}$ - Peer evaluation scores

N_{peer} - Number of peer evaluations

(Peer evaluations required for probationary faculty, optional for tenured faculty)

Merit Criteria - Research

RESEARCH CATEGORY (%)	Quantity ¹ (N)*Weight Factor		Scores (Max = 10)
1. PUBLICATIONS (40%)			
Journal Articles)	N*1		
	>10 = 10		
OR/AND			
Conference Papers	N*0.5		
	>10 = 10		
OR/AND			
Technical Reports	N*0.33		
	>10 = 10		
OR/AND			
Book Chapters	N*2		
	>10 = 10		
OR/AND			
Books	N*3		
	>10 = 10		
SUBTOTAL (Max: 10)			
2. OTHER RESEARCH ACTIVITIES (15%)	Quantity ¹ (N)*Weight Factor		
Research – Progress	N*2		
	>10 = 10		
OR/AND			
Research – Final	N*4		
	>10 = 10		
OR/AND			
Conference Presentations	N*2		
	>10 = 10		
OR/AND			
Invited Talk	N*2		
	>10 = 10		
OR/AND			
Keynote Speaker	N*2		
	>10 = 10		
OR/AND			
Patents	N*2		
	>10 = 10		
OR/AND			
Citations	N*1		
	>10 = 10		
SUBTOTAL (Max: 10)			
3. RESEARCH GRANT (35%)	Quantity ¹ (N)/Year	Allowable Score ↓	
	$0 \leq N \leq 10 K$	1	
	$10 K \leq N \leq 20 K$	2	
	$20 K \leq N \leq 30 K$	3	

	$30 K \leq N \leq 40 K$	4	
	$40 K \leq N \leq 50 K$	5	
	$50 K \leq N \leq 60 K$	6	
	$60 K \leq N \leq 70 K$	7	
	$70 K \leq N \leq 80 K$	8	
	$80 K \leq N \leq 90 K$	9	
	$N \geq 90 K$	10	
SUBTOTAL (Max: 10)			
4. PROPOSALS SUBMITTED (10%)	N*1 >10 = 10		
SUBTOTAL (Max: 10)			
Total:			
Final:			

1. N=Quantity based on three-year rolling average
2. 2= satisfactory; 3= meritorious; 4= outstanding; 5=extraordinary
3. Total scores < 1.0 will be scored as a 1.0 in the Final Score (unsatisfactory)
4. Total scores between 1.0 and 2.0 will be scored as 2.0 in the Final Score (satisfactory)
5. For research grant funding, for funds or equipment, the percentage noted on the transmittal form for splitting the funds must be used in calculating the grant credit shown above. If no percentage is shown on the transmittal form, the funds will be equally split.
6. For those working on industrial or student projects, in-kind funds must be tracked if you are to get credit in the funding area.
7. Reports submitted to industry as feedback from student projects may, in some cases, be used in the "Other Research" category.

Department of Mechanical Engineering
Merit Criteria - Service Component

Department of Mechanical Engineering

Merit Criteria - Service Component

	Individual			Metric
	Activity	Component	Weighting	
			activity / base	*
Professional Service (40%)				
Journal editor	0.00	0.00	0.00	
Journal associate editor	0.00	0.00	0.00	
Technical committee chair	0.00	0.00	0.00	
Technical committee member	0.00	0.00	0.00	
Technical conference chair/organizer	0.00	0.00	0.00	
Technical symposium chair/organizer	0.00	0.00	0.00	
Local technical committee chair	0.00	0.00	0.00	
Local technical comm. exec. member	0.00	0.00	0.00	
Papers/proposals reviewed	0.00	0.00	0.00	
	Comp. Total			0.00
	Comp. Scaled			0.00
	Comp. Credit			1.00
Academic Service (60 %)				
Undergraduate students advised	0.00	0.00	0.00	
Graduate students advised	0.00	0.00	0.00	
Professional student group adviser	0.00	0.00	0.00	
Thesis committee chair	0.00	0.00	0.00	
Thesis committee member	0.00	0.00	0.00	
Students supported (full year)	0.00	0.00	0.00	
Student recruitment activities	0.00	0.00	0.00	
University/College committee chair	0.00	0.00	0.00	
University/College committee member	0.00	0.00	0.00	
Departmental committee chair	0.00	0.00	0.00	
Departmental committee member	0.00	0.00	0.00	
	Comp. Total			0.00
	Comp. Scaled			0.00
	Comp. Credit			1.00
	Comp. Avg. Credit			1.00
Overall				
	Scaled			0.00
	Discrete Credit			1.00
	Continuous Credit			1.00

	Activity		Baseline		Metric
	Weighting	Base	Nominal	Component	
				Weighting	*
				activity / base	
	0.40				
	1.00	1.00	0.00	0.00	
	0.50	1.00	0.00	0.00	
	0.50	1.00	0.00	0.00	
	0.25	1.00	1.00	0.25	
	1.00	1.00	0.00	0.00	
	0.50	1.00	0.50	0.25	
	0.35	1.00	0.00	0.00	
	0.10	1.00	0.00	0.00	
	0.25	6.00	8.00	0.33	
			Comp. Total		0.83
			Comp. Scaled		1.00
			Comp. Credit		3.00
	0.60				
	0.25	20.00	20.00	0.25	
	0.25	20.00	0.00	0.00	
	0.40	1.00	0.00	0.00	
	0.35	1.00	0.50	0.18	
	0.10	1.00	1.00	0.10	
	0.20	1.00	0.00	0.00	
	0.10	1.00	1.00	0.10	
	0.30	1.00	0.00	0.00	
	0.15	1.00	1.00	0.15	
	0.40	1.00	0.50	0.20	
	0.20	1.00	2.00	0.40	
			Comp. Total		1.38
			Comp. Scaled		1.00
			Comp. Credit		3.00
	Credit Distribution				
	Scaled	Credits			
	0.00	1			
	0.75	2			
	1.50	3			
	2.25	4			
		5			

Merit Criteria – Teaching - Examples

Old Category (Factor)	New Category [Factor]	Weight	Case 1 - Heavy Grad Teaching	Case 2 - Middle Ground	Case 3 - Heavy Under-grad Teaching	Case 4 - Minimum Requirement
$(Eval_{avg})/3$	$\frac{\sum [Eval_{UG} * 1.2 + Eval_{Gr} + Eval_{peer}]}{(N_{ugeval} + N_{geval} + N_{peer})(0.7)}$	30 %	$[3.8] * 0.3 / .7 = 1.63$	$[3.24] * 0.3 / .7 = 1.39$	$[4.08] * 0.3 / .7 = 1.75$	$[2.7] * 0.3 / .7 = 1.16$
$\frac{(\text{Credit Hrs Teaching})}{12}$	$N_{credit hrs}$	20%	$[3] * 0.2 = 0.6$	$[6] * 0.2 = 1.2$	$[10] * 0.2 = 2.0$	$[6] * 0.2 = 1.2$
$(N_{masters projects})/4$	$(N_{masters})/0.5$	15%	$([3]/0.5) * 0.15 = 0.9$	$([2]/0.5) * 0.15 = 0.6$	$([1]/0.5) * 0.15 = 0.3$	$([1]/0.5) * 0.15 = 0.3$
$(N_{masters theses})/2$	$2 * (N_{PhD})/0.5$	15%	$(2 * [2]/0.5) * 0.15 = 1.2$	$(2 * [1]/0.5) * 0.15 = 0.6$	$(2 * [0]/0.5) * 0.15 = 0$	0
$(N_{PhD})/0.5$	$N_{courses dev} + N_{lab dev}$	10%	$[1] * 0.1 = 0.1$	$[1] * 0.1 = 0.1$	$[1] * 0.1 = 0.1$	$[1] * 0.1 = 0.1$
$\frac{(N_{courses dev} + N_{lab dev})}{2}$	$N_{comp. st. proj}$	10%	$[0] * 0.1 = 0$	$[3] * 0.1 = 0.3$	$[9] * 0.1 = 0.9$	0
$(N_{comp. st. proj})/4$						
	Total	100%	4.43	4.19	5.05	2.76

For Old Factors:

$Eval_{avg}$ - Average of evaluation - one year
 Credit Hrs Teaching - Teaching hours over one year
 $N_{masters projects}$ - Master's projects finished - one year
 $N_{masters theses}$ - Master's theses finished - one year
 N_{PhD} - Ph.D.'s finished - one year
 $N_{courses dev} + N_{lab dev}$ - Courses & labs developed - one year
 $N_{comp. st. proj}$ - Comp. student projects - one year

For New Factors:

$Eval_{UG}$ - Under grad evaluation scores
 $Eval_{Gr}$ - Grad evaluation scores
 N_{ugeval} - Number of undergrad evaluations over 3 years
 N_{geval} - Number of grad evaluations over 3 years
 $N_{credit hrs}$ - Avg Teaching hours/sem over 3 years
 $N_{masters}$ - Total master's degrees finished over three years
 N_{PhD} - Total Ph.D. degrees finished over three years
 $N_{courses dev} + N_{lab dev}$ - Total lab & courses dev over 3 years
 $N_{comp. st. proj}$ - Total Comp. student projects over 3 years
 $Eval_{peer}$ - Peer evaluation scores
 N_{peer} - Number of peer evaluations
 (Peer evaluations required for probationary faculty, optional for tenured faculty)

Merit Criteria – Research- Examples

Examples:

Case 1 (Extraordinary): 10 journal papers, 2 conference papers, 10 citations, 2 conference presentations

Case 2 (Extraordinary): \$700,000, 2 journal papers, 5 proposals submitted, 2 conference presentations, 2 conference papers, 1 final report, 2 progress reports, 2 citations, 0.15 patent

Case 3 (Average): \$20K, 2 journal papers, 2 conference papers, 2 conference presentations, 2 research proposals submitted

Case 4 (Satisfactory): 2 journal papers, 2 conference papers

RESEARCH CATEGORY (%)	Quantity ¹ (N)*Weight Factor	Scores (Max: 10)	Case 1	Case 2	Case 3	Case 4
1. PUBLICATIONS (40%)						
Journal Articles)	N*1		10	2	2	2
	>10 = 10					
OR/AND						
Conference Papers	N*0.5		1	1	1	1
	>10 = 10					
OR/AND						
Technical Reports	N*0.33					
	>10 = 10					
OR/AND						
Book Chapters	N*2					
	>10 = 10					
OR/AND						
Books	N*3					
	>10 = 10					
SUBTOTAL (Max: 10)			10	3	3	3
2. OTHER RESEARCH ACTIVITIES (15%)	Quantity¹(N)*Weight Factor					
Research – Progress	N*2			4		
	>10 = 10					
OR/AND						
Research – Final	N*4			4		
	>10 = 10					
OR/AND						
Conference Presentations	N*2		4	4	4	
	>10 =10					
OR/AND						
Invited Talk	N*2					
	>10 = 10					
OR/AND						
Keynote Speaker	N*2					

	>10 = 10					
OR/AND						
Patents	N*2			0.3		
	>10 = 10					
OR/AND						
Citations	N*1		10	2		
	>10 = 10					
SUBTOTAL (Max: 10)			10	10	4	0
3. RESEARCH GRANT (35%)	Quantity¹(N)/Year					
	$0 \leq N \leq 10 K$	1				
	$10 K \leq N \leq 20 K$	2				
	$20 K \leq N \leq 30 K$	3				
	$30 K \leq N \leq 40 K$	4			4	
	$40 K \leq N \leq 50 K$	5				
	$50 K \leq N \leq 60 K$	6				
	$60 K \leq N \leq 70 K$	7				
	$70 K \leq N \leq 80 K$	8				
	$80 K \leq N \leq 90 K$	9				
	$N \geq 90 K$	10		10		
SUBTOTAL (Max: 10)			0	10	4	0
4. PROPOSALS SUBMITTED (10%)	N*1 >10 = 10			5	2	
SUBTOTAL (Max: 10)			0	5	2	0
Total:			5.5	6.7	3.4	1.2
Final:			5 out of 5	5 out of 5	3.4 out of 5	2 out of 5

1. N=Quantity based on three-year rolling average
2. 2= satisfactory; 3= meritorious; 4= outstanding; 5=extraordinary
3. Total scores < 1.0 will be scored as a 1.0 in the Final Score (unsatisfactory)
4. Total scores between 1.0 and 2.0 will be scored as 2.0 in the Final Score (satisfactory)
5. For research grant funding, for funds or equipment, the percentage noted on the transmittal form for splitting the funds must be used in calculating the grant credit shown above. If no percentage is shown on the transmittal form, the funds will be equally split.
6. For those working on industrial or student projects, in-kind funds must be tracked if you are to get credit in the funding area.
7. Reports submitted to industry as feedback from student projects may, in some cases, be used in the "Other Research" category.

Department of Mechanical Engineering
Merit Criteria - Service Component
Example

Professional Service (40%)

Activity	Individual		Metric
	Activity	Component	
	Weighting * activity / base		
Journal editor	0.00	0.00	
Journal associate editor	0.00	0.00	
Technical committee chair	0.00	0.00	
Technical committee member	0.00	0.00	
Technical conference chair/organizer	0.00	0.00	
Technical symposium chair/organizer	0.00	0.00	
Local technical committee chair	0.00	0.00	
Local technical comm. exec. member	0.00	0.00	
Papers/proposals reviewed	0.00	0.00	
Comp. Total			0.00
Comp. Scaled			0.00
Comp. Credit			1.00

Academic Service (60 %)

Undergraduate students advised	0.00	0.00	
Graduate students advised	0.00	0.00	
Professional student group adviser	0.00	0.00	
Thesis committee chair	0.00	0.00	
Thesis committee member	0.00	0.00	
Students supported (full year)	0.00	0.00	
Student recruitment activities	0.00	0.00	
University/College committee chair	0.00	0.00	
University/College committee member	0.00	0.00	
Departmental committee chair	0.00	0.00	
Departmental committee member	0.00	0.00	
Comp. Total			0.00
Comp. Scaled			0.00
Comp. Credit			1.00
Comp. Avg. Credit			1.00

Overall	0.00
Scaled	0.00
Discrete Credit	1.00
Continuous Credit	1.00

Activity	Baseline		Metric
	Nominal	Component	
	Weighting * activity / base		
	0.40		
	1.00	0.00	
	0.50	0.00	
	0.50	0.00	
	0.25	1.00	
	1.00	0.00	
	0.50	0.25	
	0.35	0.00	
	0.10	0.00	
	0.25	8.00	
Comp. Total			0.83
Comp. Scaled			1.00
Comp. Credit			3.00
	0.60		
	0.25	20.00	
	0.25	0.00	
	0.40	0.00	
	0.35	0.50	
	0.10	1.00	
	0.20	0.00	
	0.10	1.00	
	0.30	0.00	
	0.15	1.00	
	0.40	0.50	
	0.20	2.00	
Comp. Total			1.38
Comp. Scaled			1.00
Comp. Credit			3.00
Credit Distribution			
Scaled	Credits		
0.00	1		
0.75	2		
1.50	3		
2.25	4		
	5		