

## **DRAFT COPY**

### **UAF Regulations for the Appointment And Evaluation Of Faculty**

## **AND**

### **DEPARTMENT OF MATHEMATICS AND STATISTICS UNIT CRITERIA STANDARDS AND INDICES**

THE FOLLOWING IS AN ADAPTATION OF UAF AND BOARD OF REGENTS' CRITERIA FOR ANNUAL REVIEW, PRE-TENURE REVIEW, POST-TENURE REVIEW, PROMOTION, AND TENURE, SPECIFICALLY ADAPTED FOR USE IN EVALUATING THE FACULTY OF THE DEPARTMENT OF MATHEMATICS AND STATISTICS (DMS). ITEMS IN BOLDFACE ITALICS ARE THOSE SPECIFICALLY ADDED OR EMPHASIZED BECAUSE OF THEIR RELEVANCE TO THE DEPARTMENT'S FACULTY, AND BECAUSE THEY ARE ADDITIONS TO UAF REGULATIONS. THE DOCUMENT GOVERNS EVALUATION OF ALL UAF FACULTY WITH A PRIMARY LOCUS OF RESPONSIBILITIES IN DMS. IT IS NOTED THAT THESE CRITERIA MAY DIFFER FROM THOSE FOUND IN THE NATURAL SCIENCES UNIT CRITERIA. REGULATIONS IN THE NATURAL SCIENCES UNIT CRITERIA DO NOT APPLY TO DMS.

## **CHAPTER I**

### **PURVIEW**

The University of Alaska Fairbanks document, "Faculty Appointment and Evaluation Policies," supplements the Board of Regents (BOR) policies and describes the purpose, conditions, eligibility, and other specifications relating to the evaluation of faculty at the University of Alaska Fairbanks (UAF). Contained herein are regulations and procedures to guide the evaluation processes and to identify the bodies of review appropriate for the university.

The university, through the UAF Faculty Senate, may change or amend these regulations and procedures from time to time and will provide adequate notice in making changes and amendments.

These regulations shall apply to all of the units within the University of Alaska Fairbanks, except in so far as extant collective bargaining agreements apply otherwise.

The provost is responsible for coordination and implementation of matters relating to procedures stated herein.

## CHAPTER II

### INITIAL APPOINTMENT OF FACULTY

#### A. Criteria for Initial Appointment

Minimum degree, experience and performance requirements are set forth in "UAF Faculty Appointment and Evaluation Policies," Chapter IV. Exceptions to these requirements for initial placement in academic rank or special academic rank positions shall be submitted to the chancellor or chancellor's designee for approval prior to a final selection decision.

#### B. Academic Titles

Academic titles must reflect the discipline in which the faculty are appointed.

#### C. Process for Appointment of Faculty with Academic Rank

Deans of schools and colleges, and directors when appropriate, in conjunction with the faculty in a unit, shall observe procedures for advertisement, review, and selection of candidates to fill any vacant faculty position. These procedures are set by UAF Human Resources and the Campus Diversity and Compliance (AA/EEO) office and shall provide for participation in hiring by faculty and administrators as a unit.

#### D. Process for Appointment of Faculty with Special Academic Rank

Deans and/or directors, in conjunction with the faculty in a unit, shall establish procedures for advertisement, review, and selection of candidates to fill any faculty positions as they become available. Such procedures shall be consistent with the university's stated AA/EEO policies and shall provide for participation in hiring by faculty and administrators in the unit.

#### E. Following the Selection Process

The dean or director shall appoint the new faculty member and advise him/her of the conditions, benefits, and obligations of the position. If the

appointment is to be at the professor level, the dean/ director must first obtain the concurrence of the chancellor or chancellor's designee.

F. Letter of Appointment

The initial letter of appointment shall specify the nature of the assignment, the percentage emphasis that is to be placed on each of the parts of the faculty responsibility, mandatory year of tenure review, and any special conditions relating to the appointment.

This letter of appointment establishes the nature of the position and, while the percentage of emphasis for each part may vary with each workload distribution as specified in the annual workload agreement document, the part(s) defining the position may not.

## CHAPTER III

### PERIODIC EVALUATION OF FACULTY

#### A. General Criteria

Criteria as outlined in "UAF Faculty Appointment and Evaluation Policies," Chapter IV, **AND DMS UNIT CRITERIA, STANDARDS AND INDICES** evaluators may consider, but shall not be limited to, whichever of the following are appropriate to the faculty member's professional obligation: mastery of subject matter; effectiveness in teaching; achievement in research, scholarly, and creative activity; effectiveness of public service; effectiveness of university service; demonstration of professional development and quality of total contribution to the university. **THE DMS RECOGNIZES THE VALUE OF ACADEMIC AND SCHOLASTIC DIVERSITY. AS SUCH, THE UNIT DOES NOT REQUIRE EACH CANDIDATE DEMONSTRATE EQUAL STRENGTH IN EACH AREA OF TRIPARTITE RESPONSIBILITY. CANDIDATES WILL BE RANKED IN EACH AREA BY THE DMS PEER REVIEW COMMITTEE (PRC). THE PRC CONSISTS OF ALL TENURED MEMBERS OF THE DMS. MEMBERS OF THE PRC WHO ARE ON SABBATICAL OR OFF CAMPUS FOR EXTENDED PERIODS HAVE THE OPTION OF PARTICIPATING, BUT THIS IS NOT REQUIRED. MEMBERS OF THE COMMITTEE MAY ABSTAIN FROM VOTING, BUT ONLY IN ACCORDANCE WITH DMS OPERATING PROCEDURES. CANDIDATES WILL BE RANKED IN EACH CATEGORY OF RESPONSIBILITY ACCORDING TO THE FOLLOWING SCALE: OUTSTANDING, SUPERIOR, SATISFACTORY, NEEDS IMPROVEMENT AND UNACCEPTABLE.**

**THESE CORRELATE WITH CATEGORIES SOMETIMES USED BY THE UNIVERSITY WIDE COMMITTEE AS OUTLINED BELOW.**

<b>DMS</b>		<b>UNIVERSITY WIDE</b>
<b>OUTSTANDING</b>	<b>=</b>	<b>EXCELLENT</b>
<b>SUPERIOR</b>	<b>=</b>	<b>VERY GOOD</b>
<b>SATISFACTORY</b>	<b>=</b>	<b>GOOD</b>
<b>NEEDS IMPROVEMENT</b>	<b>=</b>	<b>SATISFACTORY</b>
<b>UNACCEPTABLE</b>	<b>=</b>	<b>UNSATISFACTORY</b>

For purposes of evaluation at UAF, the total contribution to the university and activity in the areas outlined above will be defined by relevant activity and demonstrated competence from the following areas: 1) effectiveness in teaching; 2) achievement in scholarly activity; and 3) effectiveness of service.

- 1. TENURE. A CANDIDATE FOR TENURE WILL BE JUDGED ON THE BASIS OF PERFORMANCE AND INDICATIONS OF POTENTIAL IN ALL APPLICABLE AREAS OF RESPONSIBILITY, WITH EMPHASIS PLACED ON THE INTERVAL SINCE THE LAST PROMOTION OR HIRE, WHICHEVER IS MOST RECENT. A CANDIDATE NEED NOT DEMONSTRATE EQUAL PERFORMANCE IN ALL THREE AREAS. IN ORDER TO QUALIFY FOR TENURE, A FACULTY MEMBER SHOULD HAVE DEMONSTRATED A SUSTAINED PERFORMANCE IN ALL THEIR AREAS OF RESPONSIBILITY. WHILE THERE IS NO OBJECTIVE DEFINITION OF "SUSTAINED" NOR IS THERE ANY REQUIREMENT FOR ANY LENGTH OF TIME AT ANY PARTICULAR RANK, A TYPICAL CANDIDATE FOR TENURE SHOULD NORMALLY HAVE SERVED AT LEAST FIVE YEARS AT THE RANK OF ASSISTANT PROFESSOR AT UAF OR ELSEWHERE. UNTENURED FACULTY SHOULD REFER TO THEIR COLLECTIVE BARGAINING AGREEMENT AND INITIAL APPOINTMENT LETTER REGARDING MANDATORY YEAR OF TENURE REVIEW. A SUCCESSFUL CANDIDATE SHOULD ATTAIN AT LEAST A SATISFACTORY RATING IN TEACHING, RESEARCH AND SERVICE AND AT LEAST SUPERIOR IN TEACHING OR RESEARCH IN THE VOTE BY THE PRC AT THE TIME OF APPLICATION FOR TENURE.**
- 2. ASSISTANT PROFESSOR. A FACULTY MEMBER AT THE ASSISTANT PROFESSOR LEVEL MUST HAVE AN EARNED DOCTORATE OR DEMONSTRATED EQUIVALENT. DEMONSTRATED EQUIVALENCE WILL BE DECIDED ON AN AD HOC BASIS BY THE PRC. THOSE WORKING AT THE RANK OF ASSISTANT PROFESSOR SHOULD DEMONSTRATE A COMMITMENT TO TEACHING, RESEARCH AND SERVICE.**
- 3. ASSOCIATE PROFESSOR. IN ORDER TO QUALIFY FOR THIS RANK, A RECORD OF QUALITY INSTRUCTION AND RESEARCH IS IMPORTANT. THOSE WORKING AT THIS RANK ARE EXPECTED TO DEMONSTRATE A CONTINUING DEDICATION TO RESEARCH, TEACHING AND SERVICE.**

**4. PROFESSOR. THIS IS THE GREATEST SINGLE HONOR THAT THE UNIVERSITY CAN BESTOW UPON A MEMBER OF ITS FACULTY. THE HONOR MUST THEREFOR BE MADE UPON CAREFUL CONSIDERATION OF THE CANDIDATE'S TOTAL DEMONSTRATED CONTRIBUTION TO THE UNIVERSITY AND THE MATHEMATICAL SCIENCES. THE HONOR IS RESERVED FOR THOSE WHO HAVE DEMONSTRATED OUTSTANDING PERFORMANCE IN THEIR FIELDS, WHICH IS SUSTAINED OVER A SIGNIFICANT INTERVAL OF TIME. SPECIFICALLY, IN THE YEAR THE CANDIDATE APPLIES FOR PROMOTION TO PROFESSOR, A VOTE WILL BE TAKEN BY THE PRC. A SUCCESSFUL CANDIDATE FOR PROFESSOR SHOULD ATTAIN AT LEAST A SATISFACTORY RATING IN TEACHING, RESEARCH AND SERVICE IN THE VOTE OF THE PRC. IF ONE OF TEACHING OR RESEARCH IS RANKED SATISFACTORY, THE OTHER MUST BE OUTSTANDING.**

#### **Bipartite Faculty**

Bipartite faculty are regular academic rank faculty who fill positions that are designated as performing two of the three parts of the university's tripartite responsibility.

The dean or director of the relevant college/school shall determine which of the criteria defined above apply to these faculty.

Bipartite faculty may voluntarily engage in a tripartite function, but they will not be required to do so as a condition for evaluation, promotion, or tenure.

#### **B. Criteria for Instruction**

A central function of the university is instruction of students in formal courses and supervised study. Teaching includes those activities directly related to the formal and informal transmission of appropriate skills and knowledge to students. The nature of instruction will vary for each faculty member, depending upon workload distribution and the particular teaching mission of the unit. Instruction includes actual contact in classroom, correspondence or electronic delivery methods, laboratory or field and preparatory activities, such as preparing for lectures, setting up demonstrations, and preparing for laboratory experiments, as well as individual/independent study, tutorial sessions, evaluations, correcting papers, and determining grades. Other aspects of teaching and instruction extend to undergraduate and

graduate academic advising and counseling, training graduate students and serving on their graduate committees, particularly as their major advisor, curriculum development, and academic recruiting and retention activities. **THE DISSEMINATION OF IDEAS OUTSIDE THE CLASSROOM INCLUDES, BUT IS NOT RESTRICTED TO, STATISTICAL AND COMPUTING CONSULTING FOR STUDENTS; ASSISTING STUDENTS IN THE DESIGN OF EXPERIMENTS; DIRECTING UNDERGRADUATE AND GRADUATE RESEARCH. FURTHER, IT INCLUDES PUBLICATION OF TEXTBOOKS THAT ARE PRINCIPALLY INTENDED FOR CLASSROOM USE.**

**1. Effectiveness in Teaching**

Evidence of excellence in teaching may be demonstrated through, but not limited to, evidence of the various characteristics that define effective teachers. Effective teachers

- a. are highly organized, plan carefully, use class time efficiently, have clear objectives, have high expectations for students;
- b. express positive regard for students, develop good rapport with students, show interest/enthusiasm for the subject;
- c. emphasize and encourage student participation, ask questions, frequently monitor student participation for student learning and teacher effectiveness, are sensitive to student diversity;
- d. emphasize regular feedback to students and reward student learning success;
- e. demonstrate content mastery, discuss current information and divergent points of view, relate topics to other disciplines, deliver material at the appropriate level;
- f. regularly develop new courses, workshops and seminars and use a variety of methods of instructional delivery and instructional design;
- g. may receive prizes and awards for excellence in teaching.

**H. DEMAND HIGH PEDAGOGIC STANDARDS ESSENTIAL TO THE DEPARTMENT'S MISSION.**

**I. DEVELOP A TEXTBOOK THAT IS USED EXTERNAL TO UAF.**

**2. Components of Evaluation**

Effectiveness in teaching will be evaluated through information on formal and informal teaching, course and curriculum material, recruiting and advising, training/ guiding graduate students, etc., provided by:

- a. systematic student ratings, i.e. student opinion of instruction summary forms,

and at least two of the following:

- b. narrative self-evaluation,
- c. peer/ department chair classroom observation(s). **THIS IS REQUIRED FOR UNTENURED FACULTY AND RECOMMENDED FOR FACULTY APPLYING FOR PROMOTION. THEY WILL BE REVIEWED BY THE PRC (THAT INCLUDES THE DEPARTMENT HEAD). THIS COMMITTEE WILL SEND REPRESENTATIVES TO REVIEW CLASSROOM PERFORMANCE AS WELL AS SYLLABI AND SAMPLES OF GRADED MATERIAL. REPRESENTATIVES WILL WRITE A REPORT THAT INCLUDES A NARRATIVE PORTION AS WELL AS AN OVERALL RANKING OF TEACHING THAT USES THE SCALE: OUTSTANDING, SUPERIOR, SATISFACTORY, NEEDS IMPROVEMENT AND UNACCEPTABLE. WHEN A FACULTY MEMBER STANDS FOR TENURE, REPORTS FROM AT LEAST TWO YEARS SHOULD BE INCLUDED IN THE FILE, PROVIDED THE FACULTY MEMBER HAS BEEN EMPLOYED AT LEAST THREE YEARS AT THE TIME OF APPLICATION FOR TENURE. IF THE CANDIDATE HAS BEEN EMPLOYED FOR AT LEAST ONE YEAR AT THE TIME OF APPLICATION FOR TENURE, THEN AT LEAST ONE REPORT FROM THE PRC SHOULD BE INCLUDED IN THE FILE. IN THE CASE OF DISAGREEMENT BETWEEN PEER OPINIONS AND STUDENT OPINIONS, THE FORMER WILL BE CONSIDERED TO BE MORE ACCURATE.**
- d. peer/ department chair evaluation of course materials.



### C. Criteria for Research, Scholarly, and Creative Activity

Inquiry and originality are central functions of a land grant/sea grant/space grant university and all faculty with a research component in their assignment must remain active as scholars. Consequently, faculty are expected to conduct research or engage in other scholarly or creative pursuits that are appropriate to the mission of their unit, and equally important, results of their work must be disseminated through media appropriate to their discipline. Furthermore, it is important to emphasize the distinction between routine production and creative excellence as evaluated by an individual's peers at the University of Alaska and elsewhere. **CANDIDATES AT ALL LEVELS MUST DEMONSTRATE ACHIEVEMENT CONDUCTING RESEARCH IN AN INDEPENDENT AND CREATIVE FASHION. WORK WILL BE JUDGED FOR IMPORTANCE, ORIGINALITY AND QUALITY. CONSIDERATION WILL INCLUDE, BUT NOT BE RESTRICTED TO, THE CANDIDATE'S PAPERS PUBLISHED IN REFEREED JOURNALS AND REFEREED CONFERENCE PROCEEDINGS; PAPERS, LECTURES AND PRESENTATIONS DELIVERED; OTHER PAPERS AND TECHNICAL REPORTS; BOOKS, BOOK CHAPTERS, RESEARCH PROPOSALS, SOFTWARE DEVELOPED AND RESEARCH DONE THROUGH CONSULTING. THE WORK MUST BE PRESENTED IN A PUBLIC FORUM WHERE ITS CONTRIBUTION CAN BE JUDGED BY PEERS EXTERNAL TO UAF. AS SUCH, LITTLE CONSIDERATION WILL BE GIVEN TO RESEARCH THAT APPEARS IN NON-REFEREED PREPRINTS. NOR WILL WORK THAT IS DONE BY PRIVATE CONTRACTING BE CONSIDERED IF IT APPEARS ONLY IN INTERNAL COMPANY REPORTS. THE RESEARCH CONTRIBUTIONS FOUND IN A BOOK WILL BE BASED ON THE EXPOSITION OF NEW IDEAS. BOOKS THAT ONLY GATHER MATERIAL FOUND IN OTHER LOCATIONS WILL BE CONSIDERED TO BE EXPOSITORY AND NOT RESEARCH DOCUMENTS.**

#### 1. Achievement in Research, Scholarly and Creative Activity

Whatever the contribution, research, scholarly or creative activities must have one or more of the following characteristics:

- a. They must occur in a public forum.
- b. They must be evaluated by appropriate peers.
- c. They must be evaluated by peers external to this institution so as to allow an objective judgment.

- d. They must be judged to make a contribution.
2. Components of Research, Scholarly and Creative Activity
- Evidence of excellence in research, scholarly, and creative activity may be demonstrated through, but not limited to:
- a. Books, reviews, monographs, bulletins, articles, proceedings and other scholarly works published by reputable journals, scholarly presses, and publishing houses that accept works only after rigorous review and approval by peers in the discipline.
  - b. Competitive grants and contracts to finance the development of ideas, these grants and contracts being subject to rigorous peer review and approval.
  - c. Presentation of research papers before learned societies that accept papers only after rigorous review and approval by peers.
  - d. Exhibitions of art work at galleries, selection for these exhibitions being based on rigorous review and approval by PEERS, juries, recognized artists, or critics.
  - e. Performances in recitals or productions, selection for these performances being based on stringent auditions and approval by appropriate judges.
  - f. Editing or refereeing articles or proposals for professional journals or organizations.
  - g. Scholarly reviews of publications, art works and performance of the candidate.
  - h. Citations of research in scholarly publications.
  - i. Published abstracts of research papers.
  - j. Reprints or quotations of publications, reproductions of art works, and descriptions of interpretations in the performing arts, these materials appearing in reputable works of the discipline.
  - k. Prizes and awards for excellence of scholarship.

- l. Awards of special fellowships for research or artistic activities or selection of tours of duty at special institutes for advanced study.
- m. Development of processes or instruments useful in solving problems, such as computer programs and systems for the processing of data, genetic plant and animal material, and where appropriate obtaining patents and/or copyrights for said development.

**N. RESEARCH RESULTS SHOULD BE MEASURED BY QUALITY, IMAGINATION, LONG TERM IMPACT, DEPTH AND ORIGINALITY. THE DEPARTMENT EXPECTS FACULTY WITH A 30% RESEARCH LOAD TO BE PUBLISHING AT A RATE OF APPROXIMATELY ONE PAPER PER YEAR. AT A 50% LEVEL OR ABOVE THERE SHOULD BE APPROXIMATELY TWO. HOWEVER, IT SHOULD BE EMPHASIZED THAT THIS IS ONLY AN APPROXIMATE GOAL. THE MORE IMPORTANT GOAL IS QUALITY RESEARCH. HIGH QUALITY RESEARCH CAN BE PRODUCED AND DISSEMINATED IN SPECIAL CIRCUMSTANCES AT A LOWER RATE. ACCORDINGLY, CANDIDATES SHOULD NOT TRY TO MEET A RESEARCH TARGET IN TERMS OF NUMBER OF PAPERS PUBLISHED. FURTHER, HEAVY PRODUCTION RATES OF LOW QUALITY PUBLICATIONS IS DISCOURAGED.**

**O. A CANDIDATE'S PUBLICATION AND FUNDING RECORD SHOULD BE COMPARED WITH INDIVIDUALS IN THE SAME OR RELATED DISCIPLINES. THE PRACTICE OF LISTING COAUTHORS WHO HAVE CONTRIBUTED LITTLE TO A PUBLICATION IS UNCOMMON IN THE MATHEMATICAL SCIENCES. EXCEPT IN UNUSUAL CIRCUMSTANCES, EACH COAUTHOR WILL HAVE MADE A SIGNIFICANT CONTRIBUTION. COAUTHORS ARE OFTEN LISTED ALPHABETICALLY.**

**P. FOR DMS FACULTY CONDUCTING RESEARCH IN MATHEMATICS EDUCATION, APPROPRIATE RESEARCH PRODUCTS, IN ADDITION TO THOSE NOTED ABOVE, MAY ALSO INCLUDE DEVELOPMENT OF MATHEMATICAL CURRICULA THAT ARE INNOVATIVE AND BASED ON ORIGINAL RESEARCH. IN ADDITION TO JOURNALS INTENDED FOR THE RESEARCH COMMUNITY, DMS WILL ALSO VALUE PEER-REVIEWED JOURNALS INTENDED FOR**

**THE BROADER EDUCATION RESEARCH COMMUNITY. THIS INCLUDES JOURNALS DEVOTED TO TEACHER PREPARATION AND PROFESSIONAL DEVELOPMENT AS WELL AS A READING AUDIENCE OF EDUCATION POLICYMAKERS, TEACHERS AND ADMINISTRATORS.**

**D. Criteria for Public and University Service**

Public service is intrinsic to the land grant/sea grant/space grant tradition, and is a fundamental part of the university's obligation to the people of its state. In this tradition, faculty providing their professional expertise for the benefit of the university's external constituency, free of charge is identified as "public service." The tradition of the university itself provides that its faculty assumes a collegial obligation for the internal functioning of the institution; such service is identified as "university service."

## 1. Public Service

Public service is the application of teaching, research, and other scholarly and creative activity to constituencies outside the University of Alaska Fairbanks. It includes all activities which extend the faculty member's professional, academic, or leadership competence to these constituencies. It can be instructional, collaborative, or consultative in nature and is related to the faculty member's discipline or other publicly recognized expertise. Public service may be systematic activity that involves planning with clientele and delivery of information on a continuing, programmatic basis. It may also be informal, individual, professional contributions to the community or to one's discipline, or other activities in furtherance of the goals and mission of the university and its units. Such service may occur on a periodic or limited-term basis.

Examples include, but are not limited to:

- a. Providing information services to adults or youth.
- b. Service on or to government or public committees.
- c. Service on accrediting bodies.
- d. Active participation in professional organizations.
- e. Active participation in discipline-oriented service organizations.
- f. Consulting.
- g. Prizes and awards for excellence in public service.
- h. Leadership of or presentations at workshops, conferences, or public meetings.
- i. Training and facilitating.
- j. Radio and TV programs, newspaper articles and columns, publications, newsletters, films, computer applications, teleconferences and other educational media.
- k. Judging and similar educational assistance at science fairs, state fairs, and speech, drama, literary, and similar competitions.

## 2. University Service

University service includes those activities involving faculty members in the governance, administration, and other internal affairs of the university, its colleges, schools, and institutes. It includes non-instructional work with students and their organizations. Examples of such activity include, but are not limited to:

- a. Service on university, college, school, institute, or departmental committees or governing bodies.
- b. Consultative work in support of university functions, such as expert assistance for specific projects.
- c. Service as department chair or term-limited and part-time assignment as assistant/associate dean in a college/school.
- d. Participation in accreditation reviews.
- e. Service on collective bargaining unit committees or elected office.
- f. Service in support of student organizations and activities.
- g. Academic support services such as library and museum programs.
- h. Assisting other faculty or units with curriculum planning and delivery of instruction, such as serving as guest lecturer.
- i. Mentoring **OF FACULTY**.
- j. Prizes and awards for excellence in university service.

## **K. SERVICE AS OUTSIDE REVIEWER ON UAF THESIS COMMITTEES.**

## **L. PREPARATION OF UNIVERSITY REPORTS.**

## **M. CONSULTING WITH UAF FACULTY IN AND OUTSIDE DMS IN DISCIPLINE SPECIFIC ACTIVITIES THAT ARE NOT COUNTED AS RESEARCH (E.G. THAT DO NOT LEAD TO A COAUTHORED PUBLICATION).**

3. Professional Service

- a. Editing or refereeing articles or proposals for professional journals or organizations.
- b. Active participation in professional organizations.
- c. Active participation in discipline-oriented service organizations.
- d. Committee chair or officer of professional organizations.
- e. Organizer, session organizer, or moderator for professional meetings.
- f. Service on a national or international review panel or committee.

**PROFESSIONAL SERVICE INCLUDES, BUT IS NOT LIMITED TO, JOURNAL WORK, SERVICE TO NATIONAL PROFESSIONAL ORGANIZATIONS, WORKING WITH TESTING ORGANIZATIONS TO DEVELOP STANDARDIZED EXAMS, EDITING FOR TEXTBOOK AND SCIENTIFIC PUBLISHERS, ORGANIZING CONFERENCES, DEVELOPING, ORGANIZING OR PRESENTING IN-SERVICE TRAINING PROGRAMS, GIVING COLLOQUIUM LECTURES, REVIEWING PROPOSALS AND BOOKS. IT INCLUDES PRESENTATION OF EXPOSITORY MATERIAL INCLUDING EXPOSITORY TEXTS, WHICH ARE NOT PRIMARILY MEANT FOR CLASSROOM USE. OUTREACH TO EDUCATORS (E.G. OFFERING INSERVICE WORKSHOPS OR INSTITUTES FOR K-12 MATHEMATICS TEACHERS) IS ALSO APPROPRIATE**  
**PROFESSIONAL SERVICE FOR DMS FACULTY.**

4. Evaluation of Service

Each individual faculty member's proportionate responsibility in service shall be reflected in annual workload agreements. In formulating criteria, standards and indices for evaluation, promotion, and tenure, individual units should include examples of service activities and measures for evaluation appropriate for that unit. Excellence in public and university service may be demonstrated through, e.g., appropriate letters of commendation, recommendation, and/or appreciation, certificates and awards and other public means of recognition for services rendered.

## **RATIONALIZATION AND COMMENTARY**

**THE ABOVE PORTION OF THIS DOCUMENT IS MEANT TO OUTLINE THE PROCESS AND INDICES OF EVALUATION. WHAT FOLLOWS BELOW ARE A FEW REMARKS MEANT TO GIVE SOME EXPLANATION TO THIS SCHEMATIC.**

**FOR PROMOTION TO THE LEVEL OF ASSOCIATE PROFESSOR A RECORD OF QUALITY INSTRUCTION AND RESEARCH IS IMPORTANT. THE DMS RECOGNIZES THAT AT THE LEVEL OF ASSISTANT PROFESSOR, SERVICE IS SECONDARY TO TEACHING AND RESEARCH. THIS DOES NOT IMPLY SERVICE AT THIS LEVEL IS UNIMPORTANT. FACULTY NEW TO THE PROFESSION CAN PROFITABLY SPEND THEIR TIME ESTABLISHING A RESEARCH RECORD AND PERFECTING TEACHING TECHNIQUE.**

**DMS TAKES EXCEPTION WITH IDEAS FOUND IN CERTAIN QUARTERS ON SPECIFIC AND OBJECTIVE MEASURES OF IMPACT FACTORS. TO QUOTE FROM THE OCTOBER 2006 NOTICES OF THE AMERICAN MATHEMATICAL SOCIETY,**

**“PEOPLE MISUSE THE IMPACT FACTOR BECAUSE THERE ARE NO EXPLICIT PRINCIPLES GOVERNING ITS INTERPRETATION. THE IMPACT FACTOR IS USED TO MEASURE THE VALUE OF THINGS FOR WHICH IT WAS NEVER INTENDED (ARTICLES AND AUTHORS, FOR EXAMPLE), AND IT IS USED TO MAKE FAULTY COMPARISONS BETWEEN UNLIKE OBJECTS, INCLUDING JOURNALS THEMSELVES...FOR DECADES, SCHOLARS HAVE COMPLAINED ABOUT THE MISUSE OF THE IMPACT FACTOR, AND THERE IS EXTENSIVE LITERATURE OF SUCH COMPLAINTS AND ADMONITIONS. BUT IN A WORLD GONE MAD WITH AN OBSESSION TO EVALUATE EVERYTHING ‘OBJECTIVELY’, IT IS NOT SURPRISING THAT DESPERATE AND SOMETIMES INCOMPETENT EVALUATORS USE A POORLY UNDERSTOOD, BUT EASILY CALCULATED, NUMBER TO COMFORT THEM.”**

**DMS STRONGLY MAINTAINS THAT IN ADDITION TO ANY QUANTIFIED METRICS WE MUST ADD PERSONAL JUDGEMENT BY PRC AND OUTSIDE EVALUATORS. SCHOLARLY PEERS, SUBJECTIVE THOUGH THEY MAY BE, ARE THE BEST JUDGES OF QUALITY. MAKING SUCH DECISIONS IS HARD WORK BUT A NECESSARY RESPONSIBILITY OF EACH MEMBER OF THE PRC.**



TO FURTHER UNDERSCORE THE ABOVE POINTS, WE QUOTE FROM A 2006 WHITE PAPER RELEASED BY THE AMERICAN MATHEMATICAL SOCIETY.

**“MATHEMATICS IS OFTEN CONSIDERED AS PART OF THE PHYSICAL AND NATURAL SCIENCES, BUT ITS PUBLICATION PRACTICES DIFFER FROM THESE OTHER DISCIPLINES IN SEVERAL FUNDAMENTAL WAYS.**

**MATHEMATICIANS TEND TO PUBLISH AT RATES THAT ARE MODEST COMPARED TO SOME OTHER SCIENCES. THE MAJORITY OF MATHEMATICAL RESEARCH IS PUBLISHED IN REFEREED RESEARCH JOURNALS RATHER THAN CONFERENCE PROCEEDINGS OR BOOKS. THE MATHEMATICAL LITERATURE IS SPREAD AMONG A WIDER COLLECTION OF JOURNALS THAN IN MOST RELATED FIELDS. AND, SINCE AN ARTICLE TYPICALLY REPRESENTS A MATURE TREATISE ON A MATHEMATICAL QUESTION, AND SINCE MATHEMATICS RESEARCH IS NOT CONSIDERED TIME-SENSITIVE, DELAYS IN PUBLICATION ARE COMMON.**

**EVEN SOME OF THE BEST YOUNG MATHEMATICIANS PUBLISH RELATIVELY FEW PAPERS. A STUDY OF THE 40 MATHEMATICIANS WINNING SLOAN FELLOWSHIPS IN 2005-2006 SHOWS THAT 70% PUBLISH AN AVERAGE OF TWO OR FEWER ARTICLES PER YEAR IN THE FIVE YEARS PRECEDING THEIR AWARD. THESE TWO GROUPS REPRESENT AN EXCEPTIONAL GROUP OF HIGHLY PRODUCTIVE MATHEMATICIANS.**

**OF THE 274 PUBLICATIONS BY THESE GUGGENHEIM FELLOWS, 75% WERE IN REFEREED JOURNALS. ONLY THREE PUBLICATIONS WERE BOOKS. IN FACT, OF ALL ITEMS COVERED BY MATHEMATICAL REVIEWS IN THE YEARS 2001-2005, FULLY 80% WERE FROM REFEREED JOURNALS.**

**WHEN JUDGING THE WORK OF MOST MATHEMATICIANS, THE KEY MEASURE OF VALUE FOR A RESEARCH PROGRAM IS THE QUALITY OF PUBLICATIONS RATHER THAN RATE. THE INFORMATION ABOVE ABOUT THOSE WHO HAVE WON PRESTIGIOUS AWARDS STRONGLY SUPPORTS THIS VIEW”**

CERTAIN DISCIPLINES FOUND IN MATHEMATICAL SCIENCES HAVE LITTLE OPPORTUNITY IN THE WAY OF EXTERNAL FUNDING. ACCORDINGLY, THE ABILITY TO FIND FUNDING SPEAKS WELL FOR A CANDIDATE AT ANY LEVEL. HOWEVER, ABSENCE OF FUNDING MAY NOT NECESSARILY SPEAK AGAINST THE CANDIDATE. DMS DOES NOT CONSIDER THE FUNDING OF GRANT PROPOSALS TO BE THE GOAL OF ANY RESEARCH PROJECT. RATHER, WE FOCUS ON WHAT IS ACHIEVED WITH OR WITHOUT RESEARCH FUNDING.

TO SUMMARIZE, THE PRIMARY RESEARCH METRIC IS NOT NUMBER OF PUBLICATIONS, NOR NUMBER OF CITATIONS, NOR QUANTITY OF GRANT MONEY. IT IS RESEARCH RESULTS AS MEASURED BY QUALITY, IMAGINATION, LONG TERM IMPACT, DEPTH AND ORIGINALITY.

FURTHER INFORMATION ON THE CULTURE OF MATHEMATICS AND DISTINCTIONS FROM OTHER ACADEMIC DISCIPLINES CAN BE FOUND AT:

<http://www.ams.org/profession/leaders/culture/culture>