

MMAE ANNUAL EVALUATION STANDARDS AND PROCEDURES (AESP)

EXECUTIVE SUMMARY

MMAE department has developed three separate documents for the following categories of faculty.

Teaching Load of 2-2 or less- Research Active Faculty with a research appointment of 5% or greater

Teaching Load of 3-3 or more-Teaching faculty with less than 5% Research activity

Teaching Load for Lecturers and Instructors Teach 4-4- Lecturers and Instructors

Notes:

1. Each faculty will fall into one of the above three categories.
2. Faculty in each category may earn Conditional (C), Satisfactory (S), Above Satisfactory (AS) or Outstanding (O) according to criteria set out for the 3 categories.

Research Active Faculty (Exhibit A-C): Will receive a score in Teaching, Research and Service according to the rubric Exhibit (A) for faculty with more than 5% research appointment. A score of 1 for conditional, 2 for satisfactory, 3 for above satisfactory, and 4 for outstanding will be assigned to each task. Then a composite overall score would be computed as outlined under composite evaluation Exhibit (B). The composite score would determine the performance level.

Faculty with less than 5% Research Appointment (Exhibit D-E): Will be evaluated according to the rubric Exhibit (D) for faculty with less than 5% research appointment. Overall performance level will follow directly from the rubric.

Lecturers and Instructors Exhibit (F): Will be evaluated according to the Lecturers and Instructors document.

MMAE ANNUAL EVALUATION STANDARDS AND PROCEDURES (AESP)
2012-2013 Academic year

The chair of MMAE will use the criteria outlined in this document as guidelines for annual faculty evaluations. These evaluations at a minimum will be based on annual productivity as reported in FAR (Faculty Activity Reports), an up to date CV, and the specific model used to determine the FTE equivalent of teaching, research and service activities. In addition, the department chair will have annual face-to-face meetings with all untenured faculty and may meet with faculty of all ranks.

The key goal behind the AESP guidelines in this document is that the MMAE department will emphasize quality in all its endeavors. While it is not easy to assess quality, it is important that we make an attempt to do it, while also recognizing the importance of productivity. Below are some summary guidelines for each of the categories of Teaching, Research and Service. A detailed list is provided in the attached documents.

TEACHING:

It is expected that in class teaching activities be taken seriously with special emphasis on student learning outcomes. It is imperative that we maintain reasonable levels of expectation from our students and design/deliver course material with that goal in mind. Attention should be given to preparing thoughtful assignments and exams. In addition, feedback to students in the form of returning graded assignments in a timely manner, and being available during office hours, are essential.

RESEARCH:

Research activities within the university environment should lead to 1. High quality research; 2. High quality graduate students. These will be assessed through publications, graduate student direction and grantsmanship.

Publications: First, research which consumes a year of a faculty member and his/her graduate student's time should be adequately original and publishable. Otherwise, the faculty member has made a judgment error in advising the student on his/her research activities. As guidance, an M.S. thesis should result in at least one, and a Ph.D. in two refereed quality publications.

Graduate-Student Quality: Faculty guidance and development of graduate students is a serious responsibility. The professor is presumed to know the literature and the status of activities in his/her research area sufficiently to guide the student through a meaningful and productive research program. Finally, the professor is responsible for the written quality of the student's thesis, its presentation, and subsequent publication. The professor is not expected to do the work, write the thesis, etc. but he/she is expected to guide, advise, and help the students through their efforts.

Grantsmanship: In an idealized world, money probably would not be a factor in evaluating research activities; however, given our circumstances, it does count! Those circumstances include the current cost of a graduate student (around \$30K) and the fact that our discretionary research funds are almost entirely generated by overhead-return money. Being able to secure research funding is an indicator of either an established reputation or of a promising career. It is important that faculty make an extra effort to recruit and fund high quality graduate students. The dollar volume should be viewed as a necessary but not sufficient indicator of research activity. Large research budgets which do not produce a commensurate output of good graduate students and publications may not lead to a high evaluation in the research category.

SERVICE:

All faculty are expected to be engaged in service activities at the department, college and university level. It is expected that faculty will be active participants in assigned service tasks. At a minimum, attendance at scheduled meetings is expected. Involvement in professional society activities at the National and International levels is very desirable. Serving on editorial boards of reputed journals, serving on national panels/committees etc. are all considered very desirable goals for our faculty.

Exhibit A

Faculty with a more than 5% Research Appointment

Task	Category	List of Goals	Performance Expectations	S	AS	O
1	<i>TEACHING</i>	Maintain excellent teaching standards. Help to build/improve department's lab and teaching resources	No substantiated pattern of complaints on teaching. A score $\geq x$ out of a maximum of 5 on the student evaluations for overall effectiveness of instruction. Affirmation by faculty with knowledge of area. **** Satisfactory = 3+; Above Satisfactory = 3+; Outstanding = 3+. Each of these markers is out of 5.	✓	✓	✓
2		Advise Graduate/Undergraduate students	Advise x Ph.D. /M.S. thesis students. **** Satisfactory = 1; Above Satisfactory = 2; Outstanding = 3.	1	2	3
3	<i>RESEARCH</i>	Conduct research of the highest quality/impact and publish it	Publish at least x high quality journal/ conference proceedings paper, and/or invention disclosures/patents per year. **** Satisfactory = 1; Above Satisfactory = 2; Outstanding = 3.	1	2	3
4	**	Maintain an active research program that leads to a reasonable output of completed Ph.D. /M.S. degrees.	Support x graduate students/year on the average over a period of 3 years from external resources. **** Satisfactory = 1; Above Satisfactory = 2; Outstanding = 3.	1	2	3
5	***	External Funding	Secure external funds to support relevant activities including salary, equipment and travel of the order of \$x in expenditures/year averaged over 3 years	0-100K	\$101-199K	\$200+K
6	<i>SERVICE</i>	Be a good citizen. Serve the Department, College, University, and the profession.	<ul style="list-style-type: none"> a. Attend all meetings committed to and actively contribute to accomplishing the goals of the committees. b. Activities at the professional society level c. Editorial and national level activities 	✓	<ul style="list-style-type: none"> ✓ ✓ 	<ul style="list-style-type: none"> ✓ ✓ ✓

** For untenured Assistant Professors in the first 3 years the corresponding numbers would be 0 (S), 0.5 (AS) and 1(O) average over a period of 3 years.

Exhibit A (cont.)

*** For untenured Assistant Professors in the first 3 years the corresponding numbers would be 0(S), \$50K (AS), and \$100K(O) average over the first three years.

*****If anything less than the satisfactory requirements are met in each respective category, the review will be marked as conditional in that category.**

Exhibit B

COMPOSITE EVALUATION

Research Active Faculty (Tasks 1-6 as defined in Exhibit A):

Research active faculty will generally have their teaching, research and service evaluations weighted 50% in research (**R**), 40% in teaching (**T**), and 10% in service (**SS**). A rating of 4 for outstanding, 3 for above satisfactory, 2 for satisfactory, and 1 for conditional will be assigned in each of the categories with (**T**) Teaching category determined by task 2 since the task 1 is expected as a minimum for all faculty. Tasks 3, 4 and 5 will constitute the research category with each task evaluated as conditional, satisfactory, above satisfactory, and outstanding. While receiving an O in all of these tasks will automatically earn an O in this category and vice versa, other contributions listed in the activities document will be taken into consideration by the chair to determine the overall (**R**) research assessment when it is not clear cut. A weighting scheme tied to the department averages in tasks 3, 4 and 5 or some other suitable method may be adopted by the chair in consultation with the department’s advisory committee. Service (**SS**) is as defined in task 6. The final overall evaluation will be based on the weighted score $WT=0.4*T+0.5*R+0.1*SS$ with the following performance bands.

$WT=0.5*R+0.4*T+0.1*S$			
Level	Range	Final Rating	Additional Criteria
Tenured and Tenure-track Research Active Faculty	$3.5 < WT$	Outstanding	A score of 1 in any category drops rating to above satisfactory
	$3 < WT \leq 3.5$	Above satisfactory	A score of 1 in any category drops rating to satisfactory
	$1.9 < WT \leq 3$	Satisfactory	Two 1's in any two categories drops rating to conditional
	$WT \leq 1.9$	Conditional	

For Faculty with less than 5% Research Appointment and Lecturers with 100% teaching:

The performance bands will be as defined in the expectations tables (Exhibit E for faculty with less than 5% research appointment and Exhibit F for lecturers) with the overall classification clearly stated as Outstanding, Above Satisfactory, Satisfactory and Conditional.

If two consecutive years of conditional evaluations for overall performance occur, the faculty member will automatically earn an unsatisfactory evaluation for the second year. This is applicable to all faculty.

Exhibit C

ACTIVITIES IN TEACHING, RESEARCH AND SERVICE

Listed below is a compilation of typical activities that a faculty member will most likely be engaged in the teaching, research and service categories. While the key expectations for the purpose of evaluation in each of the areas of Teaching, Research and Service are listed as tasks in the rubric, there are many that are not explicitly stated there. It is understood that faculty will receive credit for unspecified activities that will help the department advance its goals. Such credit will be given in an equitable manner to adjust the ratings upwards in teaching, research and service. Faculty are expected to list unusual accomplishments under the category of “other activities”. Faculty should treat Exhibit C as general advice in shaping their activities to help the department become the best it can be, while helping their own career aspirations and professional development.

Teaching:

- Have reasonably high expectations of student performance
- Student teaching Evaluations
- Serving as faculty advisor for design groups when senior design studio is not part of the FTE calculation
- Administration of a teaching lab- credited if not considered in the FTE calculation
- Peer Evaluations
- Teaching Portfolio
- Feedback from previous students and exit interviews
- Advising of graduate/undergraduate students, Honors thesis advisor
- FTE in teaching
- Improvement and /or development of new courses/lab development
- Publications related to SoTL
- Publication of text books and education papers

Research and Scholarly Activities:

- Publications in Journals and refereed conferences of repute
- Patent disclosures, patents, licensed technologies
- Advising Ph.D. / M.S. thesis students
- M.S. /Ph.D. s completed
- Publication of Books and Monographs
- It is generally expected that on the average an M.S. thesis leads to at least 1 refereed publication and a Ph.D. dissertation results in 2 quality publications in journals.

Honors and Awards

- University Awards in Teaching, Research, Service
- State/National/International Awards in Teaching, Research, Service
- Professional Society Recognitions such as Fellows, Service Awards
- Advisee Research Recognitions at the University/State/National level

Exhibit C (cont.)

Funding Related Activities:

- Support of graduate students
- Research Expenditures
- New grants brought in
- Funding to build research infrastructure
- Support of undergraduate students/post-doctoral fellows
- IGERT, PIRE, MURI type collaborative activities
- SBIR/STTR type projects
- RET, REU, type activities
- GK-12 activities

Service, Professional and Other activities

It is understood that the national and international level activities will carry a higher level of recognition.

University and other Service

- Departmental, college, university standing committees
- Ad hoc committee service
- Serving on Faculty search committees
- Serving on Ph.D. /M.S. committees other than as chair
- Faculty advisor involvement in student organizations
- EIT review classes and other continuing education short courses
- ABET and other assessment related activities

Professional Service at the State, National, International Level

- National committees
- Chairing of committees
- Chairing of sessions at national and international meetings
- Conference Organization

Professional Outreach

- Offering short courses
- Teaching of EIT and other professional exam review classes
- Continuing education courses
- Placement of graduate students
- Review of Papers, proposals
- Serving on review Panels for NSF, DoD, NASA, NIH etc.

Editorial Activities

- Conference Editorial Boards, Associate Editor, Editor

Exhibit C (cont.)

Invited Seminars and Lectures

- Papers presented orally - such as keynote/plenary lectures
- Serving on Panels of discussion on contemporary topics at National meetings
- Invited Talks at other universities and industry
- Departmental Faculty seminar

Exhibit D

Faculty with less than 5% Research Appointment*

Task	Category	List of Goals	Performance Expectations	C	S	AS	O
1	TEACHING	Maintain excellent teaching standards	No substantiated pattern of complaints on teaching. A score $\geq x$ on the student evaluations. Affirmation by faculty with knowledge of area. Conditional = 2.75 - 3.0; Satisfactory = 3+; Above Satisfactory = 3+; Outstanding = 3+. Each of these markers is out of 5.	✓	✓	✓	✓
2		Teaching Portfolio	Materials Handed out in Class, Homework Problems, Exams, Projects, other assignments, Surveys, etc. be assembled in a 3-ring binder.	✓	✓	✓	✓
3	LIST A	<ul style="list-style-type: none"> (i) Active involvement in education related professional societies such as chairing sessions, committee service, etc. (ii) Continuing education/outreach educational activities (iii) Education related publication activities. (iv) Weighted average on student evaluations is at least 3.5 out of a total of 5. (v) Teaching of Fundamentals of Engineering Examination material to students preparing for EIT (vi) Publication of text books and monographs (vii) Funding from Teaching and Outreach related activities in excess of \$250K/yr average expenditures over a period of 3 years 	At least x number of items from list A. Conditional = 0; Satisfactory = 1; Above Satisfactory = 2; Outstanding = 4.	0	1	2	4
6	SERVICE	Be a good citizen. Serve the Department, College, University, and the profession.	Attend all meetings committed to and actively contribute to accomplishing the goals of the committees.	✓	✓	✓	✓

*Faculty with less than 5% research appointment will typically teach 3 courses/semester as a minimum. According to the current policy of CECS this assumes a 25% released time for service activities.

Exhibit D (cont.)

Involvement and achievement in the following activities will be considered for granting higher performance rating.

- Active involvement as faculty advisor to student organizations
- New course and laboratory development
- Feedback from previous students
- Number of HIM, undergraduate theses, etc. supervised.
- Advising graduate students

Exhibit E

Faculty with less than a 5% Research Appointment

Teaching and Service

- If two years of conditional evaluations occur, the faculty member will automatically earn an **unsatisfactory** evaluation for the second year.
- If the following requirements are satisfied and the weighted average is at least 2.75 but less than 3.0 (out of 5) on student evaluations for overall teaching effectiveness, the faculty member will receive an overall rating of **conditional**.
 - No substantiated pattern of complaints about teaching.
 - Teaching Assignment above 50% FTE (This means teaching more than 2 regular courses/semester).
 - Teaching portfolio such as what was covered throughout the class and samples of materials (Class Syllabus, Samples of Materials such as Examinations, Projects, Home Works/Assignments, etc. assembled into a 3 ring binder).
 - Involvement in assessment and ABET-related activities.
- These 5 items are required for a **satisfactory** evaluation
 - No substantiated pattern of complaints about teaching.
 - Teaching Assignment above 50% FTE (This means teaching more than 2 regular courses/semester).
 - Teaching portfolio such as what was covered throughout the class and samples of materials (Class Syllabus, Samples of Materials such as Examinations, Projects, Home Works/Assignments, etc. assembled into a 3 ring binder).
 - Involvement in assessment and ABET-related activities
 - The weighted average of student evaluations for overall teaching effectiveness must be at least 3 (out of 5).
- For an **above satisfactory** evaluation, in addition to the above mentioned items for satisfactory, faculty should have at least two items from List A:
- For **outstanding** evaluations, in addition to the above mentioned items for satisfactory faculty should have at least four items from List A.

Exhibit E (cont.)

List A

- Active involvement in education-related professional societies such as chairing a session, etc.
- Continuing education/outreach educational activities.
- Education-related publication activities
- The weighted average must be at least 3.5 (out of 5) on student evaluations.
- Teaching of Fundamentals of Engineering Examination material to students
- Publication of textbooks/monographs
- Funding from teaching and outreach related activities in excess of \$250K/yr. average expenditures over a period of 3 years.

Involvement and achievements in the following activities will be considered for granting a higher performance rating.

- Active involvement as faculty advisor in student organizations
- New course and laboratory development
- Positive feedback from previous students.
- Number of HIM, undergraduate theses, etc. supervised.
- Advising graduate students.

Exhibit F

LECTURERS AND INSTRUCTORS

Lecturers and Instructors will be evaluated according to the expectations listed below.

- If two years of conditional evaluations occur, the Lecturer/Instructor will automatically earn an **unsatisfactory** evaluation for the second year..
- If the following requirements are satisfied and the weighted average is at least 2.75 but less than 3.0 (out of 5) on student evaluations for overall teaching effectiveness, the faculty member will receive an overall rating of **conditional**.
 - No substantiated pattern of complaints about teaching.
 - Teaching portfolio such as what was covered throughout the class and samples of materials (Class Syllabus, Samples of Materials such as Examinations, Projects, Home Works/Assignments, etc. assembled into a 3-ring binder).
 - Teaching Assignment above 50% FTE. (This means teaching more than 2 regular courses/semester).
 - Involvement in assessment and ABET-related activities
- These 5 items are required for a **satisfactory** evaluation
 - The weighted average of student evaluations for overall teaching effectiveness must be at least 3 (out of 5).
 - No substantiated pattern of complaints about teaching.
 - Teaching portfolio such as what was covered throughout the class and samples of materials (Class Syllabus, Samples of Materials such as Examinations, Projects, Home Works/Assignments, etc. assembled into a 3-ring binder).
 - Teaching Assignment above 50% FTE. (This means teaching more than 2 regular courses/semester).
 - Involvement in assessment and ABET-related activities
- For an **above satisfactory** evaluation, in addition to the above mentioned items the weighted average of student evaluations must be at least 3.5 (out of 5)
- For **outstanding** evaluations, in addition to the above mentioned items for satisfactory, the weighted average of student evaluations must be 3.75/5 or better.

Exhibit F (cont.)

Involvement and achievements in the following activities will be considered for granting a higher performance rating.

- Active involvement as faculty advisor in student organizations
- New course and laboratory development
- Feedback from previous students.
- Guiding HIM students and undergraduate research students
- Active involvement in education-related professional societies such as chairing a session, etc.
- Continuing education/outreach educational activities.
- Education-related publication activities
- Teaching of Fundamentals of Engineering Examination material to students
- Publication of textbooks/monographs