Graduate Handbook

Department of Mathematical Sciences

2025-2026

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1 The Department of Mathematical Sciences

The Department of Mathematical Sciences is located in Wilson Hall room 2-214. The office is open from 8:00 AM until 5:00 PM weekdays. Department office personnel are always pleased to assist students with any questions or problems.

Department of Mathematical Sciences Personnel

Department Head	Dr. Elizabeth Burroughs	994-3604	burroughs@montana.edu
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The purpose of this Handbook is to answer the most frequently asked questions regarding the Department of Mathematical Sciences graduate programs. This Handbook will be updated on a regular basis to reflect policy changes in the University, the Graduate School, and the Department of Mathematical Sciences. To request a copy of the most current version of the Handbook, contact the Graduate Program Coordinator.

Because changes do occur and may not be reflected in the Handbook, please refer to The Graduate School for the most current policies and procedures. It is the students' responsibility to be up-to-date with departmental requirements for their degree program. These requirements may be more specific than those stipulated by The Graduate School. If you have questions about your graduate program or any material in the Handbook, please contact department personnel, your graduate advisor, or members of the Graduate Program Committee (GPC).

Graduate Program Committee Members

- Committee Chair and Mathematics representative: Dr. David Ayala
- Mathematics Education representative: Dr. Mary Alice Carlson
- Mathematics representative: Dr. Tianyu Zhang
- Statistics representative: Dr. Katharine Banner

2 Program Guidelines

2.1 M.S. Mathematics Program Guidelines

The departmental requirements found in this Handbook supplement those set by the MSU Graduate School. Complete program guidelines, prerequisites and requirements, and comprehensive examination information can be found in the MSU Graduate Catalog at the following URL. Students and advisors should refer to the catalog for the most current program information. Click

here or visit the webpage http://catalog.montana.edu/graduate/letters-science/mathematical-sciences/ms-mathematics/ to view the full catalog description.

The department offers both thesis and non-thesis options for the master's program, but, in most cases, we advise students to follow the non-thesis option. In order to complete the degree in two years, a student typically takes six credits of coursework for each of two semesters and nine credits of coursework during each of the other two semesters. This degree requires the student to pass a written comprehensive examination. Refer to the Graduate Catalog for the description of the exam, and see Section 4.2 of this document for the minimum registration required in order to sit for the exam along with other details.

As an addendum to the catalog description, note that each component of the M.S. comprehensive exam is graded as Ph.D. pass, M.S. pass, or fail. A Ph.D. level pass on both components of the M.S. written comprehensive exam indicates quality of work and display of mathematical maturity that is necessary for success in a Ph.D. program. Students enrolled in the M.S. program who are interested in pursuing a Ph.D. in Mathematics at MSU are encouraged to work toward the goal of attaining the Ph.D. level pass on the M.S. comprehensive exam. For M.S. students who apply to the Ph.D. in Mathematics program, a Ph.D. level pass on the M.S. comprehensive exam counts as a Pass on the Ph.D. qualifying exam. See Section 2.5 of this document and the catalog description for more details.

Another addendum to the catalog description concerns the thesis option. The M.S. thesis option requires completing the required course work, writing a thesis, an oral defense of the thesis and passing the M.S. written comprehensive exam. Students who pursue the thesis option should identify a thesis advisor and graduate committee chair during their first year of study in order to complete all requirements in a timely manner.

2.2 MSMME Program Guidelines

The departmental requirements found in this Handbook supplement those set by the MSU Graduate School. Complete program guidelines, prerequisites and requirements, and comprehensive examination information can be found in the MSU Graduate Catalog at the following URL. Students and advisors should refer to the catalog for the most current program information. Click here or visit http:catalog.montana.edu/graduate/letters-science/mathematical-sciences/ms-mathematics-education-option-msmme/ to view the full catalog description.

The Master of Science in Mathematics - Mathematics Education Option (MSMME) is designed for teachers of secondary-level mathematics. The goals of MSMME include deepening participants' understanding of secondary mathematics content, increasing pedagogical content knowledge for teaching and learning mathematics, and providing skills and habits for career-long professional reflection and growth. MSMME offers a combination of courses addressing key topics in secondary mathematics content and pedagogy and incorporates problem-based and active learning that aligns with current standards. The 30-credit-hour program includes four required core content courses, two required pedagogy courses from a choice of four, and a variety of electives. Programs of study may vary individually based on approved transfer credit, choices of elective courses, and other constraints. A number of courses include classroom-based research projects that address specific challenges in teaching, investigate new instructional strategies, or allow opportunities to design, teach, and assess lessons in a target content area. Completion of the MSMME program typically involves taking online coursework over two academic years and three summers and the completion

of a program portfolio; students will only be approved to take one online course at a time in a semester where they are working full-time as a classroom teacher. Students are expected to attend one three-week summer session in Montana in their first year.

2.3 M.S. Statistics Program Guidelines

The departmental requirements found in this Handbook supplement those set by the MSU Graduate School. Complete program guidelines, prerequisites and requirements, and comprehensive examination information can be found in the MSU Graduate Catalog at the following URL. Students and advisors should refer to the catalog for the most current program information. Click here or visit the webpage `http://catalog.montana.edu/graduate/letters-science/mathematical-sciences/ms-statistics/` to view the full catalog description.

This degree requires the student to pass a comprehensive examination. Refer to the Graduate Catalog for the description of the exam, and see Section 4.2 for the minimum registration required in order to sit for the exam and other details.

2.4 M.S. Data Science Program Guidelines

The departmental requirements found in this Handbook supplement those set by the MSU Graduate School. Complete program guidelines, prerequisites and requirements, and all other information can be found in the MSU Graduate Catalog. Students and advisors should refer to the catalog for the most current program information. Click here or visit the following webpage `http://catalog.montana.edu/graduate/letters-science/mathematical-sciences/ms-data-science/` to view the full catalog description.

The Data Science Steering Committee is comprised of a mathematician, a statistician, and a computer scientist, appointed by the Department Head of Mathematical Sciences in consultation with the Director of the School of Computing. Students are initially assigned to an available advisor in the Department of Mathematical Sciences; the Steering Committee ensures that students are assigned to an advisor in Mathematics, Statistics, or Computer Science, to align with the student's dominant interest and coursework.

2.5 Ph.D. Mathematics Program Guidelines

The departmental requirements found in this Handbook supplement those set by the MSU Graduate School. Complete program guidelines, prerequisites and requirements, committee assignments, and both written and oral comprehensive examination information can be found in the MSU Graduate Catalog at the following URL. Students and advisors should refer to the catalog for the most current program information. Click here or visit `http://catalog.montana.edu/graduate/letters-science/mathematical-sciences/phd-mathematics/` to view the full catalog description.

This degree requires the student to pass both a written and an oral comprehensive examination. Refer to the Graduate Catalog for the description of the exams, and see Section 4.2 for the minimum registration required in order to sit for the exams and other details.

Comprehensive Exam Note

The Mathematics Ph.D. Qualifying Examination section of the catalog discusses the program's option for a student to use a Ph.D. level pass on both portions of the M.S. written comprehensive exam to receive a Pass on the Ph.D. qualifying exam. A Ph.D. level pass on the M.S. written comprehensive exam indicates *quality of work and display of mathematical maturity that is indicative of a strong promise of success in the Ph.D. program.*

2.6 Ph.D. Mathematics - Education Emphasis Program Guidelines

The departmental requirements found in this Handbook supplement those set by the MSU Graduate School. Complete program guidelines, prerequisites and requirements, committee assignments, and both written and oral comprehensive examination information can be found in the MSU Graduate Catalog at the following URL. Students and advisors should refer to the catalog for the most current program information. Click here or visit `http://catalog.montana.edu/graduate/letters-science/mathematical-sciences/phd-mathematics-education/` to view the full catalog description.

The Ph.D. in Mathematics with an emphasis in mathematics education combines study in advanced mathematics, mathematics education, and quantitative and qualitative research methods in education. This pathway is designed for candidates who plan a future of teaching, research, and service focused on mathematics education. The program focuses on the teaching and learning of K-12 mathematics including curriculum, instruction, assessment, and teacher preparation or professional development in the K-12 education system. Graduates typically go on to faculty positions in mathematics departments that involve teacher preparation and research in mathematics education. Applicants are expected to possess K-12 teaching experience or to gain such experience through internships.

The dissertation is a study in mathematics education. Scholarship in mathematics education examines teaching and learning, with roots in the disciplines of mathematics and educational theory and practice. It is grounded in mathematics content through the study of curriculum and mathematical practice and is generally carried out through social science research methods, including both qualitative and quantitative analysis. Doctoral students conduct research in areas relevant to current faculty research interests or funded projects.

This degree requires the student to pass a comprehensive examination, usually with one component in mathematics content, one component in fundamentals of mathematics education practice and theory, and one component in mathematics education research design and analysis. Refer to the Graduate Catalog for the description of the exam, and see Section 4.2 for the minimum registration required in order to sit for the exam and other details.

2.7 Ph.D. Statistics Program Guidelines

The departmental requirements found in this Handbook supplement those set by the MSU Graduate School. Complete program guidelines, prerequisites and requirements, committee assignments, qualifying exam information, and both written and oral comprehensive examination information can be found in the MSU Graduate Catalog at the following URL. Students and advisors should refer to the catalog for the most current program information. Click here or visit `http://catalog.montana.edu/graduate/letters-science/mathematical-sciences/phd-statistics/` to view the full catalog description.

To earn a Ph.D. in Statistics, a student must pass a qualifying exam, pass written and oral Ph.D. comprehensive exams, and write and defend a Ph.D. dissertation. Refer to the Graduate Catalog for the description of all exams (qualifying, written, and oral) and defense, and see Section 4.2 for the minimum registration required in order to sit for the exam and other details.

3 Forming a Committee and a Program of Study

3.1 Forming a Graduate Committee

Each graduate student must have an advisor (the committee chair) and a Graduate Committee. The committee can approve the Program of Study as long as it adheres to the Graduate Catalog requirements and satisfies the guidelines established by The Graduate School and the department. The committee will advise the student on selection of coursework and comprehensive exams, guide the student through research, conduct oral examinations, and certify that the student's work meets degree standards. After the Graduate Committee is formed, it is the students' responsibility to seek out their advisor to create a Program of Study and to meet at least once a semester to discuss progress towards the degree. Prior to registration for classes each semester, the student must meet with the chair and/or committee to plan coursework and to get the PIN number needed for registration.

M.S. students must form their committees before the end of the second semester in the M.S. program. The committee is comprised of three (3) faculty members. The committee chair must hold a doctoral degree. The committee chair (and co-chair, if applicable) for the M.S. Mathematics and Statistics programs must be a tenured or tenure track professor in the Department of Mathematical Sciences; for the M.S. Data Science program the committee chair (and co-chair, if applicable) must be a tenured or tenure track professor in the Department of Mathematical Sciences or the School of Computing. Students seeking approval to include a committee member whose tenure home is not the Department of Mathematical Sciences should have a total of four (4) committee members. M.S. students who pursue the thesis option must form their committee (and file the Program of Study, see Section 3.2) prior to enrolling in M 590 thesis credits. See the Graduate School's policies and procedures for more complete requirements.

Ph.D. students must form their committees before the end of the third semester in the Ph.D. program or before attempting any component of their written comprehensive exam, whichever occurs first. The committee is typically comprised of five (5) faculty members. A Graduate Representative may also be appointed to the committee if the student chooses to include one, and this representative will be appointed by the Graduate School. The committee chair (and co-chair, if applicable) must have a doctoral degree and be a tenured or tenure track professor in the Department of Mathematical Sciences. The majority of committee members must be tenured or tenure track faculty in the Department of Mathematical Sciences.

In most cases, members of graduate committees should be faculty members whose teaching responsibility is to the program the graduate student is enrolled in. Before selecting a committee member from outside the program, the graduate student should meet with their advisor and the department head to ensure that the committee will meet with department approval.

The first three committee members will read and assess the the dissertation and examine the students' understanding of their research at the time of the dissertation defense/oral exam. The

fourth and fifth also examine the student's research understanding and give feedback at the time of the presentation component of the oral exam or dissertation defense.

For Ph.D. in Mathematics students, the first three members of the committee will read and assess the written component of the Ph.D. oral exam; the other members of the committee also give feedback through the oral exam. All committee members support the student's research by providing feedback and suggestions over the course of the student's program of study. Students are expected to discuss their interests with departmental faculty members to ensure an appropriate committee is appointed. Graduate Committees are submitted electronically through MyInfo. The submission form can be found under the Student Services page. Please see the Graduate Program Coordinator for more information.

No faculty member is required to accept more students than they believe can be advised successfully, and the department does not guarantee that a faculty member will be available to serve as an advisor. Students should plan well in advance in order to find an acceptable advisor. A student who is unable to secure an advisor in the required time frame will result in the student's dismissal from the program. The Ph.D. Statistics program requires students to find an advisor to direct their doctoral research within one year of qualifying for the Ph.D. program. See The Graduate School policies and procedures for a complete list of requirements.

3.2 Programs of Study

3.2.1 M.S. Program of Study

The M.S. Program of Study and M.S. Graduate Committee forms are filed before the end of the student's second semester. The Program of Study is jointly developed by the student and the committee and defines the minimum requirements for the degree. Other requirements as determined by the committee may also be listed. The Program of Study must meet the approval of the student's Graduate Committee and the Mathematical Sciences Department Head with final approval by The Graduate School. The Program of Study is completed and submitted in MyInfo, under the Student Services tab. For more information and instructions on how to complete this, please see the Graduate Program Coordinator.

A minimum of 30 credit hours is required by The Graduate School for graduation, although individual degree programs may require more. Only those courses listed on a graduate Program of Study are applicable toward degree credit requirements. A maximum of nine (9) credits from approved 400-level courses can be included in the Program of Study, (with an exception being 12 credits of approved 400-level credits for Math). A maximum of nine (9) credits of approved graduate level courses taken at other institutions can also be included in the Program of Study. Coursework more than 6 years old cannot be applied toward the degree.

To be in good academic standing students must meet the following Grade Point Average (GPA) standards: Students must maintain a minimum 3.0 semester GPA, a minimum 3.0 GPA in the entire Program of Study and a cumulative 3.0 GPA overall. Students whose cumulative GPA or Program of Study GPA is less than 3.0 at the end of any semester may be placed on academic warning. Once a course on a graduate degree Program of Study has been graded, it cannot be removed. A course can be retaken in order to improve the grade, with written permission from the advisor. Any course with a grade lower than C must be repeated in order to improve the grade. This also requires written permission from the advisor. The student, however, should not expect

the department to provide tuition waivers for a course that is retaken.

3.2.2 Ph.D. Program of Study

The Ph.D. Program of Study and the Ph.D. Graduate Committee forms must be filed before the end of the third semester in the program. All students earning a Ph.D. must complete a minimum of 60 credits; they must include a minimum of 18 dissertation (690) credits. No more than 30 can be included on the Program of Study. The Ph.D. programs in Statistics and the Math Education emphasis also require 3 doctoral reading (689) credits. A maximum of 30 credits from a previously earned Master's degree may be applied toward the 60-credit minimum. Each Ph.D. option (Mathematics, Statistics and Mathematics Education) has specific course requirements. The Program of Study must meet the approval of the student's Graduate Committee and the Mathematical Sciences Department Head with final approval by The Graduate School. The Program of Study is completed and submitted in MyInfo, under the Student Services tab. For more information and instructions on how to complete this, please see the Graduate Program Coordinator.

To be in good academic standing students must meet the following Grade Point Average (GPA) standards: Students must maintain a minimum 3.0 semester GPA, a minimum 3.0 GPA in the entire Program of Study and a cumulative 3.0 GPA overall. Students whose cumulative GPA or Program of Study GPA is less than 3.0 at the end of any semester may be placed on academic warning or suspended from their degree program. Once a course on a graduate degree Program of Study has been completed, it cannot be removed. A course can be retaken in order to improve the grade, with written permission from the advisor. Any course with a grade lower than C must be repeated in order to improve the grade. This also requires written permission from the advisor. The student, however, should not expect the department to provide tuition waivers for a course that is retaken.

4 Qualifying Exams, Written Comprehensive Exams, and Oral Comprehensive Exams

4.1 Qualifying exams

4.1.1 Ph.D. in Mathematics

A Ph.D. in Mathematics student must earn a Pass on the Ph.D. Qualifying exam, although the Ph.D. Qualifying Exam may be waived for students who earn an M.S. in Mathematics from MSU, provided such a student is accepted into the Ph.D. in Mathematics program. A student must be registered for a minimum of three credits at Montana State University during the term in which they take the qualifying exam. The purpose of the Ph.D. Qualifying exam is to ensure that students are prepared to undertake Ph.D. level coursework and have mastered the necessary background material to understand fundamentals necessary for mathematical research. The Ph.D. Qualifying exam consists of two components, one in linear algebra and one in real analysis. Students shall make a plan with their advisor about their eligibility to attempt a component of the Ph.D. Written Comprehensive exam if they have not yet earned a Ph.D. Pass on the Qualifying exam. A student is allowed two total attempts to pass each component of the Ph.D. qualifying exam.

4.1.2 Ph.D. Mathematics - Education Emphasis

No qualifying exam is required. Please see section 4.4.2 for required comprehensive examinations.

4.1.3 Ph.D. in Statistics

The Ph.D. qualifying exam is identical to the statistics M.S. comprehensive exam. A student who earned an M.S. in Statistics from MSU need not take the Ph.D. qualifying exam. Other prospective students are expected to take the Ph.D. qualifying exam as soon as relevant course work has been completed. Two attempts to pass the qualifying exam are allowed. Attempts taken while in the M.S. program will be counted towards these two attempts.

4.2 Comprehensive Examination Requirements for Written and Oral Exams

Since the structure and content of comprehensive examinations vary among the programs within the department, the student is referred to the description of the individual program for that specific information. However, some requirements and guidelines are common to all degree programs in the department which have some form of a comprehensive examination. Those requirements are described below.

4.2.1 Minimum Registration to Take a Comprehensive Examination

A student must be registered for a minimum of three (3) credits at Montana State University during the term in which any component of a comprehensive examination is taken. If a student wishes to take the comprehensive exam during the intersession (i.e., the time between terms), a student must receive approval from their committee and be registered for a minimum of three (3) credits in the term prior to the intersession or the term immediately following the intersession.

Note: A student who takes an exam after the start of MSU's summer term and before the last day of MSU's summer term must be enrolled in at least 3 credits during the summer term.

4.2.2 Failed Component of Comprehensive Examination

A student is allowed two (2) total attempts to pass each component of a written or an oral comprehensive examination, If the student fails a component of the M.S. comprehensive examination or the Ph.D. qualifying exam in the case of Ph.D. in Mathematics students, at least two (2) months must elapse before the examination can be repeated. The student is expected to sit for the second attempt of the examination the first time that it is offered by the department after those two months have elapsed.

If the student fails a component of the Ph.D. comprehensive examination, at least six (6) months must elapse before the examination can be repeated. In the case where a student fails a component on a first attempt, the student may not choose to sit for a different component to avoid re-taking the failed component. Any exceptions to these policies must originate with the student's advisor and must be approved by the student's Graduate Committee.

Failure to pass the second attempt at the same component of a comprehensive examination will result in the committee's consideration of the student's dismissal from the academic program. Students who are dismissed from the program are ineligible to reapply to the same degree program in the future.

4.3 M.S. Comprehensive Exams

Both the M.S. Mathematics and the M.S. Statisics programs require a written comprehensive exam. The M.S. Mathematics - Mathematics Education Option and the M.S. Data Science programs do not require written comprehensive exams.

4.4 Ph.D. Comprehensive Exams

4.4.1 Ph.D. Mathematics Comprehensive Exams

The Written Comprehensive Exams are as outlined in the catalog.

A Ph.D. in Mathematics student must earn a Pass on the Oral Comprehensive exam. The Oral Comprehensive exam involves three components, described as follows.

1. The oral presentation component is a 1-hour presentation in which the student's Graduate Committee is present, and the general public is invited to be in the audience. (Typically, the Oral Comprehensive exam is a thesis topic proposal in which the student's ability to conduct the proposed research is assessed by their Graduate Committee.)

2. The Question and Answer component of the exam takes place after the presentation, and it is closed to the general public. Only the student and the student's Graduate Committee (including a Graduate Representative if that is requested by the student) are present.

3. The written component is a professional document, written by the student. Its content subsumes that of the presentation component. (Typically, this written component becomes a chapter or section in the student's dissertation.) It is submitted to the student's Graduate Committee a minimum of two (2) week prior to the oral presentation component. The first three members of the student's Graduate Committee are expected to read and assess this document. More specific structure and requirements are determined by the student's Graduate Committee.

Before attempting the Oral Comprehensive exam, a Ph.D. student must pass the Ph.D. Written Comprehensive exam. (Typically, the Oral Comprehensive exam is attempted at least one year after passing the Ph.D. Written Comprehensive exam.) In consultation with their Graduate Committee, a Ph.D. student sets a date for their Oral Comprehensive exam. A Ph.D. student has two attempts to earn a Pass for their Oral Comprehensive exam.

4.4.2 Ph.D. Mathematics - Education Emphasis Comprehensive Exams

Graduates of the program earn the equivalent of a masters degree in mathematics and must successfully complete a comprehensive examination in mathematics. Two additional examinations address knowledge related to K-12 mathematics teaching and learning and educational research design.

1. One comprehensive exam in Mathematics. This exam will be determined by the graduate committee and administered according to the guidelines for mathematics.
2. One component of the written comprehensive exam in Foundations of Mathematics Education. This exam will be determined by the mathematics education faculty based on the graduate coursework in mathematics education on the student's program of study.
3. One component of the written comprehensive exam in Research Methods in Mathematics Education. This exam is collaboratively developed by mathematics education faculty and appropriate research methods faculty.

Following these comprehensive exams, a Ph.D. in Mathematics - Education emphasis student completes an oral comprehensive exam. A student must earn a Pass on the Oral Comprehensive exam. The Oral Comprehensive exam involves three components, described as follows.

1. The oral presentation component is a 1-hour presentation in which the student's Graduate Committee is present, and the general public is invited to be in the audience. Typically, the Oral Comprehensive exam is a dissertation topic proposal in which the student's preparation to conduct the proposed research is assessed by their Graduate Committee. Students should expect to make adjustments to their research proposal based on input from the committee.
2. The Question and Answer component of the exam takes place after the presentation, and it is closed to the general public. Only the student and the student's Graduate Committee (including a Graduate Representative if that is requested by the student) are present.
3. The written component is a professional document, written by the student. It generally becomes the first three chapters (Introduction, Literature Review, and Research Design) of a student's dissertation. It is submitted to the student's Graduate Committee at minimum of one (1) week prior to the oral presentation component. The first three members of the student's Graduate Committee are expected to read and assess this document. More specific structure and requirements are determined by the student's Graduate Committee.

Before attempting the Oral Comprehensive exam, a Ph.D. student must pass the Ph.D. Written Comprehensive exams, as specified above. (Typically, the Oral Comprehensive exam is attempted at least one year after passing the Ph.D. Written Comprehensive exam.) In consultation with their Graduate Committee, a Ph.D. student sets a date for their Oral Comprehensive exam. A Ph.D. student has two attempts to earn a Pass for their Oral Comprehensive exam.

4.4.3 Ph.D. Statistics Comprehensive Exams

The Written Comprehensive Exams are as outlined in the catalog.

A Ph.D. in Statistics student must earn a Pass on the Oral Comprehensive exam. The Oral Comprehensive exam involves three components, described as follows.

1. The oral presentation component is a 1-hour presentation in which the student's Graduate Committee is present, and the general public is invited to be in the audience. (Typically, the Oral Comprehensive exam is a dissertation topic proposal in which the student's ability to conduct the proposed research is assessed by their Graduate Committee.)
2. The Question and Answer component of the exam takes place after the presentation, and it is closed to the general public. Only the student and the student's Graduate Committee are present.
3. The written component is a professional document, written by the student. Its content subsumes that of the presentation component. (Typically, this written component becomes a chapter or section in the student's dissertation.) It is submitted to the student's Graduate Committee at minimum of one (1) week prior to the oral presentation component. The first three members of the student's Graduate Committee are expected to read and assess this document. More specific structure and requirements are determined by the student's Graduate Committee.

Before attempting the Oral Comprehensive exam, a Ph.D. student must pass the Ph.D. Written Comprehensive exam. (Typically, the Oral Comprehensive exam is attempted at least one year after passing the Ph.D. Written Comprehensive exam.) In consultation with their Graduate Committee, a Ph.D. student sets a date for their Oral Comprehensive exam. A Ph.D. student has two attempts to earn a Pass for their Oral Comprehensive exam.

5 Dissertation Requirements

After the Ph.D. candidate has passed the comprehensive exam (passed both written and oral components) the student will submit a draft of the dissertation to their committee prior to the Defense of Dissertation. The dissertation should embody the results of extended research by the candidate, be an original contribution to knowledge, and include new material worthy of publication. The dissertation must be submitted as an electronic dissertation, *in final form* to The Graduate School not later than fourteen (14) working days before the end of the term in which graduate work is completed.

5.1 Defense of Dissertation

The defense of dissertation has two components. The first is an oral examination of the student's research and the second is an examination of the dissertation written by the candidate. Each member of the graduate committee must be given a minimum of *four (4) weeks* to read the complete draft of the dissertation prior to the date of the oral defense. The date of the oral portion of the dissertation defense will be arranged by the committee chair and the graduate student. The student is responsible for reminding all of the committee members one (1) week in advance of the event. Examinations in which any committee member has had insufficient time to prepare should not take place and may need to be rescheduled. The committee chair should discourage a student from defending if the chair (or the committee) feels the student is not adequately prepared.

5.2 Registration during the Semester of the Defense

A student must be registered for a minimum of three (3) credits at MSU during the term, including summer, in which the defense is held.

5.3 Defense of Dissertation Deadlines

If a student wishes to hold their defense during the semester of graduation, the defense must be held and passed at least fourteen (14) working days before the end of the semester of graduation.

5.4 The "Open" and "Closed" Defense

A portion of the defense must be open to the public. This is usually an oral presentation of the student's research followed by a brief period for the audience to ask questions. Following the open portion of the defense, the committee chair will excuse all attendees other than committee members from the event. This begins the closed portion of the defense in which the student's knowledge of the subject matter will be assessed by the committee.

5.5 Advertising the Dissertation Defense

The student is responsible for submitting an announcement to the MSU calendar system at least one (1) week in advance of the event;

`http://www.montana.edu/calendar`

containing the following information:
a) the name of the candidate,
b) title of the doctoral dissertation,
c) time and place of defense, and
d) the place where a copy of the dissertation may be obtained for inspection.

The oral defense date must be advertised to the MSU Calendar at least one (1) week in advance. The student is also required to provide this information to the Undergraduate Program Coordinator so that the information can be posted within the department.

5.6 Reporting the Defense Results

Students whose committees determine that the Dissertation Defense results in a "Pass" may still be required to make written changes to the dissertation prior to graduation. That is, students may demonstrate sufficient independent knowledge of their area of study through both their written work and their oral defense of it to earn a "Pass," but there may be errors or omissions in the written dissertation that the committee requires the student to fix, much like the peer-review process, in order to ensure a high-quality scholarly product. The committee will provide a list of any required written changes to the dissertation to the student at the conclusion of the Defense of Dissertation. The committee shall clearly indicate which changes are suggested and which are required. The

student has until the deadline for completing degree requirements to complete the written changes.

The Defense of Dissertation report must be submitted by the committee chair or the Graduate Program Coordinator to The Graduate School no later than five (5) business days after the defense is held. Failure to submit the report of the defense may invalidate the examination.

5.7 Failed Defense of Dissertation

The candidate is allowed two (2) total attempts to pass the defense. If the student fails the defense, at least two (2) months must elapse before the examination can be repeated. Failure to pass a second defense will result in termination of doctoral work and dismissal from the academic program. Students who are dismissed from the program are ineligible to reapply to the same degree program in the future.

5.8 Invalid Defense of Dissertation

An examination held in the absence of the chair(s) will be considered invalid and must be rescheduled. It is the student's responsibility to ensure that all committee members are available when scheduling an exam. All committee members approved by The Graduate School *must be present* at the oral portion of the defense of dissertation. Video conferencing by committee members is permitted, and requirements for this situation are described below. Last minute committee changes based on scheduling conflicts must be approved by The Graduate School.

5.9 Video Conferencing during Defense of Dissertation

The Graduate School allows for students to video conference with committee members during the defense. Video conference attendance by the chair and all committee members must follow the most recent requirements set forth by the Graduate School in its Video Conferencing Policy found at the following URL. `https://www.montana.edu/gradschool/policy/degreq_general.html`

The department uses the following requirements, which are consistent with those of the Graduate School.

- The conference must have two-way video with audio for its duration. Neither the student nor any committee member is allowed to participate in the conference via telephone (audio only).
- Initiating and implementing the conference process is the responsibility of the student.
- The student is responsible for all costs incurred.
- If communication is broken during the examination or defense and cannot be re-established, the examination or defense must be terminated and rescheduled for completion at a later time/date.

6 Graduate Policies regarding Graduate Coursework and Graduate Status

All graduate policies apply, and in the case that graduate policies are updated and are more restrictive than department policies, the graduate policies apply. The faculty wish to draw your attention to these graduate school policies and their relationship to departmental policies and expectations.

6.1 Course Limitations for M.S. and Ph.D. Degrees

There are several requirements and limitations on the amount and type of courses that may be included on a student's Program of Study. The most common requirements for the department's programs are listed below. However, an exhaustive list and full description may be found in the Degree Requirements section of the Graduate School's website.
`http://www.montana.edu/gradschool/policy/degreq_general.html`

1. Special Topics: Credits allowed toward degree requirements for Special Topics courses may not exceed the number defined by each degree program.
2. Individual Problems (M 570, STAT 592): No more than six credits of Individual Problems courses may be included on a doctoral Program of Study.
3. Pass/Fail credits**:** A maximum of three credits (excluding dissertation) may be included on a doctoral Program of Study.
4. 400 level courses: a maximum of 9 credits are allowed on a graduate Program of Study, except in the M.S. Mathematics program which allows 12 credits.
5. Limit on Age of Courses**:** The age of courses on the Program of Study at the time of graduation for a master's degree may not exceed six (6) years. The age of courses on the Program of Study at the time of graduation for a doctoral degree may not exceed ten (10) years.
6. Undergraduate Seminars (494), Undergraduate Independent Study (492), Undergraduate Internship (498/476), Undergraduate Research/Instruction (490), Professional Development (588) and Graduate Consultation (589) courses are not allowed on a Program of Study and will not count toward requirements for the degree.

6.2 Dissertation Credit Requirements

All Ph.D. candidates are required to register for and complete a minimum of 18 dissertation credits (M 690). Although additional M 690 or STAT 690 credits may be taken to finish a dissertation, a maximum of 30 dissertation credits are applicable toward degree requirements.

6.3 Residence Credit Requirements for Ph.D.

1. A minimum of thirty (30) credits applicable to the degree must be taken from MSU.

2. A student must be registered for a minimum of three (3) credits during the semester, including summer, of a qualifying examination or comprehensive examination, a defense of dissertation, and the semester of graduation. See Section 6.8.1 regarding the one-credit extension.

6.4 Policy Regarding M 690 and STAT 690 Credits

The Department of Mathematical Sciences policy is that all Ph.D. students taking 690 credits must submit a progress report at the end of each semester to keep their committee informed and to assess whether or not the student is making sufficient progress to justify continued GTA or GRA support. The student must submit the report to their Graduate Committee at least two (2) weeks prior to finals week. Each Ph.D. student is responsible for maintaining contact with their committee chair throughout the semester to determine if satisfactory progress is being made.

- Failure to submit a report will result in an automatic F grade for the 690 credits.
- If a report is submitted, a grade of P or F will be determined by the Chair of the student's Graduate Committee, with input from the remainder of the Graduate Committee, based on whether or not sufficient progress was made. An N grade also may be assigned to students enrolled in 690 credits. This grade indicates that, though a student has made progress, they have not completed the course objectives successfully. The student must re-enroll in the course immediately in order to continue the course work and to complete the course objectives. The N grade does not affect the GPA.

Ph.D. students who have successfully completed the written comprehensive exam and are taking 690 credits are required to present a research seminar through the Math, Math Education, or Stat Group seminar series annually. Students may also satisfy this requirement by presenting research at a professional meeting (e.g., conference) deemed acceptable by the student's committee.

6.5 Graduate Status

6.5.1 Good Standing

If a student has a cumulative and semester GPA of 3.0 or higher and has met the provisions of admission as stated in The Graduate School admission letter, the student is in good standing.

6.5.2 Academic Notice, Academic Warning, and Academic Suspension

Students whose term GPA or cumulative GPA falls below 3.0 are subject to Graduate Policies regarding Academic Notice, Academic Warning, and Academic Suspension. Please see the Graduate School Policies for details.

6.6 University Withdrawals

All University withdrawals by graduate students must originate in The Graduate School.

6.7 Readmission to Graduate Degree Standing

A student who is in good standing and takes a leave of absence is eligible to re-enroll in a graduate program following the Enrollment policies of The Graduate School. Please see those policies for specific considerations and requirements.

A student who is suspended from a graduate program in is seeking to re-enroll must follow the policies set by The Graduate School regarding Academic Standing. Please see those policies for specific requirements.

6.8 Application for Advanced Degree

During the semester of intended graduation, the student must file an Application for Advanced Degree with The Graduate School. Students must also enroll in at least three (3) credits the semester they intend to complete their degree. If a student fails to meet semester deadlines, they must resubmit an Application for Advanced Degree the next semester in which they expect to graduate. The deadline for filing the application is the third Friday of the semester of completion of degree requirements. Students applying for graduation must meet with their academic advisor and apply for graduation on MyInfo.

6.8.1 One-Credit Extension

If an Application for Advanced Degree is submitted after the published deadline and the student is currently registered for three credits, the student may submit the application for graduation for the next semester to be eligible for a one-credit registration (instead of the mandatory three-credit registration). To be eligible for the one-credit extension, the student must complete all degree requirements before the first day of the subsequent semester. The student will then be certified to graduate *the following semester.* If more time is needed beyond the first day of the following semester, the student will be required to register for two additional credits to meet the required minimum of three credits to be eligible for graduation that term.

A One Credit Extension allows students additional time past the intended semester of graduation up to the first day of the following semester. Appropriate reasons to use the one credit extension are as follows:

- To satisfactorily complete all coursework (including "I" grade make-ups).
- Defense of thesis/dissertation past the published deadline for the intended semester.
- Satisfactory completion of all recommended corrections to the thesis or dissertation and submission of all required copies in final format to The Graduate School past the published deadline for the intended semester.
- Approval of the thesis/dissertation by the graduate Dean.
- Successful completion of all other degree requirements as determined by the department and The Graduate School, including submission of all documentation required for graduation.

To use the One Credit Extension, the student must do the following:

- Withdraw their Application for Advanced Degree for the original semester of graduation on The Graduate School website:

  `http://www.montana.edu/gradstudies/withdraw_app.html`

- Submit a new Application for Advanced Degree for the following semester; and
- Register for 1 credit the following semester. To register for the one credit, you may be able to do this yourself or contact your department staff or chair of your committee to register you for the appropriate credit/course.

The degree will not be conferred until the end of the following semester. If all degree requirements are not met by 5:00 p.m. on the first day of the following semester, the student will be required to register for an additional two (2) credits (to meet the minimum of 3 credits) to complete graduation requirements. Students who intend to take advantage of this option should contact The Graduate School.

7 Graduate Teaching Assistants (GTAs)

7.1 GTA Responsibilities

To be a Graduate Teaching Assistant you must take at least 6 credits each semester and remain in good academic standing. GTAs are assigned to duties as either an instructor of record, a course assistant, a Math and Stats Center tutor, a grader, or some combination of these roles. GTAs are assigned other duties as appropriate (hold office hours, attend weekly course meetings, attend orientation and GTA development seminars, etc.). Everyone who holds a teaching appointment will also fill out an electronic schedule card that will be emailed to you, which you are to complete and then return to Graduate Program Coordinator in the Mathematical Sciences office as well as post your hours outside your office door. A student enrolled in fewer than six (6) credits during their semester of graduation is eligible to be appointed.

7.2 Grade Reporting Policies for GTAs

The Registrar's office requires grades to be posted in the MSU Banner system within 48 hours after a final exam. Weekends are included in these 48 hours. Each course supervisor or Student Success Coordinator will explain the grading system used for the class you teach. It is your responsibility to complete your grading on time.

Once you have completed final grade calculations you must turn in a copy of your grade sheet to Undergraduate Program Coordinator. Students come to the Mathematical Sciences office questioning their grades and the office staff need to have a record of student quiz grades, homework and test scores to show them why they earned the grade they earned. Therefore, it is important that you **do this at the same time as you enter the grades in Banner**.

Web grading instructions from the Registrar are online and this is updated by the Registrar's Office each semester, so watch for updates via email. Instructions for incomplete ("I") grades, missing grades or grade changes are in the Mathematical Sciences office. Incomplete grades are not to be assigned without approval of the course supervisor.

7.3 GTA Evaluation

Each semester your course supervisor or Student Success Coordinator will observe and evaluate your teaching skills. Your students will also complete an evaluation of the course. The metrics include overall satisfaction with the course and the instructor, observation of frequency of teaching methods and other criteria. The student evaluation will be emailed to your students and you should set aside class time for students to take out their devices to complete the evaluations. If there are any problems, tell the Graduate Program Coordinator immediately. These evaluations as well as your academic performance are reviewed each semester and are part of the GTA renewal process.

7.4 GTA Offices

Graduate Teaching Assistants will be assigned to a shared office. Assigned offices are associated with teaching an MSU course and a GTA assignment. This space is shared with your fellow graduate students and should be treated as a professional space. Keep your space clean and voices to a minimum. Office environment concerns should first be brought to the attention of your office mates, then the GPC Chair and/or Graduate Program Coordinator and finally to the Department Head if needed. For maintenance issues, speak with the Graduate Program Coordinator. Feel free to bring personal items from home (pictures, lamp, books, etc.) to personalize the space, provided the office remains professional. Do not install microwaves, refrigerators, toasters, coffee makers, or other cooking implements in shared offices (use the department kitchen for storing and preparing food). These items risk overloading the building's wiring capacity, introduce odors into the workspace, and contribute to fire and vermin risks. Access to your shared office and the department office and building are through your CatCard. The external doors of Wilson Hall are only accessible using a CatCard when classes are not in session. The Graduate Program Coordinator will also issue a key for each desk, should your desk lock. You are responsible for these keys. When you leave MSU you must turn in your keys as well as clean out your desk and office area and return all borrowed textbooks to Undergraduate Program Coordinator.

7.5 GTA Conduct

The Mathematical Sciences Department expects all GTAs to be professional and to treat their undergraduate students with respect and courtesy. GTAs have instructional responsibilities and as such are required to follow university policies, including those about appropriate instructor-student relationships.

Please follow professional standards for personal grooming. Sloppy or dirty clothing, strong body odor, strong perfume or cologne, or bare feet distract from students' learning and are not acceptable. Your Student Success Coordinator and course supervisor are there to help you. When questions arise such as cheating/academic dishonesty, grading disputes, class management issues or any other problem, contact your course supervisor or Student Success Coordinator for guidance.

7.6 Policies Regarding GTA Support

7.6.1 GTA Tuition Waivers

Tuition is waived for both in-state and out-of-state GTAs. However, fees are based on the in-state or out-of-state status of each student. Each year in approximately October and February you will complete an online form listing the courses you plan to take in the coming summer (if any) and fall or spring semesters, preferences for the courses you wish to teach, and the number of tuition credit waivers you are requesting for the upcoming semester. If you change the number of waivers, add or drop classes, you **MUST** inform the Graduate Program Coordinator otherwise you may have to pay for them yourself. Summer teaching assignments are not guaranteed. Priority for summer teaching assignments are assigned to those making adequate progress towards their degree.

Tuition waivers do not cover fees. Fees must be paid by the student by the 15^{th} class day. In order for your stipend and tuition waiver paperwork to be processed by the university you must first register for courses each semester. If you do not register on time you risk losing your waivers and not being paid on time. It is your responsibility to register and to confirm your attendance. Be sure to confirm your appointment by visiting

`http://www.montana.edu/gradschool/grad_appts.html`.

If you fail to confirm your appointment, it is possible you will be responsible for your own tuition costs.

7.6.2 GTA Progress and Performance

When a Graduate Teaching Assistantship (GTA) is awarded it is understood that the teaching assistantship will continue to be available given satisfactory academic progress towards the degree as well as satisfactory performance of assistantship duties. Signs of unsatisfactory academic progress for GTAs might include failure to maintain a 3.0 GPA, dropping below 6 credits, withdrawing from a course, lack of progress towards examination milestones or lack of progress towards the final dissertation defense. Signs of unsatisfactory performance of assistantship duties might include not showing up to teach your class, being chronically late or unprepared, not performing your office hour or duties, receiving unsatisfactory student evaluations, or inappropriate behavior. GTA performance is reviewed at the end of each semester and GTAs will receive an annual review letter.

7.6.3 M.S. Timeline.

For students enrolled in an M.S. program, GTA support will not exceed three (3) years measured from the date the program is begun. Support longer than five (5) semesters (not including summers) requires Department Head approval.

7.6.4 Ph.D. Timeline.

GTA support for Ph.D. Students will continue if the student demonstrates satisfactory performance of assistantship duties and makes satisfactory progress towards completion of the following Ph.D. degree milestones:

1. For students in the Ph.D. in Mathematics program: Pass the Ph.D. Qualifying Exam within one and a half years of entering the Ph.D. program.
2. Complete at least 12 credits of coursework per year
3. Pass the Ph.D. Written Comprehensive Exam within two and a half (2.5) years of entering the Ph.D. program (three (3) years for Math Education students on a non-masters Ph.D. track).
4. Pass the Ph.D. Oral Comprehensive Exam within one to two (1-2) years from the date of passing the Ph.D. Written Comprehensive Exam, as determined by your committee.
5. Make satisfactory progress toward dissertation completion, as documented in 690 reports and evaluated by your Graduate Committee.

The termination of GTA support does not necessarily constitute dismissal from the program. Students who are in good standing with the Department of Mathematical Sciences and The Graduate School may continue in the Graduate Program at their own expense.

8 Graduate Research Assistants (GRAs)

GRA support is based on the availability of funding from either a departmental source or an external source. This can take the form of funding from a grant secured by a faculty member, from a campus entity conducting research or from a grant secured by the individual student. The GRA is required to be aware of and to comply with all rules imposed by the specific funding source. Regardless of the source, the GRA will be assigned a research supervisor associated with the funding, typically a faculty member. Depending on the source of funding, the research supervisor and the student's faculty advisor within the department may be two distinct persons. If offered GRA funding from a source external to the department, the student must speak to both the faculty advisor and the Program Coordinator within the department before making the decision to accept the funding.

8.1 GRA Responsibilities

In order to be a Graduate Research Assistant, a student must take at least 6 credits each semester and remain in good academic standing. GRAs are required to assist the faculty research supervisor providing funding with research activities.

8.2 GRA Evaluation

Research performance evaluations as well as the student's academic performance are reviewed each semester and are part of the GRA renewal process. When the funding source is external to the department or when the research supervisor is distinct from the faculty advisor, the appointed research supervisor will evaluate the student's research performance. The student is also expected to meet with the departmental faculty advisor monthly to determine if the student's research workload is appropriately balanced with the student's academic workload in order to ensure continued progress towards the degree.

8.3 GRA Offices

Office space is prioritized for GTAs within the department. If space is available after all GTAs are accommodated, then GRAs can be assigned office space. The GRA should check with the Graduate Program Coordinator for availability. In the event that a GRA is assigned office space, then the GRA is subject to the same policies and expectations as that of a GTA; see Section 7.4 for details. GRAs are always eligible to use the shared desks in the Graduate Library.

8.4 GRA Conduct

The Mathematical Sciences Department expects all GRAs to be professional and to treat their peers as well as other students with respect and courtesy. Your faculty supervisor is there to help you. When questions arise, contact your faculty supervisor for guidance.

8.5 Self-Funded Students

Students who are self-funded and accepted into a graduate program in the Department have access to shared work and study space in the Graduate Student Library in Wilson 1-104. See the `Graduate Program Coordinator` for access. They are also welcome to use the kitchen area in the Mathematical Sciences office. The department cannot allocate mailbox or photocopy use.

8.6 Policies Regarding GRA Support

8.6.1 GRA Tuition

Tuition for both in-state and out-of-state GRAs is typically paid by a grant sponsor, faculty research supervisor or other research entity. Each year in February and October student completes an online form listing the coursework plan for the coming summer (if any) and fall or spring semesters, preferences for the courses the student wishes to teach (for GTAs) in the following year, and the number of tuition credit waivers requested for the upcoming semester. If the number of waivers changes, if classes are added or dropped, the student **MUST** inform the Graduate Program Coordinator, otherwise the student may have to pay for them out-of-pocket. Summer research assignments are not guaranteed but are contingent upon funding availability. Priority for summer research assignments is assigned to those making adequate progress towards the degree.

Depending on the funding source, tuition may be covered; however, fees may or may not covered. Any fees not paid by the funding source must be paid by the student by the 15^{th} class day. In order for the stipend and tuition paperwork to be processed by the university, the student must first register for courses each semester. If the student does not register in time, funding may be lost or pay may be delayed. It is the student's responsibility to register and to confirm attendance. Be sure to confirm your appointment by visiting

`http://www.montana.edu/gradschool/grad_appts.html`.

Failure to confirm the appointment may result in the student being responsible for his or her tuition costs.

8.6.2 GRA Progress and Performance

When a Graduate Research Assistantship (GRA) is awarded it is understood that the assistantship is contingent upon funding availability, satisfactory academic progress towards the degree, as well as satisfactory performance of research duties. Signs of unsatisfactory academic progress for GRAs might include failure to maintain a 3.0 GPA, dropping below six (6) credits, withdrawing from a course, lack of progress towards examination milestones or lack of progress towards the final dissertation defense. Signs of unsatisfactory performance of research duties might include not showing up to meetings with your research advisor, being chronically late or unprepared, receiving unsatisfactory performance evaluations from your research advisor, or inappropriate behavior. GRA performance is reviewed at the end of each semester and GRAs will receive an annual review letter.

9 Additional Graduate Student Information

9.1 Montana Residency

The Department of Mathematical Sciences encourages out-of-state students to establish Montana residency in order to minimize tuition costs for the student should they need to pay tuition themselves. Consult the websites of the Registrar and the Graduate School to find all the required forms and instructions to petition to be classified as a resident; it is a full 12-month process. During that time, you may **not** enroll in more than six (6) credits per semester. It is your responsibility to read all the requirements and follow guidelines in order to become a Montana resident.

9.2 Enrollment Requirements

The Graduate School sets policy regarding student enrollment requirements. Please see the Graduate Catalog section regarding Enrollment and follow the policies described there.

9.3 University Health Insurance

Montana State University requires students who are enrolled in 7 or more credits to have and maintain major medical insurance while attending MSU, either their own policy or by purchasing the MSU policy. Please see information provided by Student Health Services. Additionally, international students must provide proof of insurance each semester to the Office of International Programs. Failure to provide this proof results in a fee for MSU's health insurance being placed on the students' bill.

9.4 Conferences and Travel

There may be various calls for graduate student travel funding, usually in fall, spring and summer. Ask the Graduate Program Coordinator for more information about these opportunities. Graduate students who are funded for travel or will be participating in conferences must see Business Manager one month before traveling to be sure you have completed the necessary forms. Travel forms are required to be completed by the student before travel arrangements have been

made and for reimbursement after travel is completed. Students who receive funding from department, college, or university sources are required to submit a report, upon their return, according to guidelines from the Graduate Program Coordinator. When traveling, you are a representative of the Mathematical Sciences department and you are expected to exhibit professional behavior.

9.5 Emergency Funding

Generous donors have established an emergency fund to provide financial support to graduate students who find themselves with a temporary need. See the Graduate Program Coordinator for details.

10 Office Procedures

10.1 Mailboxes

GTAs, and GRAs if space is available, are assigned mailboxes located in the Mathematical Sciences Office. Please check your box daily to keep informed on any departmental business or other messages. Your undergraduate students are **NOT** allowed to put materials in your box. Please make other arrangements for collecting tests and assignments. Do not have your students bring papers to the Mathematical Sciences Office to be put in your box, but rather request that your students use the drop box located on the outside, north wall of the main Math Sciences Office.

10.2 Bulletin Board

Notices regarding seminars, special events, employment opportunities and other activities are posted on the bulletin board in the Mathematical Sciences office work room and on the bulletin board in the hallway by the Hurst Conference Room.

10.3 Break Room

All members of the department are welcome to use the kitchen (break room) in 2-214. Everyone who uses this room is collectively responsible for keeping it tidy. This means wiping crumbs from the counter, sweeping the floor, and cleaning the sink and microwave regularly, even if you aren't the one who made the mess. (It's an accumulation of small crumbs that results in an untidy kitchen, and everyone inadvertently leaves a trail of crumbs.) **You must clean up after yourself and dispose of your trash**. Be thoughtful and courteous as many people use this kitchen area. Both coffee and tea are provided by the department at no cost to you, for you to consume while you are at work. Please do not be wasteful of these items. Do not leave an empty coffee pot; if you use the last of the coffee and it is before noon, then make another pot. The refrigerator and microwaves are also available for your use. If you make a mess in either of the appliances, clean it up. Please do not use the microwaves to heat foods with strong smells. To be courteous of others, please use the microwaves in the SUB for foods with strong smells. The refrigerator is cleaned out on a monthly

basis. Be sure not to leave your items in the refrigerator for an extended period of time, otherwise they will be disposed of, dish and all.

10.4 Copy Machine

GTAs and GRAs may use the department's copy machine for teaching-related activities only. The code for the copy machine is available from the Graduate Coordinator. The copy machine also scans and emails scanned documents. Please keep the copy room clean and orderly.

10.5 Graduate Student Library

Wilson 1-104 is reserved for students in the Department of Mathematical Sciences. This room is reserved as a place to study. Office hours should NOT be held in this room. Students are expected to clean up after themselves when using the library.

11 Contact Information

The Mathematical Sciences office maintains a list of contact information for all faculty, staff, and students. It is your responsibility to inform the Undergraduate Program Coordinator of your most up-to-date address and phone numbers. You will be assigned an email address when you arrive and all departmental email will be sent to that address. DO NOT forward your work email to your personal email address; this is a violation of MSU's computer security regulations. Check your email on a daily basis and respond accordingly. You will be held responsible for emails that you neglect to respond to.

12 Resources

Department of Mathematical Sciences: `http://www.math.montana.edu`

Graduate School: `http://www.montana.edu/gradschool/`

University Health Partners: `http://www.montana.edu/health/`

Student Accounts: `http://www.montana.edu/ubs/studentaccounts/`

Financial Aid: `http://www.montana.edu/financialaid/`

Family Graduate Housing: `http://www.montana.edu/fgh/`

Residency Information: `http://www.montana.edu/registrar/Residency.html`

Conduct Guideline and Grievance Procedures for Students:

`http://www.montana.edu/policy/student_conduct/index.html`

Collective Bargaining Agreement

https://mus.edu/hr/cba/024-CBA.pdf