

## **DEPARTMENT OF MATHEMATICS AND STATISTICS STATEMENT OF PROMOTION AND TENURE CRITERIA**

**Preamble:** The Department of Mathematics and Statistics seeks to promote excellence in the mathematical and statistical sciences, in discovering, creating, interpreting, and conveying mathematical knowledge. It is committed to fostering intellectual and educational exchange within the University, the Alabama community and society as a whole. The mathematical sciences are central to the research, education, and outreach missions of the college and the university.

Promotion and tenure of faculty in the Department of Mathematics and Statistics are governed by the Faculty Handbook. Candidates for promotion and tenure should familiarize themselves with the handbook and with this document. This document specifies departmental procedures for evaluating candidates and discipline specific requirements for promotion and tenure.

A review of the candidate's progress toward tenure is implemented during the third year of the candidate's employment at Auburn University. A committee of tenured faculty familiar with the candidate's research is formed; the committee reviews the candidate's research productivity and progress toward tenure. The committee then presents its report to the chair who adds his/her own evaluation and forwards the third year review to the Dean. The report will be made available to the candidate. If the review is determined to reflect a substandard progress toward tenure then a letter of non-continuance could be sent to the candidate.

The department recognizes that the evaluation of the candidates by the tenured faculty, in regards to tenure, and by the faculty of higher rank, in regards to promotion, is of paramount importance. The department Tenure and Promotion Committee consists of all tenured faculty in regard to tenure and all faculty of the higher rank in regard to promotion to the higher rank. Assessment by specialists in the field will provide optimal evaluations of a candidate by his or her peers; this assessment is based on a variety of different criteria as outlined below. The primary method of assessing the candidate's dossier is through the well-established peer-review process (in accord with the principle of "peer-review").

An important part of the Tenure and Promotion process is the review of the candidate's research portfolio by an external evaluator. A department tenure and promotion committee is formed by the chair that is comprised of researchers in the candidate's or related field and typically includes members of the third year review committee for the candidate. The candidate has the option to make suggestions for the outside reviewer to the department tenure and promotion committee; the committee recommends a list of at least three outside reviewers to the chair; the chair in consultation with the departmental committee produces a finalized list which is forwarded to the Dean for his or her final approval. For candidates for tenure and promotion to the rank of Associate Professor, reviewers with national reputations are selected; for candidates for promotion to the rank of Professor, reviewers with international reputations are selected. (Guidelines for external evaluator selection for faculty evaluation may be found at the Provost's website: <http://www.auburn.edu/academic/provost/policies.html> ) An examination of the editorial boards on which an outside reviewer serves is often an indication of the reviewer's status in the research community.

## **Research.**

To be recommended for tenure and/or promotion, a candidate must be actively engaged in a continuing research program. Written evaluations by internationally recognized reviewers are the most important measure in determining the quality of the candidate's research. Research in mathematics is judged primarily by the quality of publications in peer reviewed journals and refereed conference proceedings, including both papers published and those accepted for publication. Expected publication rates vary widely between different areas of mathematics. In most areas, the rate of publication is typically one or more papers per year, but quality is always the primary consideration in judging research. Researchers are expected to publish in high quality/high impact peer refereed journals. Typically this would be in the researcher's area of mathematical specialization; in addition researchers are encouraged to broaden their research programs and consequently mathematical publications outside the candidate's area of specialization will be considered. The journals review in the AMS Mathematical Reviews provides a list of quality journals - though quality journals in related fields or in fields of mathematical or statistical applications also may be considered.

Candidates are strongly encouraged to pursue extramural funding and especially funding that supports theoretical mathematics research. In mathematics, external funding for theoretical mathematical research is very scarce and difficult to obtain; however mathematicians and statisticians are frequently needed in collaborative grant-supported projects that require a high level of complex mathematical or statistical analysis. Candidates are strongly encouraged to pursue such funding opportunities. Obtaining such funding should be highly regarded as recognition of the candidate's mathematical expertise.

In appraising the candidate's research, faculty members and external reviewers will be asked to consider the following:

- The quality and significance of the work.
- The quality of the outlet for publication or presentation, and, in cases of collaborative work, the role of the candidate. (It is standard practice in mathematics to list authors in alphabetical order and to assume that each author's contribution is the same unless otherwise indicated.)
- A research productivity commensurate with researchers in the field.
- A record of participation in the mathematical life of the department through involvement in seminars and other informal exchanges.
- Efforts in obtaining extramural support for research work, either individually or as part of a collaborative group. (As explained in the preamble, success in securing grant support is not a necessary condition for tenure and/or promotion, but highly regarded as recognition of the candidate's work.)
- Efforts in obtaining patents and or copyrights; though very rare for research mathematicians, obtaining a patent or a copyright on a research result is an excellent indication of the candidate's application of his/her work.
- Involvement in mathematical or statistical consulting or other interdisciplinary activities. (Such work may result in a mathematical contribution to a research publication or technical report in another field. In some cases, this type of scholarly activity may be a required

component of a candidate's job description, delineated as such in the letter in which the candidate is offered a job.)

In appraising the research for a candidate for the rank of **Full Professor**, faculty members and external reviewers will be asked to consider in addition the following:

- Clear and convincing evidence of emerging stature as a national or international authority.
- Service on journal editorial boards, program committees for professional conferences, and similar services to the profession.
- Contributions to the peer-review process such as refereeing of scholarly publications or grant proposals and service on funding agencies review panels.

In no instance will the absence of some items listed above be considered dispositive; rather, the entire case must be considered as a whole.

### **Teaching.**

To be recommended for tenure and/or promotion, candidates must have demonstrated effectiveness in teaching, which is judged primarily by the candidate's performance in teaching courses in the Department of Mathematics and Statistics. Effective teaching is a necessary but not sufficient condition for tenure.

The manner in which individuals provide an effective teaching environment varies widely and, as such, is difficult to evaluate. As many relevant measures as possible should be employed in the evaluation. When using numerical teaching evaluations, absolute scores, scores relative to departmental averages, scores relative to grade distribution, quality of preparation of students, and trendlines can all be considered.

In appraising the candidate's teaching, faculty members and external reviewers will be specifically asked to consider the following criteria:

- The candidate's knowledge of the subject and his or her professional growth in the field of specialization.
- Active pursuit of professional improvement and certification/licensure when appropriate (e.g. faculty in support of the Actuarial Program).
- The quality of the candidate's teaching as indicated by peer and student evaluations and teaching awards.
- Performance of the candidate's students on standardized tests or in subsequent classes.
- Development of new courses, innovative instructional material or innovative presentation.
- The quality of pedagogical material published or distributed to students.
- Service on students' Masters or Ph.D. committees.
- Participation in special teaching activities outside of the university, including international assignments, special lectureships, panel presentations, seminar participation, and international study and development projects.
- Collaborative work on interdisciplinary courses, programs and curricula within the university or across institutions.

- Upholding departmental and institutional governance and academic policy and procedure as related to teaching.
- Successful integration of teaching and research in ways that benefit students.

In appraising teaching for a candidate for the rank of **Full Professor**, faculty members and external reviewers will be asked to consider the following in addition to the above:

- The quantity and quality of the candidate's direction of dissertations, theses, independent study projects, etc., including service as outside readers on dissertations.
- The inclusion of graduate students in the candidate's research program, Ph.D. advisees are expected to produce a publishable research work that add to the knowledge base of mathematics.
- Accomplishments of the teacher's current and former students.
- The quantity and quality of the candidate's contributions to the academic advising of students.
- Development of new curricula or improvements to existing curricula: the creating of innovative instructional material or innovative presentation.
- Development of service-learning and outreach courses and programs, including mathematics education programs and programs for K-12 and post-secondary education.
- The candidate's contributions to the academic advising of students.
- Publication activities related to teaching, including textbooks, published lecture notes, articles, or reviews that reflect the candidate's teaching contributions and scholarship, and presentation of papers on teaching before learned societies.
- Improvement of instruction grants (receipt of competitive grants to fund innovative teaching activities or to fund stipends for students and membership on panels to judge proposals for teaching grants programs).
- Election to offices, committee activities and other important services to professional associations and learned societies including editorial work and peer review as related to teaching.

### **Service.**

To be recommended for tenure and/or promotion, candidates must be active citizens of the Department of Mathematics and Statistics and are expected to participate in the administration of the department through assigned committee work and other duties. Service responsibilities, while minor for assistant professors, grow with increased rank.

In appraising the candidate's service, faculty members and external reviewers will be specifically asked to consider the following criteria:

- Service to the profession that enhances the reputation and visibility of the department and the university such as appointments on national committees.
- Active participation in governance at the department, college, or university level.
- Service to the profession, including reviewing and refereeing services, organization of conferences or workshops, and service on panels for funding agencies or professional societies.

In appraising the service of a candidate for the rank of **Full Professor**, faculty members and external reviewers will be asked to consider the following criteria in addition to the above:

- Record of leadership in departmental affairs, including efforts to attract new faculty to the department, mentoring of junior faculty, and providing direction and vision within the department to increase its prestige and visibility.
- Service to the profession that enhances the reputation and visibility of the department and the university such as appointments on national committees, service on editorial boards of journals, or service as officer of professional societies.

**Above all the candidate is advised to read and be familiar with the relevant sections of the Faculty Handbook.**