## 1 Mission Statement

The Department of Mathematics will be a center of excellence in all facets of undergraduate and masters-level graduate education. This excellence will be measured by the quality of our graduates and will be achieved through:

- dedicated and caring teaching;
- a rigorous curriculum that requires students to demonstrate a high level of mathematical thinking, problem solving, and use of technology; and
- an active faculty that values excellence in teaching and ongoing mathematical scholarship and provides support and encouragement to students at both the undergraduate and graduate levels.

Specific goals for the Department of Mathematics that reinforce the mission outlined above include:

- Continuing and strengthening a system of peer evaluation of teaching so that best practices in teaching may be learned and strengthened to promote continued excellence in teaching.
- Continuing and strengthening a culture of scholarship through active research seminars, collaboration in research, and dissemination of research results through publication in refereed journals and regional, national, and international mathematics conferences.
- Continuing and strengthening a culture of undergraduate research by encouraging more students to participate in research and to write senior theses.
- Maintaining UT Tyler as an NSF-funded REU site in mathematics.
- Establishing a culture of masters-level research by encouraging more masters students to participate in research toward the masters thesis option.
- Identifying attainable funding sources for research and mathematical outreach, such as programs to train more secondary teachers and programs to give more in-service teachers opportunities to continue their education at the masters level.
- Encouraging enrollment and retention of high-ability students.
- Continuing to provide students with excellent preparation for graduate study or careers in industry and teaching.
- Continuing to provide students with access to and training for modern technology.


## 2 Voting Membership

The voting membership of the Department consists of the tenured and tenuretrack faculty members and all full-time lecturers with continuing appointments. For matters pertaining to the graduate curriculum, tenure and promotion, or hiring at the rank of Assistant Professor or above, voting will be restricted to tenured and tenure-track faculty members.

## 3 Policy for Department Meetings

The Mathematics Department will meet once per month during the academic year (September through April). The Chair will announce the date and time of any Department meeting at least one week in advance, and should provide a detailed agenda for the meeting at least three days in advance. The Chair is encouraged to adhere to a regular schedule (e.g., the first Friday of each month at 12:20 p.m.), as well as to arrange, to the greatest extent possible, the schedule of each faculty member so that regularly scheduled classes do not preclude any Department member from meeting attendance. Circumstances may occasionally require deviation from the monthly meeting schedule, and a meeting may be called for by either the Chair or by any group of three faculty members without any prior notice required. The first item of business at such a meeting must be a motion to waive prior notice requirements, and this motion must pass by approval of at least $\frac{2}{3}$ of the voting membership of the Department. Should the motion fail to pass, the meeting shall be adjourned immediately.

A quorum consists of $\frac{2}{3}$ of the voting membership of the Department. Motions will pass or fail by majority vote, with the following two exceptions: amendments to the Governance Document and hiring motions must each pass by a $\frac{2}{3}$ vote. Neither absentee voting nor proxy voting, nor any form
of non-physical attendance, is to be permitted at any Department meeting unless specifically approved by at least $\frac{2}{3}$ of the voting membership of the Department.

Typical procedure for voting on any motion in Department meetings will be the raising of hands, a count of votes "for" and "against" taken and called out by the Chair. Any voting member of the Department may call for a vote on any issue announced in the detailed agenda to be taken by secret ballot. Such a request can be made to the Chair, either verbally, in writing, or electronically before the meeting. A request may also be made via any of the above methods by any voting member of the Department to any tenured faculty member, who must convey the request to the Chair, withholding the name of the requesting party.

## 4 Committees

### 4.1 Permanent Committees

The following committees are considered permanent and are to be appointed by the Chair at the beginning of each academic year. The Chair is considered to be an ex-officio member of each of these committees.

- Curriculum Committee. The Curriculum Committee is responsible for matters relating to the B.S. in Mathematics and the Minor in Mathematics.
- Education Committee. The Education Committee is responsible for matters affecting the Mathematics Department relating to teacher certification, as well as providing a general interface as necessary with the School of Education.
- Graduate Committee. The Graduate Committee is responsible for matters relating to the M.S. in Mathematics. Specifically included in this responsibility are recruitment and admissions.
- Student Workers Committee. The Student Workers Committee is responsible for matters relating to the staffing and operation of the Mathematics Learning Center. Specifically included in this responsibility are scheduling and supervisory roles for MLC workers and assignment of student graders to Mathematics faculty as requested and needed. These
assignments often overlap with GTA assignments, so careful coordination with the Graduate Committee is warranted.
- Technology Committee. The Technology Committee is responsible for matters relating to the Department's computing labs and computerequipped classrooms.
- Awards Committee. The Awards Committee is responsible for matters relating to awards given out by the Department including the Graduate Teaching Award, the Cranford Award, and the Faculty Teaching Award.


### 4.2 Tenure and Promotion Committee

The Mathematics Department Tenure and Promotion Committee will comprise all tenured mathematics faculty (excluding the Chair), and will choose its own chair. This committee will be responsible for pre-tenure reviews and decisions regarding tenure and/or promotion to Associate Professor. A subcommittee of all Full Professors from the Tenure and Promotion Committee will handle promotions to Full Professor. Should circumstances be such that the committee (or the Full Professor subcommittee in the event that it is needed) is not of sufficient size to satisfy College of Arts and Sciences or University requirements, external faculty from the College of Arts and Sciences at the appropriate rank will be selected to make up any deficiency.

### 4.3 Ad Hoc Committees

The Chair may find it expedient from time to time to appoint extra committees as needed. The appointment and constitution of such committees is to be considered normal Department business and as such must be approved at a Department meeting. The special case of a hiring committee is addressed in the Hiring section below.

## 5 Hiring

A Hiring Committee will be appointed by the Chair to hire for all positions other than adjunct instructors. Consonant with the voting membership requirements, Lecturers can serve on committees to hire at the rank of Lec-
turer, while tenured and tenure-track faculty alone can serve on committees hiring at other ranks. While all applications are to be available for review by the entire faculty should they so desire, the Hiring Committee is to review all applications and select a large list of candidates to be given short interviews. This list will be submitted to the Department for review and possible alterations. Upon approval of the Department, a subgroup of the Hiring Committee will conduct short interviews with the selected candidates, either at the Joint Mathematics Meetings in January, by telephone, or by video conference.

The Hiring Committee will then rank the candidates after the short interviews and submit a ranked list of candidates to the entire Department, who will then vote to determine the candidates that will be invited to campus. This motion need only pass by majority vote. The Hiring Committee is responsible for the logistics of campus interviews, but all faculty are encouraged to participate and to assist. As mentioned in the Department Meetings section, a motion to hire must pass by a $\frac{2}{3}$ vote in a meeting of the entire Department.

## 6 Course Policies

The default position of the Department is that each instructor is wholly responsible for the content and delivery of the course, including, but not limited to, the composition of the syllabus, the choice of text, the ordering of topics, and the method of instruction. All courses must abide by University Policies (e.g., academic honesty, absence for religious reasons, disability services, etc.), and all syllabi should include either the statement of the current University policy or a link to such policies.

In certain instances (coordinated courses), the Department requires additional oversight as outlined below. In this section we also give Department policy for independent study courses.

### 6.1 Coordinated Courses and Department Syllabi

The Department sets the required content, student learning outcomes, and textbooks for the following coordinated courses:

1. Math 1324 and Math 1325,
2. Math 1332 and Math 1333,
3. Math 1342 and Math 1343,
4. Math 2312,
5. Math 2413,
6. Math 2414.

Each semester, a course coordinator is to be appointed by the Chair for each coordinated course. In the event that there is only one instructor for one of these courses (e.g., only two sections of Math 2312, both taught by Dr. Gauss), a coordinator need not be appointed.

It is the duty of the course coordinator to coordinate syllabi, course pacing, and, at the discretion of the coordinator, organize the creation and administration of a common final exam. The coordinator may call two or three meetings throughout the semester to check on each section's progress through the material and to make adjustments as necessary.

### 6.2 Independent Study

Independent Studies require approval from the Curriculum Committee in most cases. However, in the following situations, Independent Studies may be approved by:

1. the Graduate Committee if the student is a graduate student;
2. the instructor and the Chair if the student is an undergraduate seeking to enroll in a graduate course;
3. the instructor and the Chair if the student seeks to enroll in an independent study covering a topic not regularly offered;
4. the Chair if the student is seeking to enroll in an independent study to count for a regularly-offered course in a semester when said course fails to make minimum enrollment.

## 7 Workload Implementation Policy

The purpose of this section is to define the Workload Implementation Policy (WIP) of the Department of Mathematics. According to University policy, the Chair of the Department of Mathematics must assign percentages to the areas of teaching, research, and service that describe faculty time and effort in each category. The distribution of workload for tenured and tenure-track mathematics faculty is usually $60 \%$ teaching, $30 \%$ research, and $10 \%$ service. The distribution of workload for lecturers in the Department is usually $90 \%$ teaching and $10 \%$ service.

The usual teaching load for tenured and tenure-track faculty is three courses per term. For faculty who are active in research, especially assistant professors in the pre-tenure period, the teaching and service may be slightly reduced in favor of research. The teaching load for lecturers is at most five courses per term. A reduction to four courses in a term is possible, for example in cases where the courses have a high number of contact hours with students or the faculty member has large service commitments.

Tenured and tenure-track faculty are expected to be involved in research. While publication of new and useful results is the primary goal of research, there are a number of other activities that fall under the heading of research and professional growth: presentation of research at professional meetings, grant writing, professional consulting, authoring of textbooks, and involvement with student research.

All faculty members are expected to devote some effort to serve the Department, the College, the University, or the mathematical community. This effort may include committee work, curriculum development, student advising, and many other related activities.

## 8 Tenure and Promotion

### 8.1 Definitions and Criteria for Faculty Evaluation

The Mathematics Department has established the following guidelines for evaluation of faculty merit as well as for tenure and promotion. The four categories for evaluation are Teaching, Research/Scholarship/Creative Activity, Service, and Collegiality.

### 8.1.1 Teaching

Teaching is a multifaceted activity encompassing various duties both inside and outside the classroom. Teaching excellence is hard to quantify precisely, as two outstanding teachers can have quite different teaching styles. Most excellent teachers, however, will exhibit some of the qualities in the following list (which shall not be considered exhaustive):

- mastery of course content;
- the ability to explain the course content at an appropriate level for students;
- an ethic of holding students to high standards of academic performance;
- the ability to engage with students; and
- engagement in activities that support teaching and enhance student learning.

Documentation to validate effectiveness in this category may include, but need not be limited to:

- evidence of effective teaching from student ratings on end-of-course surveys;
- evidence of positive peer evaluation as seen in peer observations, faculty seminars, and successful student performance in subsequent classes;
- teaching awards;
- participation in professional experiences related to teaching;
- positive comments from students (both solicited and unsolicited); and
- breadth of teaching.


### 8.1.2 Research/Scholarship/Creative Activity

Research, scholarship, and creative activity, in the context of tenure and promotion, is defined as the creation, dissemination, and application of mathematical science. Excellence in research is difficult to quantify precisely, as two outstanding researchers can measure very differently on any one specific metric. Most excellent scholars, however, will exhibit some of the qualities in the following list (which shall not be considered exhaustive):

- passion about his or her area of study,
- a connection to the larger mathematical community, and
- a history of contribution to the overall knowledge base within the field.

Typically, research is primarily judged by the quality of research publications in reputable refereed journals and proceedings. Documentation to validate effectiveness in this category may include, but need not be limited to:

- research publications in refereed journals;
- presentations at professional meetings;
- grants;
- professional consulting;
- textbooks authored; and
- involvement with student research.


### 8.1.3 Service

Service, in the context of tenure and promotion, is defined as service to the Department, College, University, professional community, and/or broader local community. Documentation to validate effectiveness in this category may include, but need not be limited to:

- service on Department, College, and University committees;
- chairing Department, College, and University committees;
- involvement in curriculum development;
- student advising;
- service to the community, especially the mathematics community beyond the University; and
- service to the profession.


### 8.1.4 Collegiality

Collegiality involves interacting with students, faculty, administration, and community in a professionally acceptable manner, which enhances cooperation and productivity in each of the other three categories. While it is difficult to measure this attribute, it is usually apparent to cohorts and will be considered in evaluating each faculty member.

### 8.2 Yearly Faculty Evaluations

These four areas will be used by the Chair for annual evaluations.

### 8.3 Pre-Tenure Review

In the spring of the third year, according to the current College of Arts and Sciences policy and timeline, each non-tenured faculty (in a tenure-track position) will be reviewed in light of the four criteria listed above in Section 8.1. At least one month before the review, the Chair shall request a current vita, copies of annual evaluations, evidence of teaching effectiveness, and names of faculty who have chaired committees on which the faculty member has served. It is intended that the same type of materials be used in this review as for the actual tenure evaluation but in a somewhat condensed and shortened version.

The Department Tenure and Promotion Committee will consider the documentation presented and make a recommendation to the Department Chair. The committee is to issue one of three recommendations:

1. The faculty member is making satisfactory progress in teaching, service, scholarship, and collegiality.
2. The faculty member is making satisfactory progress in some of these areas but needs to upgrade activity in a particular area. In these cases, the committee should recommend what steps the faculty member needs to take in order to improve progress. The committee may, in some cases, wish to recommend an additional review in the following year to see if progress is being made.
3. The faculty member is not making satisfactory progress. It appears unlikely that, given the remaining probationary period, satisfactory progress will be made, and the committee recommends termination.

The report will be signed by the chair of the Tenure and Promotion Committee, and a vote of all members will be recorded. Individual votes should not be identified; a summary vote is sufficient. Whatever the results of the vote, faculty members under evaluation should understand that this vote is not a commitment to grant or deny tenure in the future. The report will be forwarded to the Department Chair.

The Department Chair will then make a separate recommendation that progress is satisfactory, needs improvement, or is unsatisfactory with his or her own evaluation and suggestions. This recommendation, along with that of the committee, is to be forwarded to the candidate and to the Dean.

### 8.4 Tenure and Promotion

### 8.4.1 Associate Professor and/or Tenure

For promotion to Associate Professor and/or granting of tenure, the candidate is required to present extensive documentation evincing his or her efforts in teaching effectiveness, research and professional growth, and service. This documentation must be sufficient to convince the Department Tenure and Promotion Committee that each of the following is true.

- The candidate has demonstrated evidence of a strong record in teaching according to the evaluation guidelines in Section 8.1.1.
- The candidate has demonstrated evidence of a strong record in research and scholarship according to the evaluation guidelines in Section 8.1.2.
- The candidate has demonstrated a satisfactory record of service according to the evaluation guidelines in Section 8.1.3.
- In at least one of the areas of teaching and research, the candidate has exhibited outstanding performance.
- In addition to demonstrating quality in these traditional areas, the candidate for tenure and/or promotion must also demonstrate professional collegiality.

The Department Committee will submit a report on its decision to the Chair. The report will include an outline of the committee's evaluation in each of the four areas described above, the voting results, and an outline of the dissenting opinion if required by a split vote.

### 8.4.2 Full Professor

For promotion to Full Professor and/or granting of tenure at the Full Professor level the candidate is required to present extensive documentation evincing his or her efforts in teaching effectiveness, research and professional growth, and service. This documentation must be sufficient to convince the Department Tenure and Promotion Committee that each of the following is true.

- The candidate has demonstrated evidence of achievement and distinction in teaching according to the evaluation guidelines in Section 8.1.1.
- The candidate has demonstrated evidence of achievement and distinction in research and scholarship according to the evaluation guidelines in Section 8.1.2.
- The candidate must also have actively participated in service to the Department, College, University, and the profession. Evidence of this participation may be taken from the evaluation guidelines in Section 8.1.3.
- In addition to demonstrating quality in these traditional areas, the candidate for promotion must also demonstrate professional collegiality.

The Department committee will submit a report on its decision to the Chair. The report will include an outline of the committee's evaluation in each of the four areas described above, the voting results, and an outline of the dissenting opinion if required by a split vote.

## 9 Post-tenure review

According to the schedule, policies, and procedures in the Handbook of Operating Procedures, the Department will conduct post-tenure reviews.

## 10 Advising

All faculty members at the rank of Assistant Professor or above, save the Chair, the Graduate Director, and those in their first year at UT Tyler, will be responsible for advising undergraduate mathematics majors. The Department Administrative Assistant will be responsible for the assignment of advisors as needed.

The Chair shall appoint a Graduate Director, who will be responsible for advising all M.S. students. The Graduate Director is expected to chair the Graduate Committee.

## 11 Peer Review of Teaching

Peer review of teaching takes place in "Teaching Triangles" consisting of groups of three faculty members, including at least one tenured faculty member. The membership of the teaching triangles is appointed by the Chair at the beginning of each semester. Membership will be rotated regularly to ensure that any two faculty members will eventually be part of the same triangle, subject to the constraint that each triangle must contain at least one tenured faculty member. Faculty members may express privately a desire not to be on a triangle with particular Department members, and the Chair will honor those wishes.

### 11.1 Frequency of Peer Observations

Over the course of the semester, the teaching triangle is to meet monthly, with each member of the triangle visiting the classrooms of each of the other members each month. For the fall semester, 'monthly' is meant to include September, October, and November (the roughly one week of classes in each of August and December not being lengthy enough to provide sufficient time to schedule observations). For the spring semester, 'monthly' is meant to include January, February, March, and April.

### 11.2 Process for Peer Observations

Visits are to be agreed upon at least one week in advance by the triangle members involved and can be visits to the same class or to a different class at the discretion of the team member having his or her class visited.

Before each visit there is to be a pre-observation meeting. The purpose of the pre-observation meeting between the peer observer and the instructor is to help the observer understand the context of the class, to receive and review a copy of the syllabus and selected instructional materials, to address special instructor concerns, and to mutually agree on a class and date for the observation. The observation instrument will be reviewed and discussed as part of the pre-observation conference.

During the observation period (or immediately thereafter), the observing faculty member will complete the Classroom Observation Form below. Feedback should be constructive, specific, focused, action-oriented, clear, honest, and positively phrased.

A post-observation conference must take place soon after the observation. During the post-observation session, the instructor will receive a Classroom Observation Form from the observer and both will complete the Peer Observation Report form. The instructor will prepare a summary statement on how he or she will use suggestions from the observation. Unless expressly requested by the faculty member being observed, the results of the observation and pre- and post-observation discussions will remain within the teaching triangle. At the conclusion of the post-observation discussion, the form for the observations will become property of the observed faculty member.

# Peer Observation Report 

Department of Mathematics
Faculty Member:

Peer Observer:

Semester:

Number and Title of Course Observed:

Date of Report:

Date of Pre-observation meeting:

Date of Classroom Observation:

Date of Post-observation Meeting:

Signature of Peer Observer:

Signature of Faculty Member:
(confirming that the discussions took place)

# Classroom Observation Form 

Department of Mathematics
Content and organization of course:

Interactions between instructor and students that promote students' engagement in learning:

Verbal and nonverbal communication:

Observed strengths of instructor:

Areas for improvement:

