

**New Mexico State University**

Department of Mechanical & Aerospace Engineering

**PROMOTION  
AND  
TENURE  
POLICY**

Policies and Procedures of Annual Evaluation and Promotion & Tenure

Updated 01/06/2019

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## NMSU Materials & Aerospace Engineering Department Mission

The mission of the Mechanical and Aerospace Engineering Department at New Mexico State University is threefold:

- to educate those who will advance knowledge and become the future leaders of industry and academia;
- to conduct both basic and applied research in mechanical and aerospace engineering and related interdisciplinary areas; and
- to provide service to the professions, to the state of New Mexico, to the country and to the future development of engineering worldwide.

The mission of the Undergraduate Program is to serve the state of New Mexico by providing students with a strong background in mechanical or aerospace engineering, and by producing highly sought after graduates.

Educational objectives and program outcomes derive from this mission, and reflect NMSU's university-wide mission, objectives, and standards.

## Introduction

This *Statement of Functions and Criteria* presumes the reader is knowledgeable of the definitions, procedures, and timelines contained within appropriate University<sup>1</sup> and College<sup>2</sup> documents that discuss Promotion and Tenure, and thus the content thereof will not be repeated here.

This *Statement of Functions and Criteria* serves to provide specificity to the evaluation criteria of faculty members within the Department, based on the general performance areas outlined in the College of Engineering *Promotion and Tenure Policies and Procedures*<sup>3</sup>:

- (1) Teaching & Advising;
- (2) Externally Funded Research;
- (3) Scholarship & Creative Activities;
- (4) Service, Extension, & Outreach; and
- (5) Leadership.

## Goals:

The established criteria are designed to achieve the following goals:

### Tenure

- All MAE faculty members who are on tenure track contracts will strive for, tenured contracts by submitting to the MAE P&T Committee a portfolio for review.
- The MAE P&T Committee and MAE Department Head will make each tenure-track faculty member aware annually of progress toward a continuous contract.
- Any MAE faculty member who is on temporary contract and who is not making progress towards a continuous contract will be terminated.

### Promotion

- All MAE faculty members will strive for promotion by submitting to the MAE P&T Committee a portfolio for review.
- The MAE P&T Committee and MAE Department Head will make each faculty member aware annually of progress towards promotion.
- The MAE P&T Committee will assist MAE faculty members in being promoted when their performance meets/exceeds departmental standards.

### Annual Performance Evaluation

- All MAE faculty with guidance from the MAE Department Head will define their role within the department for the ensuing year through the allocation of effort process targeting their individual strengths while considering the overall needs of the program and the students within it.
- All MAE faculty will participate in assessment activities as defined by the departmental self-study program.
- All MAE faculty employing non-standard teaching methods will document the source of their activities, or seek peer-review acceptance of those methods.
- All MAE faculty will:
  - participate in shared governance of the department, including:
    - faculty meetings;
    - course scheduling discussions;
    - curriculum review and modification;
    - assessment, including Course Assessment Records and documentation for ABET self-study;
    - qualifying exam preparation, delivery and assessment;
    - service on M.S. and Ph.D. defense committees;
    - public symposia sponsored by the department; and
    - ceremonial activities
  - advise graduate students, to maintain graduate faculty status
  - advise undergraduate students
  - prepare, in a timely manner, annual performance evaluation, including generation of a Digital Measures report of activities, and allocation of effort; and
  - maintain collegial relationships with faculty, staff and students.

## Procedures & Policies

All annual faculty evaluation, promotion, and tenure procedures have been standardized within the College of Engineering. These can be found in the *NMSU Policy Manual*<sup>1</sup> and the *CoE P&T Policies and Procedures*.<sup>2</sup>

MAE non-tenured faculty are expected to submit to the MAE P&T Committee for review a portfolio each year that conforms to the College of Engineering P&T Policies and Procedures. This portfolio must include all previous P&T Committee and Department Head evaluation memos as documentation of the responsiveness of the faculty member to the guidance of the MAE P&T Committee and of the committee's thoroughness in providing evaluation and guidance.

### Allocation of Teaching and Advising

Per section §6.61F of the Administrative Rules and Procedures (ARP) Manual,

1. Departments and equivalent units will specify how they determine teaching loads. Departmental or equivalent unit workload policy will be 1) developed by the department faculty in collaboration with the department head and approved by the dean or equivalent administrator, 2) contained in written departmental guidelines, and 3) distributed to all faculty in the department. Department guidelines shall clearly specify the method by which teaching load is distributed. The dean or equivalent may ask for revisions to the departmental workload policy.
2. In determining teaching load, the departmental or equivalent unit workload policy shall consider the impact of: courses with a lab component; career path of the instructor; tenure and promotion; workloads at peer institutions; national disciplinary norms; faculty retention; relative proportion of graduate and undergraduate instruction; supervision of master's theses or doctoral dissertations; student advising and retention activity; mentoring activity, individual faculty member's scholarly and creative productivity; service productivity; new preparations; method of course delivery; class size; help from graduate assistants; administrative and/or service assignments; team teaching; and methods of grading. Given the importance of graduate programs to the mission of the university, special consideration must be given to support of graduate programs. Other factors specific to particular departments or disciplines may also be considered.

The MAE Department will assign teaching load based on the following guidelines:

The Mechanical & Aerospace Engineering Department provides each faculty member with up to 25% of their load to distributed among the activities listed in ARP §6.61 F.2. Each faculty member must describe their planned activities during the allocation of effort process, and these activities must be "significant" as stated in Section C of that chapter.

The remaining ~75% (9 credit hours) of a faculty member's time will be allocated to teaching each semester per the following guidelines, and will be based on each faculty member's relative **degree of creative/research activity** (considered by the extent of grant management, proposals submission and the number of graduate students being supervised). MAE faculty will never be *required* to buy-out to justify allocation of a reduced teaching load.

- inactive (no grants, publications, graduate student supervision, proposal activity) - 9 credit hours
- moderately active - 5 to 7 credit hours
- highly active - 3 to 4 credit hours
- highly active w/ 25% buyout - no teaching responsibility\*

*\*A faculty member may completely buyout of teaching for a maximum of two consecutive semesters.*

A limit of 3 credit hours of teaching will be afforded during the first 4 semesters as a tenure-track assistant professor in MAE.

Deviation from these general guidelines based on the many factors described in ARP §6.61 F.2 will be addressed in the allocation of effort process each year.

## Criteria

The large size of the Department of Mechanical & Aerospace Engineering relative to other departments in the College of Engineering dictate a set of criteria suitable to the administration of such an operating unit. The criteria are thus prioritized with consideration for the size of the department and size of the student body. The criteria should be revisited as changes occur to the number of faculty and/or students within the program.

Candidates for promotion to associate professor will be evaluated at a performance level below that expected of a candidate for promotion to full professor primarily in the areas of leadership, quality of teaching and advisement activities, professional maturity of scholarly and creative activities, and scholarly reputation.

### Evaluation of Teaching and Advising

(see CoE P&T Policies and Procedures, Section 4.1)

All faculty will teach and advise students each semester, unless on sabbatical or because of extenuating circumstances approved by the department head. The teaching of a candidate will be evaluated by the following criteria:

- knowledge of course subject matter;
- knowledge of program curriculum content;
- ability to teach and stimulate students;
- organization and management of the course;
- achievement of learning outcomes for the course;
- ability to relate subject matter to broader fields;
- advisement and mentoring\* of students in activities beyond the curriculum and classroom, including such areas as career, professional development, ethical challenges, and research; and
- ability to effectively direct graduate students as evidenced by the timely production of M.S. and Ph. D. candidates.

\* Mentoring of undergraduate and graduate students, formally or informally, is an important aspect of "teaching and advising" and will be used to evaluate teaching effectiveness. It is important to acknowledge and reward the efforts of faculty who guide research projects of undergraduate and graduate students, and who aid in the professional development of students by helping them prepare publications, conference presentations, and fellowship and grant applications. It is expected that each member of the Mechanical & Aerospace Engineering faculty will be available to both undergraduate and graduate students outside of the classroom as teacher, advisor, and mentor. Personal contact between the faculty member and students is an important part of the learning process of the student. This activity should extend to all students who seek help from, or counsel with, any member of the faculty.

Several forms of evidence must be used to comprehensively assess teaching effectiveness. Materials appropriate for evaluating teaching may include: (a) student evaluations of

instructor, (b) peer faculty evaluation, (c) self-evaluation, and (d) evidence of student learning.

#### ***Student Evaluations of Instructor***

Results of student evaluations should be presented as tallies of grades received (number of As, Bs, Cs, etc.) in response to course evaluation questions, as well as in response to questions devised by the faculty member to assess the meeting of course objectives. A complete set of written student comments should be included for each course taught.

#### ***Peer Faculty Evaluation***

The NMSU Teaching Academy provides resources and services to aid in documenting peer evaluation of teaching. (<http://www.teaching.nmsu.edu/>)

#### ***Self-Evaluations***

Self-evaluations may be the most effective means of documenting and assessing certain elements of teaching activities. For example, while students may be able to judge course organization they cannot judge the degree to which the content is current. Thus, faculty statements concerning this aspect of teaching may be particularly useful.

#### ***Evidence of Student Learning***

Evidence of student learning includes results of assessment activities. This should include evidence of indirect (e.g. surveys) and direct (e.g. Course Assessment Records) student learning, as well as nationally-normed performance indicators (e.g. FE pass rates and performance within exam categories). The NMSU Teaching Academy can assist with appropriate methods and data presentation.

#### **Evaluation of Externally-Funded Research**

(see CoE P&T Policies and Procedures, Section 4.2)

Externally-funded research of a candidate will be evaluated by the following criteria, each of which is required in the standardized presentation of performance data.<sup>2</sup>:

- The total dollar value of the funded research.
- The number of proposals written and submitted, and fraction of those proposals receiving funding.
- The number of consecutive years funding was received.
- Interdisciplinary nature and diversity of team members

#### **Evaluation of Scholarship and Creative Activities**

(see CoE P&T Policies and Procedures, Section 4.3)

A candidate's scholarship and creative activities will be judged by these criteria:

- professional maturity of scholarship and/or creative activities as evidenced by: (a) a high level of expertise in one or more areas of mechanical and/or aerospace engineering; and (b) an ability to author scholarly proposals that provide extramural funding to maintain research program viability;

- publication of quality works evidenced by: (a) presentations at professional symposiums; (b) publications in refereed journals; (c) publication of books or selected chapters of volumes dealing with advances in candidate's area of research; and (d) citations of these works by other authors; and
- scholarly reputation as evidenced by: (a) regard by peers; (b) professional recognition and esteem outside the University; (c) participation in professional symposia as chair or organizer; (d) recognition through invitation to be plenary speaker; (e) providing mentorship to junior faculty; (f) making collaborative funding opportunity available to other researchers

### **Evaluation of Service, Outreach, and Extension**

(see CoE P&T Policies and Procedures, Section 4.4)

Professional service includes a faculty member's efforts in support of promoting the quality of the Mechanical & Aerospace Engineering program at New Mexico State University. It involves the operation of the Department, representation of the Department in matters of the University, and interfacing on behalf of the Department with public-agencies and private industry. Service activities will be evaluated on an individual basis, and such activities will be extended the broadest interpretation possible consistent with the goals and past practices of the Department.

### **Evaluation of Leadership**

(see CoE P&T Policies and Procedures, Section 4.5)

A candidate's leadership will be evaluated for each of the general areas previously defined (Teaching and Advising; Externally-Funded Research; Scholarship and Creative Activities; and Service, Outreach, and Extension), as well as in Departmental Operations. For any academic department to operate efficiently, it is expected that all faculty will participate significantly in departmental operations. In addition to those areas of leadership defined in CoE P&T Section 4.5, it is expected that faculty in the Mechanical & Aerospace Engineering Department will all assume leadership roles in departmental assessment activities to assure program accreditation is maintained.

*Leadership* embodies initiative, perseverance, and originality. Leadership facilitates others to excel in their academic activities. A faculty's leadership role will vary over a career but is expected to increase with experience.

Evidence of leadership is a significant requirement for promotion to full professorship, yet professional leadership at all levels is encouraged and recognized.

Examples of leadership include but are not limited to:

- serving as the principal investigator of multidisciplinary or multi-institution teaching or research grants;
- organizing professional symposia;
- assuming leadership roles in journal editorial boards or professional societies;
- facilitating collaborations within/across departments, colleges, or institutions;
- mentoring of junior faculty within the university, enabling the professional success of colleagues;

- contributing to teaching scholarship evidenced by curriculum innovation;
- receiving invitations to serve as conference plenary speaker; and/or
- impacting the direction of a field of study through novel persevering ideas.

Faculty may document leadership activities, for example, by providing letters of recognition and thanks, statements of leadership duties from grant applications, committee descriptions of leadership responsibilities. Success as a mentor may be documented through the success of mentees, for example, in terms of their achieving tenure or receiving successful grant funding.

## Application of Criteria to Promotion & Tenure

Faculty members making important contributions to the discipline and the University and who have performed their duties with distinction will be considered for reappointment or promotion. *Sustained* professional growth and contribution in the general areas defined in *Criteria* are required of all ranks. Advancement in rank must be earned through *continuous* accomplishment across the full spectrum of expected activities and assigned duties. All faculty, including non-tenure-track faculty, will be held to the standards presented herein. Application of the *Criteria* for promotion and tenure are weighted according to the candidate's allocation of effort.

### Promotion to Associate Professor

Upon granting of tenure, the University gives up the option of annual contract of an individual to afford that individual with academic freedom. The University thereby trusts the judgment of peer evaluators to determine the likelihood of continued success and productivity of the candidate. For this reason, individuals promoted to the rank of Associate Professor must demonstrate qualities that provide a strong indication of the kind of continuing personal and professional development that will assure sustained productivity throughout a career.

### Tenure

The Department of Mechanical & Aerospace Engineering considers scholarship as the primary criterion for tenure. Excellence in scholarship as defined in by the Departmental, College, and University P&T policies, is absolutely necessary to achieve tenure within the Department.

Effective teaching and significant levels of service and/or outreach activity are necessary but not sufficient for the granting of tenure. Such accomplishments are expected of all faculty, but cannot replace excellence in scholarship as a justification for tenure.

### Promotion to Full Professor

Promotion to Full Professor represents advancement to the highest academic rank. It is based on continued personal and professional development *well beyond that achieved at the rank of Associate Professor*.

Rigorous standards are applied in the consideration of the promotion of an individual to the rank of Full Professor. This individual is expected to have achieved significant stature in their disciplinary area, and should have clearly demonstrated leadership at the institutional level and beyond. Full Professors are expected to be actively engaged in multiple forms of scholarship, including research. They should have an active and well-funded research program that supports undergraduate, graduate and/or post-doctoral scholars. No specific time interval is required for the promotion to Full Professor, given that a faculty member is able to demonstrate the level of scholarship and leadership required for advancement to this rank.

## Reference Documents

1. Administrative Rules and Procedures (ARP) Chapter 9 | HR - Performance Evaluation, Promotion and Tenure (<https://arp.nmsu.edu/chapter-9/>)
2. NMSU College of Engineering Promotion & Tenure Policies and Procedures, April 2016 Version 7.0 (<https://enr.nmsu.edu/files/2016/01/COE-PT-Final-4-7-16.pdf>)