Procedures and Criteria for Tenure and Promotion Reviews by the Department of Mathematics at Indiana University

(adopted October, 2014)

revised May 2022, with required addition of detail for ranking ratings

A. Preamble

These guidelines outline the criteria for promotion and tenure in the Department of Mathematics. They provide a specific departmental context within the general university framework for promotion and tenure of faculty. If the department's criteria for tenure change during the period of candidacy, the faculty member may choose to be evaluated for tenure under the criteria in force at the time of hiring; promotion reviews are grounded in current expectations.

A candidate will be considered for tenure when he or she, in consultation with the chair, decides that it is appropriate, but no later than the fall of the sixth year at Indiana University. A candidate may be considered for tenure only once. The decision to initiate the tenure-review process will be made during the spring preceding the fall in which the case is presented to the faculty.

The candidate for tenure will be asked to assist the chair in ensuring that the dossier includes all items relevant to the evaluation of research, teaching, and service, and will be asked to provide a list of six suggested external research referees. The chair, in consultation with appropriate departmental members, will provide a list of six independent external research referees. The chair will forward both lists to the College of Arts and Sciences. The Dean of the College will then select a subset of these twelve from whom the Department will solicit letters evaluating the candidate's research. The dossier will also include peer reviews of the candidate's teaching, summary student evaluations from all sections taught, typed comments from student evaluations from all sections taught, and letters from students solicited by the chair.

A committee of three tenured faculty members will be chosen by the chair. This committee will prepare the departmental summary report of the dossier. The dossier and the departmental summary report will be made available to the entire tenured faculty at least one week in advance of a meeting convened to discuss the case. There will be a vote of the tenured faculty by secret ballot, and the vote total, the committee report and recommendation, and the chair's report and recommendation will then be forwarded to the College. The candidate will be informed immediately of the result of the Department's vote.

Candidates who are awarded tenure are automatically promoted to the rank of Associate Professor.

The full professors will meet each spring to discuss possible promotions of associate professors to the rank of Full Professor. Upon the recommendation of a majority of the full professors, the chair will initiate the preparation of a promotion dossier for a given associate professor for consideration the following fall. Associate professors may also apply for promotion and dossiers will be prepared for any who apply. Procedures for preparation and consideration of promotion dossiers are similar to those for tenure dossiers discussed above except that only full professors participate in the process.

B. Research

It is expected that tenure and promotion cases in the Department of Mathematics will be based on excellence in research. If excellence in research is not the basis of the case, research activity must rise to the level of satisfactory. For tenure cases based on research, the candidate must have achieved or be clearly developing a position of research leadership in a substantial area of mathematics, and there must be convincing evidence that the candidate will maintain and enhance his or her overall level of performance. For cases involving promotion to Full Professor based on research, the candidate must have achieved a position of research leadership in a substantial area of mathematics, and there must be convincing evidence that the candidate will maintain and enhance her or his level of performance.

Mathematicians typically publish articles or research monographs. Typical time to publication after submitting an article for review is 1-3 years, and there are notable exceptions of important papers taking even longer to appear in press. Thus, while manuscripts are considered published research only if they are accepted by a publisher and irreversibly "in production," and articles and book chapters must either be "in press" or "accepted" in order to be considered published research, mathematicians look to preprints and works under review as evidence of maintaining and enhancing performance. In particular, the department includes preprints in the materials sent to external referees.

Mathematicians in our department work in a variety of fields spanning pure and applied mathematics. Expectations vary somewhat between fields. Overall, we value quality in creative work. In pure mathematics, quality is determined by the importance of the problem being solved or the value of the new theory being developed. In applied mathematics, quality is determined by the impact the mathematics has on its field of application. We expect that faculty will seek external grant funding. While obtaining external funding is neither necessary nor sufficient evidence of research excellence, the consistent ability to obtain external funding is evidence of research quality and productivity. We expect that faculty will attend conferences, present talks, referee papers in their field, and review proposals, but that the quantity and variety of these activities will vary over time and personal circumstances.

In pure mathematics, authors are listed alphabetically and are usually considered to contribute equally to the work. This standard may or may not hold in applied mathematics. Since candidates are expected to establish independent lines of research and since it is vital to establish the autonomous role played by the candidate in collaborative publications and grant proposals, the candidate must describe her or his role in multi-authored work in the research statement. The chair may solicit input from collaborators and co-authors, attesting to the autonomous contributions of the candidate.

Rankings of Research for tenure cases.

- To achieve the ranking of Excellent in research, the candidate must have achieved or be clearly developing a position of research leadership in a substantial area of mathematics, and there must be convincing evidence that the candidate will maintain and enhance his or her overall level of performance.

- For a ranking of Very Good in research, the candidate must be regularly active in a substantial area of mathematics, as evidenced by publications and other disseminations of research activity, and there must be convincing evidence that the candidate will remain so engaged.

- For a ranking of Satisfactory in research, the candidate must be regularly active in an area of mathematics, as evidenced by publications and other disseminations of research activity.

Rankings of Research for promotion-to-full cases.

- To achieve the ranking of Excellent in research, the candidate must have achieved a position of research leadership in a substantial area of mathematics, and there must be convincing evidence that the candidate will maintain or enhance his or her overall level of performance.

- For a ranking of Very Good in research, the candidate must be regularly active in a substantial area of mathematics and demonstrate the potential for future leadership, as evidenced by publications and other disseminations of research activity, and there must be convincing evidence that the candidate will remain so engaged.

- For a ranking of Satisfactory in research, the candidate must be regularly active in an area of mathematics, as evidenced by publications and other disseminations of research activity.

C. Teaching

It is expected that tenure and promotion cases in the Department of Mathematics will be based on excellence in research. Teaching plays an important role in the promotion process regardless of the basis for the promotion. The criteria for the awarding of tenure or promotion in the Department of Mathematics are that the candidate's teaching has been effective and that there is convincing evidence that the candidate will maintain and enhance his or her overall level of performance. Excellence in teaching is required for a case where teaching is the basis.

The Department of Mathematics takes a multi-faceted view of the assessment of teaching effectiveness. We do not rely on any single numerical quantity or single quality, nor do we require that all candidates display identical qualities. Regularly conducted peer evaluations of teaching for non-tenured faculty members provide valuable insights into classroom teaching. Feedback from faculty whose teaching work has overlapped with that of the candidate, through activities such as mentorship, course coordination, and outreach, provides important

additional information. Letters solicited by the department from former students often contribute thoughtful reflections on students' instructional experience with the candidate. We consider comments and numerical data from anonymous student evaluations in the context of our own departmental metrics.

We value junior faculty involvement in additional teaching activities such as graduate student supervision and committee work, supervision of undergraduate research, and post-doctoral mentoring. While engagement in such activities is neither necessary nor sufficient evidence of teaching excellence, substantial involvement in these additional teaching activities is evidence of teaching quality and productivity.

Other measures of teaching effectiveness cited by the College include teaching awards, teaching publications, curricular and pedagogical development, and awards received by students. Teaching awards internal to the department are based on the multi-faceted criteria and additional teaching activities discussed above. Teaching awards external to the department provide independent evidence of teaching effectiveness. We do not expect junior faculty to be writing articles about teaching or to play a major role in curricular or pedagogical development. Student achievements can provide evidence of effective faculty mentoring.

Rankings of Teaching for tenure cases.

- To achieve the ranking of a rating of Excellent in teaching, a candidate for tenure must provide evidence of outstanding classroom instruction as well as broad teaching impact beyond the campus. The candidate should also have achieved or be well on the way to achieving a national and/or international reputation for teaching impact. Examples of broad teaching impact include, but are not limited to, development of instructional/curricular materials that are used or referenced by instructors in the candidate's field; leadership positions in regional, national, or international organizations concerned with pedagogy; pedagogical publications or presentations; and regional, national, or international teaching awards.

- A rating of Very Good requires evidence of outstanding classroom instruction as well as an important contribution to teaching outside their own classroom. Examples include, but are not limited to, development of curricula with significant impact on campus instruction; mentoring and advising that has had a demonstrable impact on student achievement; demonstrated ability to direct the studies of undergraduate or graduate students; and College or campus teaching awards; as well as the examples given for teaching excellence.

- A rating of Effective is appropriate for candidates who provide evidence of high-quality instruction in their own classes and a commitment to student success.

Rankings of Teaching for promotion-to-full cases.

- To achieve the ranking of a rating of Excellent in teaching, a candidate for promotion based on teaching should provide evidence of having achieved a national and/or international reputation as a leader in the practice or study of teaching.

- For a rating of Very Good in teaching, a candidate for promotion based on teaching should provide evidence of outstanding classroom instruction as well as regular significant contributions to teaching outside the classroom.

- A rating of Effective is appropriate for candidates who provide evidence of high-quality instruction in their own classes and a commitment to student success at diverse levels.

D. Service

It is expected that tenure and promotion cases in the Department of Mathematics will be based on excellence in research. Service plays an important role in the promotion process when research and creative activity or teaching is the basis. The criteria for the awarding of tenure or promotion in the Department of Mathematics is that a candidate has made a positive service contribution and that there is convincing evidence that the candidate will maintain and enhance his or her overall level of performance. Excellence in service is required for a tenure or promotion case where service is the basis.

Rankings of Service for tenure cases.

- To achieve the ranking of a rating of Excellent in service, a candidate for tenure must provide evidence that they have achieved or are on their way to achieving a position of leadership that is nationally or internationally recognized.

- A rating of Very Good requires evidence of an impact beyond the department.

- A rating of Satisfactory is appropriate for candidates who meet the general expectation that all faculty contribute meaningful service to the department.

Rankings of Service for promotion-to-full cases.

- For a rating of Excellent, candidates must provide evidence of having achieved national/international visibility and stature resulting from service activities.

- A rating of Very Good requires evidence of significant sustained impact beyond the department.

- A rating of Satisfactory should demonstrate increased contributions to the effective operations and/or leadership of the department, College, Campus, and/or the profession.