MATHEMATICS GRADUATE STUDENT HANDBOOK

(2024)

MATHEMATICS GRADUATE STUDENT HANDBOOK

PREFACE

This handbook collects, in one place, important information for students in the master's program in mathematics at Western Washington University. It contains both statements of policy and general guidelines. We hope that explaining the academic regulations will help minimize uncertainty about program requirements or expectations.

When you receive this handbook, read it through to see the overall structure of the master's program. Then save it for reference.

TABLE OF CONTENTS

1. ADMISSION REQUIREMENTS

To be eligible for full admission (possibly with stipulations) to the M.S. program in Mathematics, a student must have a baccalaureate degree from an accredited institution and

1) have completed the following courses or their equivalent with a grade of B or better: Math 224, 304, 312, 331, CS 140 or Math 307, and two courses at the 400 level, and

2) have a GPA of 3.0 for the last 60 semester or 90 quarter credits and an overall GPA in undergraduate mathematics of at least 3.0, and

3) have met other requirements detailed by the Graduate School, such as having letters of recommendation submitted and submitting any test scores required.

A student whose native language is not English and who are not completing a degree at an English-speaking institution, must have passed the TOEFL or IELTS within one year of the time of application with a score at or above TOEFL (86 iBT) or IELTS (7.0).

A student who has not completed all the courses listed under (1) but who can demonstrate strong promise of the ability to succeed in the M.S. program in Mathematics may be admitted with special stipulations. The Graduate Program Coordinator will specify the coursework necessary to correct the weaknesses in the student's background and the time for its completion. In some cases, one or more of these courses may be acceptable as part of the graduate degree program.

A very limited number of students whose undergraduate GPA in mathematics is below 3.0 may be granted admission with conditions specified by the Graduate Program Coordinator. A student on provisional status may not hold a Teaching Assistantship but is eligible for other forms of financial support. See the section "Sources of Financial Support."

2. GRADUATION REQUIREMENTS

A student may select either:

- the non-thesis program with a project (48 credits including 1 or 2 project credits (Math 691)), or
- the thesis program (45 credits including up to 2 project credits (Math 691) and 4 thesis credits (Math 690). Math 690 credits must be taken in a quarter after when the Math 691 credits are taken).
- An exception to the above is for a student who has entered as part of the accelerated BS-MS program. For such a student, the non-thesis option requires 36 credits to be completed in three quarters. None of these can be at 400-level, and up to 9 credits at the 500-level, taken as an undergraduate, may be transferred into the program. A student entering as an accelerated student may be permitted to complete the accelerated program in four quarters, and in exceptional cases in five quarters. Such a request must be made, in writing, to the graduate committee. If denied, or the time extends beyond five quarters, then the 48-credit requirement is imposed. There is no thesis option as part of the accelerated program.

Most students complete the program with the project option. Pursuing the thesis option is considerably more challenging and should only be considered after significant consultation with a potential graduate faculty advisor.

If a student plans to complete the program with a thesis, a proposal is due to the Graduate Committee by the end of the fourth week of the fall quarter before graduation. The proposal must include a contingency plan for converting from completing the program with a thesis to completing the program with a project. The student must inform the Graduate Committee by the end of the seventh week of the next quarter if they wish to complete the program without the thesis option.

In both programs, a student must: complete the course requirements outlined below, pass the Qualifying Exam, and submit and receive approval of a project proposal. For the project option they must pass an oral exam and give a department colloquium talk; for the thesis option they must submit an extended abstract and give a public defense. Details about these requirements are in the relevant sections below.

Departmental policy limits students to at most four credits of seminars.

Course Requirements

The following courses or their equivalents must be completed before graduation:

Math 504 (abstract linear algebra),
521 (Analysis of Metric Spaces; currently named Methods of Mathematical Analysis I),
522 (Analysis in Euclidean space; currently named Methods of Mathematical Analysis II),
691 (project credits); 690 (thesis credits if pursuing the thesis option)
and four courses with one course or its equivalent from each of the following lists:

1) Algebra and discrete math:
    a. 502 (abstract algebra),
    b. 503 (topics in abstract algebra),
    c. 505 (algebraic geometry),
    d. 551 (number theory),
    e. 560 (topics in geometry),
    f. 564 (graph theory),
    g. 566 (topics in combinatorics).

2) Analysis and topology:
    a. 524 (topics in analysis),
    b. 525 (topology),
    c. 527 (real analysis),
    d. 528 (functional analysis),
    e. 531 (analysis in PDE),
    f. 533 (advanced ordinary differential equations),
    g. 539 (topics in complex analysis),
    h. 562 (differential geometry).

3) Decisions:
    a. 535 (nonlinear optimization),
    b. 540 (topics in probability and statistics),
    c. 542 (mathematical statistics),
    d. 543 (linear statistical models),
    e. 556 (applied time series),
    f. 557 (Bayesian statistics),
    g. 558 (stochastic processes),
    h. 570 (topics in optimization).

4) Applied:
    a. 510 (mathematical modeling)
    b. 511 (advanced modeling)
    c. 515 (mathematical biology),
    d. 533 (advanced ordinary differential equations),
    e. 573 (numerical linear algebra),
    f. 575 (numerical analysis),
    g. 577 (topics in numerical analysis),
    h. 680 (internship in industrial mathematics; 4 credit requirement).

A single class cannot be used to simultaneously satisfy two of these lists. The student's program must include **at least four** of the following courses: Math 503, 511, 525, 527, 528, 531, 533, 539, 540, 560, 562, 564, 566, 570, 577. (These courses may simultaneously be used to satisfy one of the lists above.)

A student who has not completed a senior-level course in each of the following areas is encouraged to include the indicated course or courses as part of the program:

401 (abstract algebra),
432 (a second course in ordinary differential equations),
538 (complex analysis),
541 (probability and mathematical statistics).

A student who has had an equivalent course as an undergraduate will not have to take the corresponding course as part of the graduate program. However, a student may not receive credit toward a master's degree at WWU for courses which have been used as part of a previous degree. No lower-level credits and at most 10 credits at the 400 level may be counted toward the degree. Math 680 can be taken for varying credit; to meet the requirement of one course from list 4 (Applied), it must be taken for at least 4 credits.

<u>Grades.</u>

This section is provided only as a guide, to help you gauge how you are performing as you progress through the program.

1) Over a two-year period, about half of the grades in the graduate courses in math should be either A or A-.

2) A grade of B- or below is generally regarded as concerning (see "Additional Requirements" below regarding graduate school grade policy).
3) Typically, a student admitted provisionally is required to earn at least a B grade in each course for the first 15 credits of graduate coursework.
4) For a dual-numbered course, the assignment of grades to graduate students should not be related to the assignment of grades to undergraduates.
5) The project or thesis will be graded satisfactory (S) or unsatisfactory (U).
6) Students whose project and course work are of particularly high quality may, at the discretion of the Graduate Committee, be awarded a degree "With Distinction." This departmental honor may be used in vitae and mentioned in letters of recommendation.

The Graduate School has specific policies regarding acceptable grades. See the "Scholarship Standards" section of https://gradschool.wwu.edu/policies .

Planning Your Degree and Coursework

As well as meeting the course requirements you must also (more detail about each of these follows):

1) Pass the graduate Qualifying Exam.
2) Submit for approval a project (or thesis) proposal to the Graduate Committee.
3) Work with a project/thesis advisor to meet the outcomes proposed in the submitted proposal.
4) For the thesis option, submit an extended abstract to the thesis committee.
5) Pass an oral examination of your project studies or a defense of your thesis.
6) Give a departmental colloquium (for the project option).

Timeline to remain on track to graduate in two years:

1) Fall, first year: perhaps optionally take the fall offering of the Qualifying Exam.
2) Winter, first year: perhaps optionally take Math 582 which prepares you for taking the Qualifying Exam.
3) Spring, first year: take the spring offering of the Qualifying Exam; begin to look for a project topic and advisor.
4) Fall, second year: last chance to take the qualifying exam without delaying graduation; submission of project/thesis proposal to the Graduate Committee for approval. Note: it is a requirement that you have passed the Qualifying Exam before you can have a proposal approved; work with your advisor on your project.
5) Winter, second year: prepare for and sit your project oral examination (project option); submit an extended abstract to the thesis committee by the end of the seventh week of the quarter (thesis option).
6) Spring, second year: give your departmental colloquium (project option); schedule a public presentation and defense of your thesis and submit a final draft of your thesis to the thesis committee at least three weeks prior to the scheduled time of the defense (thesis option).

Students entering as part of the accelerated BS-MS program and planning to graduate in one academic year need to: pass the Qualifying Exam at its offering before the start of fall quarter; identify a project and advisor and submit a project proposal to the Graduate Committee by the end of the fourth week of fall

quarter; pass their oral exam in winter quarter; and give their departmental colloquium in spring quarter. (The thesis option is not available for an accelerated student planning to graduate in one year.)

The University tracks your progress toward the MS using *DegreeWorks*. See https://registrar.wwu.edu/degree-works/students. You should discuss a plan with the program's academic advisor, as not all classes are available every year, and lack of planning may delay your graduation. It is recommended you make a tentative plan during your first quarter in the program.

Qualifying Exam

Each student must pass the Qualifying Exam before approval of a project proposal. The exam covers calculus, elementary linear algebra, and elementary differential equations and is designed to allow a student to demonstrate mastery of these subjects at an early point in graduate study. Further information about the exam can be found at https://mathematics.wwu.edu/graduate-qualifying-exam where there is a link to the Qualifying Exam Syllabus as well as multiple past exams and their solutions. In addition to this resource, Math 582 is offered every winter quarter and focusses on material which prepares students to take the Qualifying Exam.

The Qualifying Exam may only be taken by graduate students enrolled in the WWU Mathematics Graduate Program.

Failure to complete this requirement in the first year of study may make it difficult to complete the degree within two years. The exam is normally given before classes begin in the Fall (typically one full week before classes, in mid-September) and before classes begin in the Spring (typically the day before classes, in late March). A student who has not passed the qualifying exam after its third offering must have permission from the Graduate Committee to remain in the program. For example, a student entering in the Fall and not passing by the beginning of the next Fall quarter would have to request an extension from the Chair of the Graduate Committee.

Project Proposal

A student is eligible to submit a project proposal after they have:

1) received full admission to graduate degree status,
2) passed the Qualifying Exam, and
3) fulfilled any stipulation or provision listed in the admission letter.

The proposal:

1) Must be written by the student, with guidance from a faculty advisor. It should be written in a formal manner and thoroughly proof-read.
2) It is limited to one page and should clearly indicate the project's scope and include a bibliography from which the student will learn. It is encouraged that students use journal-acceptable formatting for their bibliography.
3) Should be quite specific, such as stating which chapters from a given text will be studied.

Project

All students must complete the requirements of the project (Math 691). At least one credit (and up to two, as the student wishes) will be awarded upon successful completion of the project, which will involve both an oral examination about the project and a departmental colloquium presentation to the mathematical community. See the section entitled "The Project."

Thesis Option

A student who elects the thesis option may complete the degree with 45 credits. One to two of these credits will be project credits (Math 691) and up to four will be thesis credits (Math 690). Timing of these credits, procedures for selecting a thesis committee, for submission of the thesis, and for the thesis defense are described in the section entitled "The Thesis." The Committee reserves the right to decide that a student cannot select the thesis option if it feels they are not suitably prepared.

Transfer Credit

At most twelve (quarter-based) hours of transfer credit can be included in the program. These credits must be discussed with the Graduate Academic Adviser and, if acceptable, will be included in the student's *DegreeWorks* plan. The Graduate School will then, if the courses are acceptable to them, approve the credit. To be acceptable as transfer credit, courses must be of a level equivalent to that of WWU courses acceptable in the graduate program, must not have been used as part of the requirements for any previous degree, and must have been completed within the three years prior to admission to the graduate program. While in the graduate program, credit received for graduate work done elsewhere will count towards the WWU degree only with prior approval.

Full-Time Status

A student is considered full-time if registered for at least eight credits. An exception is granted to a student completing the degree who is registered for at least 4 credits in their last quarter.

Graduate teaching assistants and students receiving financial aid must maintain full-time status.

Additional Requirements

In addition to the requirements above, the Graduate School has several requirements concerning residency, time limits, grades and so forth. These are summarized here. See the Graduate section of the University Catalog for additional details.

1) Residence: Students must be registered for at least two credits during the quarter of their graduation. For students who have completed other degree requirements, the Graduate School provides a "Continuing Enrollment" course.
2) Time Limit: The degree program must be completed within five years.
3) Grades: A student must maintain an overall GPA of at least 3.0 for graduate-level coursework included in the degree to remain a candidate for the graduate degree. Courses taken Pass/No Pass

may not be applied toward a graduate degree. A student who receives more than 10 credits of C+ or lower grades is removed from the program. Every C+ or lower grade received, including those from courses repeated later, counts toward the total. No graduate credit is allowed for courses graded D+ or lower.

Changes

Any change from the above requirements must be approved by the Graduate Committee. A student requesting a change must do so in writing, submitting the request and the justification and reasons for the request to the Chair of the Graduate Committee.

3. THE PROJECT

Objectives

The purpose is to establish that the student can engage in independent study of advanced mathematical material and can present the results of such study in a scientific and scholarly manner. To meet this purpose, the material concerned should lie beyond the scope of courses normally taught at WWU, but may, for example, be based on topics covered in advanced texts or published papers appearing in journals.

The project consists of the following four steps:

1) Selection of a topic and a supervisor.
2) Submission of a type-set proposal to the Graduate Committee.
3) Oral exam before a committee of graduate faculty.
4) A one-hour colloquium talk by the student.

Timeline

Unless an exception is requested from the Chair of the Graduate Committee and approved by the committee, Steps 2, 3, and 4 occur in distinct quarters. Step 2 must be done **by the end of the fourth week** of the quarter. For example, a student planning to graduate in June would have to submit the proposal by the end of the fourth week of Fall Quarter, pass the oral exam during Winter Quarter, and give the colloquium talk during Spring Quarter. Oral exams and colloquia are never scheduled during the summer.

Step 2 may only occur after the student has passed the qualifying exam.

When a student requests an exception to the requirement that steps 2, 3, and 4 occur in distinct quarters, the Graduate Committee may choose to allow two of the three steps to be taken during the same quarter. In this situation, the colloquium can only be scheduled after the student has satisfactorily defended the project (that is, completed step 3 successfully).

Steps

Selection of a topic and a supervisor

This step should occur as early as possible. Students are encouraged to seek the help of the Graduate Committee Chair and of the Graduate Adviser in selecting a supervisor. To keep on track, it is advised that an advisor and topic has been identified by the end of spring quarter of the first year.

It is the task of the supervisor to guide and assist the student where necessary, beginning with the preparation of a proposal for submission to the Graduate Committee. The supervisor and student should meet regularly to monitor the work's progress, and the supervisor should provide appropriate criticism and advice for the work and the oral presentations. The supervisor should provide opportunities for the student to practice their oral exam presentation and answer questions expected during the question-and-answer period. The supervisor should hear preliminary versions of the colloquium talk and offer constructive suggestions for its improvement. No student shall be denied the opportunity to have a supervisor.

Submission of a typed proposal to the Graduate Committee

The student and the supervisor together shall choose the specific subject matter of the project. The student, aided by the supervisor, shall prepare a project proposal, not to exceed one page in length, setting out the topic to be studied and a list of references. The proposal should have a clearly stated title and the names of the student and the supervisor. The advisor shall submit the proposal to the Graduate Committee which will select a project committee if it approves the project.

The Oral Examination

A **one-page** handout must be prepared by the student and supervisor and distributed, **by the supervisor, at least two days** before the oral exam. The handout should include date, time, and place, and names of the project committee members. The student will begin by giving a presentation which demonstrates mastery of key components of the project to an audience of faculty members only. This presentation is strictly limited to 20 minutes in length. It should focus more on examples and sketches of proofs rather than full proofs. The handout should be designed to facilitate an efficient presentation and should be referred to during the presentation.

The student will be expected to answer questions for the remainder of the hour, designed to reveal whether a satisfactory understanding of the material and background has been achieved. The student will be expected to defend the mathematics they have learned. It will not be enough to describe the project's content without justification. It is expected that the student will not depend on notes during their presentation and when answering questions. It is acceptable for the occasional glance at notes, especially if they need to recall a complicated formula, for example, but such glances must be kept to a minimum.

The Graduate Committee will meet immediately after the oral exam and will decide whether the student's performance is satisfactory. If so, the student may schedule the colloquium talk. If not, the student may repeat the oral exam once or defend the project (for instance by meeting to answer

questions) in one additional meeting. A student who does not pass the oral exam on the second attempt must have the permission of the Graduate Committee to stay in the program.

The Colloquium Talk

After the oral examination has been passed, the final step is a one-hour (50 minutes) colloquium talk by the student on their topic. The student should reach out to the Colloquium Organizer to schedule a date for their talk. Department colloquia are usually given at 4:00 pm on Thursdays.

In collaboration with the supervisor, the student must prepare a title and abstract for the talk and give this to the Colloquium Organizer at least **one week before the talk**.

The talk should be at a level suitable for graduate students in the department and should:

1) demonstrate a good understanding of the subject matter and familiarity with its broader mathematical context,
2) be of a sufficiently high mathematical level, and
3) be clear, coherent, well organized, and interesting.

The talk should be thoroughly prepared and practiced to fit within the time available. It should include a brief introduction describing the problem, its history and significance, and an outline of the talk. Appropriate examples and applications should be included. The student is not expected to cover everything they have learned during the project.

No talk presented in a class such as a Math 599 seminar class may serve as the colloquium talk, although the project's topic may be related to a talk given in such a class.

4. THE THESIS

Outline

Pursuing the thesis option is challenging and should not be approached lightly. The proposed work must constitute a contribution to mathematical knowledge and understanding by means of a critical review, comparison, unification of material, or some (original) mathematical advance.

Eligibility and Outline of Procedures

It is the student's responsibility to find a faculty member willing to serve as adviser for the project and thesis and their joint responsibility to develop a proposal for submission to the Graduate Committee. The proposal should outline the work to be undertaken and must include a bibliography from which the student will work. The proposal must also contain a contingency plan for changing from the thesis option to the project option; this contingency plan must satisfy the requirements of the project proposal described above in the section titled "The Project." The combined proposal and contingency plan must be limited to two pages. This submission may not occur until after the student has passed the Qualifying Exam.

The Graduate Committee will evaluate the thesis proposal according to the following criteria:

1) mathematical maturity and level of preparedness of the student,
2) potential of the student to complete the proposed project,
3) suitability and significance of the topic.

If the Committee feels the student is not ready or suitable for the thesis option, further coursework could be prescribed, or the thesis option might be declined.

If the Graduate Committee approves the thesis proposal and the contingency plan for a project, they will find two other faculty members willing to serve with the thesis adviser on the thesis committee. The thesis topic and thesis committee membership must then be submitted for the Graduate Dean's formal approval — see the Graduate School's website.

By the end of the seventh week of the quarter following approval of the proposal, the student must do one of the following actions:

1. Submit an extended abstract describing their work to the thesis committee. This abstract must be well-written, demonstrating the student's ability to properly present mathematical content, and representing the scope of the work to be included in the thesis. The thesis committee will either accept the abstract and approve continuation of the thesis option or will recommend the student change to the project option. In the latter case, the student will follow the following action.
2. Decide to change to the project option and follow the contingency plan outlined in their proposal. The student will then aim to sit their oral exam before the end of the current quarter. If necessary, they may request, in writing, from the Graduate Committee that they sit their oral exam in the first two weeks of the following quarter and give their colloquium talk during that same quarter.

The Thesis Adviser (Thesis Committee Chair)*

The adviser is responsible for guiding the student, reading drafts, deciding on the suitability of subject matter, and monitoring progress. The adviser will also examine the written thesis with the thesis committee and take part in the Final Evaluation. The thesis adviser is responsible for keeping the thesis committee informed of the student's progress and of any possible difficulties.

The Thesis Committee*

The thesis committee will consist of the adviser and at least two other faculty members. They are expected to read and evaluate the thesis and to participate in the Final Evaluation. They will also read and assess the extended abstract described above. Regular contact with the student during the course of study is encouraged.

*Graduate School regulations concerning the selection of the thesis adviser and committee must be satisfied. Further information on Graduate School policies regarding theses may be found at https://gradschool.wwu.edu/thesis-information.

Content and Evaluation of the Thesis

The student is expected, in the thesis, to show knowledge of the field within which the thesis topic lies, the relevant literature, and the work's context. This thesis must constitute a contribution to mathematical knowledge and understanding by means of a critical review, comparison, unification of material, or some (original) mathematical advance. In all the above, the contribution must be of a substantial nature and both the oral and written presentations must be done in a scholarly manner.

The Thesis.

A final draft of the thesis must be available to the thesis committee and any other interested faculty at least three weeks before the Final Evaluation. If the thesis committee feels that the thesis requires more than minor typographical corrections, the Public Defense must be postponed until the committee is satisfied. In practice, the adviser is expected to bar submission of a final draft until the adviser feels that it will meet departmental standards. If, after at least two "final" versions have been examined, the committee finds it appropriate to do so, it may inform the student that the thesis project has been unsuccessful, and the student will be required to drop the thesis option. The format of the thesis must conform to the norms of mathematical literature and to the regulations of the Graduate School. A copy of the Graduate School regulations is available on its website.

The Final Evaluation

The thesis committee (including the thesis adviser) makes the Final Evaluation. This constitutes acceptance of the submitted thesis and permits the Public Defense to proceed.

The Public Defense

After the thesis has been accepted by the Final Evaluation, the final step is a one-hour Public Defense by the student. The Graduate School must be informed at least two weeks before the Public Defense to allow for a Graduate Council representative. A draft must be submitted to the Graduate School at least one week prior to the Public Defense.

The student should first spend 40 minutes giving an overview of their work. There will then be a question session in which the adviser and other members of the thesis committee ask questions specifically related to the thesis and to the more general field within which it lies. Some of these questions may be posed ahead of time so that the student can prepare in advance. Once the adviser and thesis committee have completed their questions, other faculty and the Graduate Council representative will be given a chance to ask the candidate questions.

Award of "Cum Laude"

If the Graduate Committee, upon the recommendation of the thesis committee, feels that the thesis work and course work is of a particularly high quality, they may declare that the master's degree is awarded Cum Laude. This is purely a departmental award, which can be referred to on the student's vitae and in letters of recommendation. The award must be made by the date of graduation.

5. SOURCES OF FINANCIAL SUPPORT

The three principal sources of financial support through the Graduate School are teaching assistantships, the graduate work-study program, and partial tuition and fee waivers.

Teaching Assistantships

A student interested in receiving a Teaching Assistantship is encouraged to apply while applying for admission to the graduate program. A T.A.'s duties generally involve teaching one section of an elementary mathematics course each quarter under a faculty member's supervision. A student must be fully admitted to the graduate program to be eligible for a T.A. position.

In filling teaching assistant positions that become vacant during the academic year, priority will be given to students who have already taken the T.A. training course Math 595.

A student may receive support as a T.A. for at most six quarters. Once a student has received a full Teaching Assistantship, it will generally be renewed for as long as necessary (within the six-quarter limitation) provided the student continues to make adequate progress toward the degree and is a successful teacher.

Graduate Work-Study Program*

Students may apply for work-study money through Student Financial Resources. Students must have checked the box for work-study on their FASFA form to be eligible. This funding is available based on financial need to graduate students not holding a Teaching Assistantship. Provisionally admitted students are eligible for this money if they qualify on need. Students are eligible to work for at most 19 hours per week at a rate that is comparable to that of a T.A. Duties generally consist of assistance with research and instructional programs.

Partial Tuition and Fee Waivers*

A limited number of partial tuition waivers are awarded by the Graduate School (in consultation with the Mathematics Department) to U.S. citizens or resident aliens who have met all admissions provisions and who are not T.A.s.

*It is necessary to be registered for at least 8 credits in any quarter in which tuition waiver or work-study money is received.

6. FOR TEACHING ASSISTANTS

Training

Teaching assistants are required to attend the training course Math 595 during their first year. This course typically begins in the middle of September and consists of one week of intensive training followed by weekly meetings during the fall quarter. Teaching assistants will also meet with lead instructors to discuss approaches and details for each course taught.

Continuation of Teaching Assistantships for first year students

A graduate teaching assistant who is in good academic standing and has performed their teaching duties satisfactorily will be reappointed as a teaching assistant for a second year. (This assumes that the department has the appropriate funding.)

Payday

The first payday is usually October 10th. However, you will not be in pay status on September 16th unless you fill out both the I-9 and other forms, by the beginning of September, so please fill out these forms as soon as you can in the Human Resources offices. For the I-9 form, you will need to present one or more identifying documents. For specific information concerning acceptable ID, please call HR at 360-650-3774. If you cannot visit HR in a timely manner, arrangements can be made to have an HR department at another entity, or a Notary Public perform this process and then send the form to the Western HR office. If this is the case, please contact the HR department for guidance.

Office, Key, Materials

The departmental office will help you choose a desk in an office and will provide you with an office key. **If you lose your key you will have to pay for a replacement**, which will probably take at least a week to obtain. Please put your name on a large sheet of paper and tape it to your desk. Computer terminals are available in BH 229, 231, 194 and 244. They are for the use of T.A.s only, with no exceptions. Offices are for the use of T.A.s only, not other students or friends.

You will need to choose 5 hours per week for office hours and post these outside your office. T.A.s often choose common office hours (which are always noisy) to keep the office a quiet and usable study room at other times. ALWAYS be there for each full office hour.

Office supplies (pencils, red pens for grading, etc.) are in BH 202. The copy code for the copy machine can be obtained from the departmental office. You may not use the departmental copy code for personal use, but you can purchase a personal copy card at the Wilson Library Copy Center. For copying materials for every member of your class, you must use the services of Copy Duplicating; your lead instructor must make the copy-duplicating request (unless you are teaching Math 99). You have a mailbox in BH 211. Check it daily as this is where notices, many of which have time deadlines, will be deposited.

Your Class

You will be teaching one section of a course in which there is a lead instructor. The lead instructor will be responsible for the exams (though you may be asked to help compose them) and the grading scheme. The T.A.s will do much of the grading. The lead instructor will assist you with materials to be taught, assist you in limiting the time you spend on all teaching duties to not more than 20 hours in any one week, determine the class syllabus, and will also meet with you regularly to discuss how and when to cover the material. You are expected to attend these sessions, to work cooperatively with the lead instructor and your peers, to assist in grading, to prepare well for each class you teach, and to start each class on time. All class handouts must be approved in advance by the lead instructor. The lead instructor is there to help you become a better teacher. Remember that all of us have room for improvement.

The following statement concerning the relationship between teachers and students pertains to all teaching levels and is worth thinking about.

"I've come to the frightening conclusion that I am the decisive element in the classroom. My personal approach creates the climate. My daily mood makes the weather. As a teacher, I possess a tremendous power to make a child's life miserable or joyous. I can be a tool of torture or an instrument of inspiration. I can humiliate or humor, hurt or heal. In all situations, it is my response that decides whether a crisis will be escalated or de-escalated, and a child humanized or de-humanized." - Haim Ginott.

If a student in your class wants a special favor—some variation in the announced grading scheme, the privilege of taking a quiz or exam at other than the announced time, getting an "incomplete," or changing the grading scale, for instance—refer the student to the lead instructor. Avoid ingratiating yourself with your class by complaining about the lead instructor to them. Always remember that while acting as a T.A. you are a colleague, and we expect you to behave like one.

Missing Your Class

If you ever must miss a class for health or other reasons (it goes without saying that "other" reasons should be equally compelling), get another T.A. or faculty member to substitute for you and always report each absence to the lead instructor. We have the general policy of helping each other as needed, so we do not pay substitutes, but rather hope that it balances out overall.

Academic Dishonesty

It is an unfortunate fact that you may have to cope with cheating in your class. You should try to deter cheating by careful proctoring of exams and other mechanisms that you may discuss with your lead instructor. Sometimes suspected cheating may be squelched before it has any effect without making any formal accusation. Just take away the extra notes, make students who seem to be collaborating move to different seats, or do whatever is appropriate.

If you suspect (or know of) cheating after an exam, **do not** attempt to deal with the situation yourself. **At no time should you publicly accuse a student of cheating.** Among other things, doing so exposes you to the legal danger of libel and slander. Take such cases to your lead instructor and the Graduate Adviser to deal with. There is a very well-developed university policy on cheating in the General Catalog, which you should read; a student found cheating may receive an F for the course and can be placed on a list in the office of the Vice President for Academic Affairs.

Incomplete Grade Contract (K Grade)

Incomplete grade contracts must be arranged and completed with the lead instructor.

Final Grades

At the end of **each** quarter you have taught, be sure the departmental office has a copy of your final grade sheet, a copy of your record for each test score for every student and a copy of the syllabus (or whatever

you have showing grade cut-offs). These are necessary since students may request a grade change after you have left WWU.

Teaching Evaluations

You must have student evaluations of EACH CLASS YOU TEACH. Each quarter you will receive an email from the university administration with a form to be printed and distributed to your class. You should coordinate with your lead instructor about printing these forms and having your students complete the evaluations. **Failure to comply with the policy of having student evaluations completed each quarter may put the continuation of your assistantship in jeopardy.** You will receive scans of completed evaluations, again by email, which you should forward to the graduate teaching assistant coordinator.

General Expectations

The use of alcohol or drugs is governed by university policy set out in the University Catalog. Use of abusive language or behavior, with your students, your peers, or your instructors, is not acceptable. Sexual harassment (defined in the university catalog) is unacceptable. Failure to meet the expectations listed in the above sections may also be grounds for dismissal.

It is expected that lead instructors and T.A.s will carry out their duties as outlined in their job descriptions and that conflicts in jointly taught classes will be rare.

When possible, interpersonal conflicts should be handled by the parties involved through direct discussion and compromise, whether the conflict involves T.A.s, students, or the lead instructor, always recognizing that the goal is to provide a good learning environment for our undergraduates. If an affected party feels uncomfortable handling the conflict directly, or if a problem arises for which the party involved feels that direct discussion is inappropriate, or if the conflict remains unresolved after direct discussion, the following steps should be taken in the order given, as appropriate.

1) Consult with the lead instructor.
2) Seek a mutually agreed upon mediator – possibly the Graduate Adviser.
3) Consult the department's chairperson.

If a situation involving a T.A. is serious enough to involve possible dismissal, written notification will be given to the T.A. indicating deficiencies. If the deficiencies are not corrected promptly, the matter will be referred to the Executive Committee. T.A.s may be relieved of their teaching responsibilities by the Executive Committee in case of inadequate progress, violation of the provisions of Appendix J in the University Catalog, or inadequate performance in their teaching responsibilities as stated in the job description.

Teaching your own class is a rewarding experience which demands a lot of your time. Be careful to set clear boundaries and to prioritize your time judiciously. While it might seem like making yourself generously available for your students is a good thing, you must not let your teaching duties adversely affect your master's studies.

7. SUMMARY OF PROCEDURES FOR THE MASTER'S DEGREE

Procedure	Responsibility	Where Submitted	When
Application Materials	Student	Graduate School	Preferably by March 1st
Registration	Student, Graduate Adviser	Online (Web4U)	See WWU Academic Calendar
Plan of Study	Student	*DegreeWorks*	First or second quarter of study
Qualifying Exam	Student	Department	Fall or spring year one, or fall year two
Selection of Project and Project Advisor	Student, Graduate Adviser		Spring year one, or early fall year two
Submission of Project Proposal or Thesis Proposal	Student, Project Advisor	Graduate Committee	After passing the Qualifying Exam
Oral Exam	Graduate Committee, Student	Department	By end of second-to-last quarter
Application for Degree	Student	(Using online web form) Graduate School	By end of second-to-last quarter
Topic Approval (Thesis option)	Student	Department, Graduate School	Fall quarter
Colloquium Presentation	Student	Department	Quarter following oral exam
Submission of Thesis (Thesis option)	Student	Thesis Committee, Graduate School	3 weeks before Public Defense
Public Defense (Thesis option)	Student	Department, Graduate School	Before end of graduating quarter
Recommendation for Degree	Student, Graduate Adviser	(Using online web form) Department, Graduate School	2 weeks before end of quarter during which graduation occurs

APPENDIX

LIST OF FORMS

This appendix lists the forms pertaining to your graduate career. All of them are on-line forms linked from the Graduate School's web site.

Forms Requiring Graduate Adviser's Signature

DegreeWorks Plan of Study.

Transfer Credit/Exempt Course - part of the plan of study.

Directed Independent Study Permit.

Application for Master's Degree.

Recommendation for Master's Degree.

Forms Not Requiring Graduate Adviser's Signature

Graduate School Returning Student Application

W-4 (Employee Withholding Allowance)

I-9 (Employment Eligibility Verification)

Evaluation of and by T.A.s

Student Evaluation of Instruction

Evaluation of Teaching Assistant and Teaching Assistant Job Description

Evaluation of Lead Instructor and Lead Instructor Job Description