

# WELCOME TO THE DEPARTMENT OF GEOLOGICAL AND ENVIRONMENTAL SCIENCES, WESTERN MICHIGAN UNIVERSITY

2023-2024

**GRADUATE STUDENT HANDBOOK** 

## WESTERN MICHIGAN UNIVERSITY

Department of Geological and Environmental Sciences
College of Arts and Sciences



August 28, 2023

Dear new and returning graduate students,

Welcome back (or just welcome) to graduate studies at WMU. We are excited to have you in the Department of Geological and Environmental Sciences. Thanks to you (the students) and the work of our faculty, instructors, and staff, we are well-known for the outstanding work that we do across many fields of geoscience!

In this handbook, you will find requirements for completing each of the three graduate programs that we offer (MS Earth Science, MS Geosciences, PhD Geosciences). The handbook also contains copies of the forms and timelines required to navigate to your final degree. If you are ever in doubt of your program requirements, the Graduate Catalog has the current information (<a href="http://catalog.wmich.edu/index.php">http://catalog.wmich.edu/index.php</a>, view the "Graduate Catalog 2020-21" from the pull-down menu, then search for your program). The latest Catalog usually becomes available for download in late August each year.

There are two sets of requirements and deadlines that you must be aware of to complete your program. First, the Geological and Environmental Sciences Department has requirements for your coursework and credit hours, and (for the MS Geosciences and PhD programs) presentations/publications and a strict timeline of when each requirement must be fulfilled. These requirements are given in the handbook, listed in the audit letter that you receive each semester, and shown in the WMU Graduate Catalog. Second, the Graduate College has additional requirements and due dates for filing paperwork related to your permanent program, graduate audit, and graduation application. These are on the Graduate College webpage (<a href="http://www.wmich.edu/grad/currentstudents/index.html">http://www.wmich.edu/grad/currentstudents/index.html</a>) and in the handbook. PLEASE be aware of both sets of timelines and due dates!

If you talk to your advisor and other students in the program, you may hear different advice on what courses you need and when (or even if) you are supposed to complete certain requirements. If you are ever in doubt about your program requirements or your progress, please come to me. My job is to know and enforce the requirements for each graduate program.

At the end of each semester, I will perform an audit of your progress. You will receive a letter each semester noting your progress and any requirements that you need to fulfill. These letters are very important, as they will let you know if you are on track. Please note that there are many of you, but only one of me. Mistakes will happen or paperwork will get mislaid. If you find an error in your audit, please let me know as soon as

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possible so that it can be corrected. However, it is also your responsibility to be aware of all program requirements and to submit forms in a timely manner. If it is not in your permanent (red) file, I have no way of knowing that you have completed a requirement.

Luckily, my job as graduate advisor goes beyond just writing nasty letters and making you fill out forms. I am your go-to person if you ever have any questions, concerns, or new ideas about your program, your personal situation with your advisor or committee, or graduate study in the department in general. I want to know about problems that you see and hear about your ideas for how the department can make your life as a graduate student better. If I know what you want to improve, I can work on your behalf to make it happen. Again, I am happy to meet you all and look forward to a good year. Please see my office door (1137 Rood Hall) for posted drop-in hours – these are a good time to stop by to pick up a form, get a signature, or ask a question. I will gladly set up video conferencing with individual students. If you need more extensive help, please make an appointment. The best way to reach me is by email.

Cheers, Peter Voice <a href="mailto:peter.voice@wmich.edu">peter.voice@wmich.edu</a> 269-387-5488

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# PROGRAM REQUIREMENTS & FAQS

#### **Geological and Environmental Sciences**

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The Department of Geological and Environmental Sciences offers the Master of Science in Geosciences, the Master of Science in Earth Science, and the Doctor of Philosophy in Geosciences.

## **Master of Science in Earth Science (Accelerated)** (ERMQ)

Advisor: Dr. Peter Voice Room 1137, Rood Hall

The accelerated graduate degree program in Earth Science allows undergraduate students in the Geological and Environmental Sciences Department at Western Michigan University to begin accumulating credits toward the completion of a Master of Science (non-thesis, Accelerated) in Earth Science degree while completing a bachelor's degree.

When admitted to the accelerated program with senior standing, a student may take up to 12 credit hours of designated coursework that is applied toward both the bachelor's degree and the master's degree. Coursework must be counted from designated classes taken at the 5000-level. Students must earn a grade of "B" or better in order to receive graduate credit for these classes.

An undergraduate degree in geosciences requires a total of 122 credit hours. The Master of Science (Non-thesis, Accelerated) in Earth Science requires a total of 35 credit hours, with 24 credits in Geosciences and 18 credits at the 6000 level. When enrolling in the accelerated program for the maximum 12 graduate credits, a student will earn 145 total undergraduate and graduate credits in contrast to the typical combined 157 undergraduate and graduate credit hours under the usual progression to degree(s). A M.S. (Non-thesis) in Earth Sciences generally requires 2 to 2.5 years to complete, after earning a Geosciences B.S. degree. The accelerated program can be completed in 12 months after the B.S., if the student takes eligible summer classes, or 1.5 years after completion of the B.S. in Geosciences.

A student will pay undergraduate tuition for courses taken as an undergraduate and these courses will be included in the flat tuition rate. On completion of the undergraduate degree, the student will be reclassified as a graduate student and then will pay graduate tuition rates.

#### **Eligibility**

This program is open to undergraduate students who:

- Are enrolled as B.S. students in the Geology, Geochemistry, Geophysics, Environmental Geology or Hydrology majors.
- Have senior status (minimum 88 credit hours) and have earned a minimum of 30 credit hours at WMU and at least 20 credit hours as a declared major in the Geological and Environmental Sciences Department.
- Have and maintain a cumulative overall GPA of at least 3.0 based on at least 88 earned hours, at least 30 of which shall be earned at Western Michigan University.
- Have a cumulative GPA of 3.0 or above in their major classes and a cumulative GPA of 2.5 or above in their cognate classes.

Undergraduate students enrolled in the accelerated program are expected to meet graduate expectations in their designated graduate courses. That is, only courses for which the student receives a grade of 3.0 or better will be transferred into the graduate program.

If a student has received a bachelor's degree, he or she will be ineligible to apply for this program and retroactively claim credits to apply toward the master's degree.

#### Enrollment

- 1. As early as possible in the academic junior year, contact the Geological and Environmental Sciences graduate advisor to discuss this option and review requirements, timelines and application procedures.
- 2. Apply for admission to the Master of Science (non-thesis) in Earth Sciences program in the Geological and Environmental Sciences Department.
- 3. Upon acceptance, meet with the graduate advisor and the undergraduate advisor to prepare an appropriate program of study that meets the requirements for both the undergraduate and graduate degrees.
- 4. A letter advising which courses will be counted in both degrees will be sent to the student and to the Registrar. A copy of this letter also will be included in the student's graduate file.

#### Admission

WMU has an online graduate application system that allows all students (domestic and international) to submit required information into one system. General application information for the University, as well as specific requirements for individual programs, are captured into this system.

To view the admission requirements for the M.S. (Non-thesis, Accelerated) in Earth Science program, please visit <a href="https://www.wmich.edu/grad/admissions/single.php?id=110">wmich.edu/grad/admissions/single.php?id=110</a>.

#### Requirements for continuing eligibility and graduation

- Completing the undergraduate degree with a GPA within the major of less than 3.0 or a GPA in cognate classes of less than 2.5 will automatically declare a student ineligible for the program.
- If a student is admitted to the accelerated program, he or she must follow the program of study developed with the graduate and undergraduate advisors. Failure to follow this program of study may result in ineligibility for the program.
- If a student becomes ineligible to continue participation in the program, he or she will be notified in writing by the graduate advisor.
- In order to progress automatically into the graduate program, a student must achieve a grade of "B" or better in each of the courses being counted for both the undergraduate and graduate degrees. If the student does not meet this requirement, he or she will have the earned grade applied only to the undergraduate degree. If a student completes the undergraduate degree including a "B" or above in a minimum of 6 credits of the specified courses, he or she will be admitted as a graduate student (with the relevant graduate credit) in the next semester or session after receiving the bachelor's degree.
- It is expected that the baccalaureate degree will be awarded within one calendar year after initial accelerated program enrollment. If a student does not meet this time constraint, he or she must reapply to be admitted to the graduate program.
- When a student completes the accelerated degree program, it will be noted on his or her undergraduate and graduate transcripts.
- A student may withdraw at any time from the program by informing the Geological and Environmental Sciences graduate advisor in writing. A copy of the request to withdraw must be sent to the Registrar.
- A student must complete the requirements for the M.S. (Non-thesis, Accelerated) degree within 24 months (2 years) from the completion of the bachelor's degree. If the student is unable to meet these requirements, he or she must apply for an extension with the Geological and Environmental Sciences Department graduate advisor.

Hours may include satisfactory completion of up to 7 credits of:

- GEOS 5170 Research Project Credits: 3 hours
   OR
- GEOS 7100 Independent Research Credits: 2 to 6 hours (may include up to four hours of GEOS 7100)
   OR
- GEOS 7120 Professional Field Experience Credits: 2 to 12 hours

#### (may include up to three hours of GEOS 7120)

#### Geoscience courses eligible for the program

- GEOS 5010 Geologic Communications and Presentations Credits: 1 hour
- GEOS 5060 Introduction to Soils Credits: 3 hours
- GEOS 5090 Surface Water Hydrology Credits: 3 hours
- GEOS 5100 Advanced Earth Materials Credits: 3 hours
- GEOS 5120 Principles of Hydrogeology Credits: 3 hours
- GEOS 5170 Research Project Credits: 3 hours
- GEOS 5200 Economic Geology Credits: 3 hours
- GEOS 5210 Geological and Environmental Remote Sensing Credits: 4 hours
- GEOS 5230 Hazardous Waste Operation and Emergency Response Credits: 1 hour
- GEOS 5240 Remediation Design and Implementation Credits: 1 hour
- GEOS 5250 Surface Geophysics Credits: 1 hour
- GEOS 5260 Principles and Practices of Aquifer Testing Credits: 1 hour
- GEOS 5270 Principles of Well Drilling and Installation Credits: 1 hour
- GEOS 5280 Principles/Practices of Ground-water Sampling/Monitoring Credits: 1 hour
- GEOS 5350 GIS Applications in Geological and Environmental Sciences Credits: 3 hours
- GEOS 5360 Glacial Geology Credits: 3 hours
- GEOS 5400 Igneous and Metamorphic Petrology Credits: 4 hours
- GEOS 5430 Petrology and Petrography Credits: 3 hours
- GEOS 5450 Hazardous Waste Remediation Credits: 3 hours
- GEOS 5550 Introduction to Geochemistry Credits: 3 hours
- GEOS 5600 Introduction to Geophysics **Credits:** 3 hours
- GEOS 5610 Reflection Seismology Credits: 3 hours
- GEOS 5630 Electrical Methods Credits: 3 hours
- GEOS 5730 UAVs Geological and Environmental Applications Credits: 3 hours
- GEOS 5740 UAVs: Geophysical Applications Credits: 3 hours

#### **Master of Science in Earth Science (ERMM)**

The Master of Science in Earth Science (Non-thesis) is a non-thesis program that permits students to design programs of study, in consultation with the program advisor, that are compatible with the individual's goals. The program is intentionally flexible; course work may be drawn from geosciences, biological sciences, chemistry, anthropology, economics, political science, communication, and physics, among others.

#### **Admission Requirements**

- 1. Grade-point average of at least 3.0 (of 4.0) for previous two years of undergraduate work is strongly recommended and is required for full consideration for financial support via teaching assistantships. However, teaching assistantships will be awarded preferentially to students enrolled in the M.S. and Ph.D. Geosciences programs.
- 2. Students must have successfully completed GEOS 1300, 3010, and a minimum of three credits of field experience approved by the Graduate Director, or equivalent, or must complete these courses prior to finishing the degree.

#### **Program Requirements**

1. Complete a minimum of 35 hours of graduate course work

with at least 18 hours at the 6000-level or above.

- 2. A core of 24 semester hours in Geosciences is required.
- 3. Hours may include satisfactory completion of up to 7 hours of:
  - GEOS 5170 Research Project Credits: 3 hours OR
  - GEOS 7100 Independent Research Credits: 2 to 6 hours (may include up to four hours of GEOS 7100)
     OR
  - GEOS 7120 Professional Field Experience **Credits:** 2 to 12 hours (may include up to three hours of GEOS 7120)
- 4. Students are strongly encouraged to attend weekly departmental seminars.

#### **Master of Science in Geosciences (GESM)**

Advisor: Dr. Peter Voice Room 1137, Rood Hall

The Master of Science in Geosciences is designed to prepare the student for professional work in geology and for further graduate study. The program has four core areas of specialization: Hydrogeology, Geochemistry and Economic Geology, Geophysics and Tectonics, Stratigraphy and Sedimentary Geology.

Please note: Under exceptional circumstances, a student may request that their advisor petition the faculty for approval of modifications to the timelines stated below. Exceptions may only be granted by a faculty vote.

#### **Admission Requirements**

- 1. Undergraduate major in geology or a related field. Students must have completed, or will be required to complete as soon as possible upon enrollment in the program, GEOS 1300, 3010, and a minimum of three credits of field experience approved by the Graduate Director, or equivalent. Any remedial course work completed upon enrollment in the graduate program must be completed with grade of "B" or better to satisfy this requirement. For students who enter the program with course work deficiencies, program requirement timelines (see below) will begin once remedial work has been satisfactorily completed, rather than upon matriculation in the program.
- 2. Grade point average of at least 3.0 (of 4.0) for the previous two years of undergraduate work is strongly recommended and is required for full consideration for financial support via teaching assistantships.
- 3. Three letters of recommendation are required of all applicants from persons well situated to evaluate his/her qualifications for graduate study. If they are coming from a faculty member at a college or university, the letter should be on that school's letterhead. Letters must be submitted through the WMU electronic application system.
- 4. Graduate Record Examination (GRE) scores are not required for admission. Individual advisors may request GRE scores for admission; please talk with your potential advisor.

#### **Program Requirements**

#### 1. Choose a graduate advisor by the end of the first semester after matriculation.

No later than the end of the third academic semester, the student should complete three (3) hours of research (GEOS 6340) with this advisor in the preparation of a thesis proposal, and file appropriate paperwork identifying a thesis committee composed of the primary advisor, at least one other Geological and Environmental Sciences department faculty member, and a third committee member who may be internal or external to the department.

#### 2. Qualifying Requirement.

This requirement must be completed no later than the end of the second full year in residence. Students must achieve an average grade of "BA" in two of four core graduate courses. One graduate course in each of the four areas (Hydrogeology, Geochemistry and Economic Geology, Geophysics and Tectonics, Stratigraphy and Sedimentary Geology) will be designated as a "core" course (see graduate advisor for details). In some cases, students may enter the program with a strong background in one or more of the core areas. Such students may be excused from enrolling in one or more core courses by achieving a grade of "B" or better on the final examination for the course(s), provided these result in an average grade of "BA" for two of the core courses. Students who do not achieve a "B" in a core area, or an average of "BA" for two core courses, on their first attempt will be given one additional opportunity to either pass each course or the final examination with a grade of "B" or the grade necessary to achieve an average of "BA" for two of the core courses.

#### 3. Proposal Examination.

By the end of the third academic semester in residence, students must develop a written proposal describing their planned research. This proposal will be presented in a public 15-20 minute talk and will be followed by a closed-door oral examination covering both the proposal and related aspects of Geosciences, to be conducted by the student's chosen thesis committee. Students who do not pass the proposal exam may be given one additional opportunity to repeat the examination. A second attempt must be made within a timeframe to be determined by the student's thesis committee, and must occur no later than the end of the next academic semester.

### 4. Complete at least thirty (30) total graduate credit hours in Geosciences and related areas

(mathematics, physical sciences); at least fifteen (15) credit hours must be at the 6000-level or above, and at least twenty-one (21) of the total credits must be completed in Geosciences. At least eighteen (18) credits of Geosciences coursework must be completed, exclusive of GEOS 6340: Research in Geology and Earth Sciences, GEOS 7100: Independent Research, GEOS 7120: Professional Field Experience, GEOS 7000: Master's Thesis, and GEOS 7350: Graduate Research.

- 5. Attend weekly departmental seminars.
- 6. Satisfactory completion of six (6) hours of the following:
  - GEOS 7000 Master's Thesis **Credits:** 1 to 6 hours
- 7. At least one scientific presentation must be given at an approved external venue

prior to graduation, or at least one scientific paper must be submitted to an approved refereed journal prior to graduation. Journals and venues must be approved by the student's thesis committee. See the graduate advisor for examples of approved journals and presentation venues.

#### 8. Successfully defend thesis.

The student will give a 30-45 minute public presentation describing the results of his/her research. This will be followed by a closed-door defense to be conducted by the members of the student's thesis committee. See the appropriate section of this Graduate Catalog for policies and procedures in the event of an unsuccessful defense. The final written thesis must conform to the requirements explained in the University's *Guidelines for the Preparation of Theses, Projects, and Dissertations* and may be written according to one of the following options:

#### a. Option 1:

The student will present a traditional comprehensive thesis based on the master's research. The thesis must include an introduction, review of relevant literature, description of methodology used in the thesis research, presentation of the results (including appendices of data where appropriate), and discussion of the significance of the research.

#### b. Option 2:

The student will present at least one first-authored journal paper based on the thesis research that has been submitted for publication and is deemed to be publishable by the student's thesis committee. A separately written introduction including a brief literature review, summary of the significance of the work, and appendices of data (where appropriate) must also be submitted.

#### **Graduate Certificate**

#### **Graduate Certificate Program in Hydrogeology (HYDC)**

The Certificate in Hydrogeology program provides students with field, technical, and analytical skills that prepare them for successful careers in hydro- and environmental geology. Through online offerings, classroom, lab, and field studies students will learn how to collect environmental field data, water and sediment sampling techniques, the principles and practices of near-surface geophysics, drilling and water well installation methods, environmental assessment and hydrogeologic measurement techniques, field geochemistry, scientific writing, data presentation, data analysis, and problem-solving skills. Trained environmental professionals are needed to solve problems concerning drinking water supplies, wastewater treatment, water resources availability, subsurface contaminant transport, water quality and quality assessment, the effects of climate and land-use change on water and wetland resources, and many other environmental issues. Employment opportunities may include work dealing with: environmental consulting, environmental regulations, hydrogeologic investigation, wetland mitigation, flood prediction, pollution abatement and remediation, and environmental geochemistry.

Coursework is twelve credit hours in Geosciences. The certificate requires completion of 3 credit hours of GEOS 5120 and 9 additional credit hours available either online or face-to-face. A list of the appropriate courses is available from the certificate coordinator. The certificate is open to degree and non-degree graduate students.

#### Required courses (3 credits)

• GEOS 5120 - Principles of Hydrogeology Credits: 3 hours

#### Choose 9 credits of the following

- GEOS 5060 Introduction to Soils Credits: 3 hours
- GEOS 5090 Surface Water Hydrology Credits: 3 hours
- GEOS 5140 Isotope Hydrology Credits: 3 hours
- GEOS 5230 Hazardous Waste Operation and Emergency Response Credits: 1 hour
- GEOS 5240 Remediation Design and Implementation Credits: 1 hour
- GEOS 5250 Surface Geophysics Credits: 1 hour
- GEOS 5260 Principles and Practices of Aquifer Testing Credits: 1 hour
- GEOS 5270 Principles of Well Drilling and Installation Credits: 1 hour
- GEOS 5280 Principles/Practices of Ground-water Sampling/Monitoring Credits: 1 hour
- GEOS 5360 Glacial Geology Credits: 3 hours
- GEOS 5450 Hazardous Waste Remediation Credits: 3 hours
- GEOS 6000 Hydrogeochemistry Credits: 3 hours
- GEOS 6050 Groundwater Modeling Credits: 3 hours
- GEOS 6120 Advanced Hydrology Credits: 3 hours
- GEOS 6130 Wetlands Hydrology Credits: 3 hours
- GEOS 6150 Contaminant Hydrology Credits: 3 hours
- GEOS 6170 Stable Isotope Geochemistry Credits: 3 hours

#### For retention students must comply with the following:

In order to remain in good academic standing, graduate students must maintain a minimum cumulative GPA of 3.0. Students who fail to meet the program's criteria may be placed on probation or dismissed from the program.

# Graduate Certificate Program in UAVs Applications in Geological and Environmental Sciences (UGEC)

The Department of Geological and Environmental Sciences jointly with the College of Aviation (COA) at Western Michigan University is offering a nine credit hour certificate in the geological and environmental applications of unmanned aerial vehicles (UAVs). The certificate program provides a comprehensive understanding of the available geophysical and remote sensing sensors mounted on UAVs, and training on the acquisition of the UAV observation and their applications in addressing geological and environmental problems of interest such as mapping of environmental hazards (e.g., algal bloom distribution, contaminant releases, flood assessment, landslides, fire and volcano monitoring), and mapping of natural resources (water, mineral, forestry, vegetation intensity and type, and wildlife). Two courses will be taught in Geological and Environmental Sciences each for three credit hours, one in remote sensing fundamentals, methods, and applications in geological and environmental sciences, and the second in geophysics fundamentals, methods, and applications in geological and environmental sciences. Both courses will also cover the acquisition, download, processing, and analysis of UAV datasets in the department. One three credit hour hybrid course will be taught by the COA; the course will provide an introduction to unmanned aerial systems, operations, Federal Aviation Administration regulations, fundamentals of flight and weather, and preparation for the FAA UAS knowledge examination. All classes will be offered during summer sessions.

#### **Admission Requirements**

A BS degree and completion of application online. Applicants planning on enrolling in the graduate UAV certificate in conjunction with a graduate degree program must submit separate online applications for each program.

#### Program Requirements (9 hours)

• GEOS 5730 - UAVs Geological and Environmental Applications Credits: 3 hours

(hybrid)

- GEOS 5740 UAVs: Geophysical Applications Credits: 3 hours (hybrid)
- AVS 5300 Unmanned Aerial Systems I Credits: 3 hours (hybrid)

#### **Doctor of Philosophy**

#### **Doctor of Philosophy in Geosciences (GESD)**

The Doctor of Philosophy in Geosciences is a research degree designed for persons intending to take leadership roles in teaching and research in one of four core areas of the Geosciences: Hydrogeology; Geochemistry and Economic Geology; Geophysics and Tectonics; Stratigraphy and Sedimentary Geology. Applicants will be expected to meet the minimum entrance requirements of the Graduate College and must demonstrate an interest in, and aptitude for, conducting high quality research.

Please note: Under exceptional circumstances, a student may request that the primary advisor petition the faculty for approval of modifications to the timelines stated below. Exceptions may only be granted by faculty vote.

#### **Admission Requirements**

- 1. Bachelor's or master's degree in geology or related field is required; an M.S. degree is strongly recommended. Students must have completed, or must complete as soon as possible upon enrollment, GEOS 1300, 3010, and a minimum of three credits of field experience approved by the Graduate Director, or its equivalent. Any remedial course work completed upon enrollment in the graduate program must be completed with grade of "B" or better to satisfy this requirement. For students who enter the program with course work deficiencies, program requirement timelines (see below) will begin once remedial work has been satisfactorily completed, rather than upon matriculation in the program.
- 2. Grade-point average of 3.25 (of 4.0) for prior graduate work. To be admitted without an M.S. degree, a GPA of at least 3.25 (of 4.0) during the previous two years of undergraduate work is required.
- 3. Three letters of recommendation are required of all applicants from persons well situated to evaluate his/her qualifications for graduate study. If they are coming from a faculty member at a college or university, the letter should be on that school's letterhead. Letters must be submitted through the WMU electronic application system.
- 4. Graduate Record Examination (GRE) scores are not required for admission. Individual advisors may request GRE scores for admission; please talk with your potential advisor.

#### **Financial Assistance**

Several departmental, University and grant-funded fellowships, teaching assistantships, and research assistantships are available. Application forms and additional information are available from the Department of Geological and Environmental Sciences and from the Graduate College.

#### **Program Requirements**

#### 1. Choose a graduate advisor within two semesters following matriculation.

Within three semesters following matriculation, the student must choose a doctoral committee. This committee will be chaired by the student's primary advisor, and must include one other faculty member from within the Geological and Environmental Sciences Department, as well as a third committee member from outside the Geological and Environmental Sciences Department. It is strongly recommended that the third committee member be chosen from an outside research facility or university, although members may also be chosen from other programs at WMU, if appropriate. The committee should be chosen to reflect the

doctoral student's expressed research interests. The committee will facilitate and guide the student's development within the academic and research programs of the department and University.

#### 2. Complete at least three research credit hours

directed toward preparing a dissertation research proposal, with the student's primary graduate advisor by the end of the second semester of residence.

GEOS 6340 - Research in Geology and Earth Science Credits: 1 to 4 hours

#### 3. Qualifying Requirement.

This requirement must be completed no later than the end of the fourth semester in residence. Students must achieve an average grade of "BA" in three of four core graduate courses. One graduate course in each of the four areas (Hydrology, Geochemistry and Economic Geology, Geophysics and Tectonics, Stratigraphy and Sedimentary Geology) will be designated as a "core" course (see graduate advisor for details). In some cases, students may enter the program with a strong background in one or more of the core areas. Such students may be excused from enrolling in one or more core courses by achieving a grade of "B" or better on the final examination for the course(s). Students who do not achieve a "B" or better in a core area on their first attempt (or an overall average of "BA" for the three courses) will be given one additional opportunity to either pass each core course or the final examination with a grade sufficient to achieve an average of "BA" for the three courses.

#### 4. Proposal Examination:

By the end of the fourth semester, students must develop a written proposal describing their planned doctoral research. This proposal will be presented in a public 20-minute talk. The talk will be followed by a closed-door oral examination, to be conducted by the student's doctoral committee. Students who do not pass the proposal exam will be given one additional opportunity to repeat the examination. A second attempt must be made within a timeframe to be determined by the student's doctoral committee, and must occur within one year of the first attempt. If the external committee member cannot be present on campus for the proposal examination, they may attend virtually or submit written comments or questions.

#### 5. Complete at least sixty (60) total credit hours

of which thirty (30) credit hours must be at the 6000-level or above. At least eighteen (18) GEOS graduate credit hours of course work is required, not including credit from courses used to fulfill the core course requirement, exclusive of GEOS 6340: Research in Geology and Earth Science, GEOS 7100: Independent Research, GEOS 7120: Professional Field Experience, GEOS 7300: Doctoral Dissertation, and GEOS 7350: Graduate Research.

#### 6. Complete 15 hours of the following:

• GEOS 7300 - Doctoral Dissertation Credits: 1 to 15 hours

#### 7. Demonstrate proficiency in two appropriate research tools.

At least one of the research tools must be completed outside of the student's declared core area of study. Students are strongly encouraged to complete at least one tool via course work or other training outside of the Geological and Environmental Sciences Department. For details regarding acceptable research skills, consult with the graduate advisor. Research tools may include:

• Achieving a working knowledge of statistics by receiving a grade of "B" or better in an approved course or by showing the ability to apply advanced statistical analysis to the doctoral research.

- Demonstrating competence in computer science or programming by receiving a grade of "B" or better in an approved course or by applying computer programming to the doctoral research.
- Demonstrating proficiency in areas relevant to the doctoral research, including mathematics, biological sciences, chemistry, geography, remote sensing, physics, or engineering. Proficiency will be demonstrated by achieving a grade of "B" or better in an approved graduate course.
- Mastering the design, repair or development of instrumentation used as part of an approved Geosciences course or in the doctoral research.
- Demonstrating development, while enrolled in the doctoral program, of reading competency in a foreign language
  relevant (as deemed by the student's primary advisor) to the student's dissertation research. This skill will be
  demonstrated by receiving a grade of "B" or better in a 4010 course in the language, by passing a standardized
  examination, or by successfully translating one or more technical articles assigned by the student's primary advisor.

#### 8. Attend weekly departmental seminars.

In each year in residence following a successful dissertation proposal defense, the student must give a 12-minute seminar presentation. An external presentation at an approved (by the student's doctoral committee) conference will fulfill this requirement in any year of study. The dissertation defense oral presentation, if completed during the academic year, will fulfill this requirement in the final year of study.

#### 9. Students must give at least one scientific presentation

in an approved (by the student's doctoral committee) external venue prior to graduation.

### 10. At least one first-authored paper must be accepted for publication in a peer-reviewed journal prior to graduation.

Under exceptional circumstances, the doctoral candidate may petition the Geological and Environmental Sciences faculty to allow a first-authored paper submitted to a journal for peer review to be accepted in lieu of an accepted publication. Decisions regarding the petition will be made by majority vote of the faculty.

#### 11. Successfully defend dissertation.

The student will give a 50-minute public presentation. This will be followed by a closed-door defense to be conducted by the members of the student's doctoral committee. See this Graduate Catalog for policies and procedures in the event of an unsuccessful defense. The final written dissertation must conform to the requirements explained in the University's *Guidelines for the Preparation of Theses, Projects, and Dissertations* and may be written according to one of the following two options:

#### a. Option 1:

The student will write a traditional comprehensive dissertation based on the doctoral research. The dissertation should include an introduction, review of the relevant literature, description of methodology used in the dissertation research, presentation of the results (including appendices of data where appropriate), and discussion of the significance of the research.

#### b. Option 2:

The student will present at least two first-authored journal papers, which may include the paper written to fulfill program requirement #11, that have been accepted for publication in appropriate peer-reviewed journals. A separately written introduction including a brief literature review, summary of the relevance/conclusions of the studies and an appendix of data (where appropriate) must also be submitted.

#### **Geosciences Graduate Program Frequently Asked Questions (FAQs)**

#### 1. What are the core courses?

Principles of Hydrogeology (GEOS 5120) Introduction to Geochemistry (GEOS 5550) Introduction to Geophysics (GEOS 5600) Sed/Strat (choose one from GEOS 5110, 6460, or 6560)

Note Students who entered the program before Fall 2019 may still use GEOS 6450, 6550 or 6650 for the Sed/Strat Core. Students who entered before Fall 2021 may still use GEOS 6110 for the Sed/Strat Core.

#### 2. Can I substitute another course for a core course?

No, only the courses listed above count as cores.

#### 3. How many core courses do I need to take and what grade do I need?

MA students are not required to take any core courses. MS students must complete two (of four) with a "BA" grade average by the end of their second full year in residence. PhD students must complete three (of four) with a "BA" grade average by the end of their second full year in residence.

#### 4. Can I test out of a core course?

Yes, you may be excused from enrolling in a core course by earning a grade of "B" or better on the final exam (provided that your average grade across two core courses is a "BA" or better). Contact the instructor of the course to set up the exam and ask the instructor to send the results of the exam to the Graduate Advisor so that your exemption can be noted in your program file. You should be notified of results within two weeks of taking the exam. Please contact the Graduate Advisor if there is a delay in receiving your exam score.

#### 5. What if I took a core course at another university?

You may test out of the WMU core course by passing the final exam with a grade of "B" or better. Contact the instructor of the course to set up the exam, and ask the instructor to send the results of the exam to the Graduate Advisor so that your exemption can be noted in your program file. You should be notified of results within two weeks of taking the exam. Please contact the Graduate Advisor if there is a delay in receiving your exam score.

#### 6. How many credits should I enroll in?

This depends on your personal and academic situation. If you are on appointment (GA or DA), you are required to enroll in a minimum of 6 credit hours per fall/spring academic semester, and 3 hours per summer semester that you stay on appointment. Students on appointment may enroll in a maximum of 9 credit hour per fall/spring semester, and 3 per summer session. If you have finished all of your program requirements other than thesis/dissertation credits and are on appointment, you may underenroll (see Graduate Advisor).

If you are not on appointment, you may take as many or as few credits as you wish. However, we strongly recommend not taking more than 9 credits at the graduate level per academic semester. Three credit hours is considered part-time enrollment, and 6 hours is considered full time enrollment.

For the full policy on enrollment, please see the Graduate Catalog and the Graduate College webpage.

#### 7. Is there a grade requirement for graduate courses?

Only course that receive a grade of "C" or higher can be counted in a graduate program. The Graduate College requires that students maintain a "B" (3.0) grade point average in all graduate-level coursework. For the full grade policy, please see the <u>Graduate Catalog</u>.

#### 8. What does it mean to be admitted to a graduate program with conditions?

If you are admitted to a graduate program with conditions, these will be noted in your admittance letter. You are required to meet these conditions to remain in and graduate from the program.

If your conditional admit involves undergraduate coursework, you will need to complete the courses noted in your letter prior to your graduation. We strongly recommend that you complete any conditional coursework in your first academic year, as many advanced courses will require these basic courses as prerequisites. Please see the Graduate Advisor for help in planning your program to accommodate this coursework.

#### 9. Can I use undergraduate coursework in a graduate program?

Undergraduate coursework (any coursework not at the 5000, 6000, or 7000 level) may not be counted in a graduate program.

#### 10. Can I transfer coursework from another university or another degree program?

Coursework taken elsewhere or during another degree program at WMU can be transferred to your current graduate program. Only graduate-level courses in which a grade of "B" or better was earned and taken in the past 6 years (7 years for PhD), may be transferred.

The maximum amount of transfer credits allowed differs by degree program. MA and MS students may transfer a total of 6 credit hours. PhD students may transfer a total of 9 credit hours. Independent study, thesis and dissertation credits may not be transferred.

Coursework transferred from another university may be used to fulfill general program credit hour requirements. It may not be used to fulfill requirements of GEOS coursework or core courses.

#### 11. Can I earn a graduate certificate while enrolled in a graduate program?

Yes, you may be enrolled in both a certificate program and a graduate program. You may "double count" the coursework you are applying toward your MA, MS, or PhD toward a graduate certificate program. And you may apply graduate certificate coursework toward the MA, MS, or PhD program. For example, the courses you take for the Hydrogeology Graduate Certificate can also be applied to your MA, MS, or PhD.

You need to apply to the graduate certificate program in addition to your MA, MS, or PhD program. You also need to apply for graduation separately for the certificate program and for the MA, MS, or PhD.

12. Can I earn a graduate certificate and then apply that coursework toward a graduate degree?

Yes, you may complete a graduate certificate program, and then enroll in the MA, MS, or PhD program. The coursework you took toward the certificate can be applied to the graduate degree program

provided that the coursework was at the graduate level, taken within the last 6 years, and earned a grade of "C" or better.

#### 13. Do I have to attend seminar?

MS and PhD students are required to attend the weekly department seminar each semester. MA students are strongly recommended to attend. If you are unable to attend due to your residence or work schedule, please contact the Graduate Advisor.

Any missed seminars need to be made up by attending extra seminars in Geosciences, attending a seminar in another department, attending a student presentation (such as a thesis/dissertation proposal defense, or a thesis/dissertation defense), or by attending a conference outside of WMU (counts at 1 seminar).

Please remember to complete the seminar form each time you attend a regular or make-up seminar. Without the form, there is no way to track your attendance.

#### 14. How do I fulfill my external presentation and/or publication requirements?

For a publication, please send a copy of the email indicating acceptance of your paper to the Graduate Advisor. A copy will be put in your graduate file. For a presentation, please give a copy of your accepted abstract and/or the program page showing the time and date of your presentation to the Graduate Advisor. These will be put in your graduate file. Both oral and poster presentations are acceptable.

#### 15. How can I fulfill the annual presentation requirement for the PhD program?

In each academic year following your dissertation proposal approval, you must present your research in either an oral or poster format. This presentation may take place at an external conference (for example, GSA or AGU), a conference internal to WMU, during the department seminar, or in another format approved by your advisor. Submit a copy of the abstract and/or program page showing the time and date of your presentation to the Graduate Advisor to be recorded in your file. Your dissertation defense may be used to fulfill this requirement in your final year.

#### 16. Travel Support

The Department of Geological and Environmental Sciences will try to provide financial support to help offset the expense of student travel to professional conferences in which the student is presenting. This support will be prioritized for, but not limited to, conference presentations that fulfill program requirements. The level of support is contingent on department resources and the conference attended.

Students who receive support are expected to present their talk or poster in departmental events.

We also encourage students to pursue other sources of funding to help cover the cost of their travel including:

- 1) Travel Grants from the WMU Graduate College (details described in the section of the handbook on travel and research grants)
- 2) Travel support from the professional societies sponsoring the conference. Many professional organizations (e.g., AGU, GSA, SEPM, etc.) and their various regional sections and divisions provide stipends to help offset the cost of travel. Support may also be available in the form of

student volunteer work at the conference – which may include waiving conference fees, providing stipends, or other travel support when a student volunteers at the conference.

#### 17. How do I switch between programs?

You are permitted to internally switch between degree programs if your circumstances change and you can no longer continue in your current program. If you are switching within a program, i.e., MS Earth Science to MS Geosciences, MS Geosciences to MS Earth Sciences or from PhD to MA/MS, you do not need to reapply to the university. If you are switching from the MA/MS program to the PhD program, a new application through the Graduate College is required.

To switch from one MS program to the other, consult with the Graduate Advisor.

To switch from the PhD to the MS or MA program, consult with the Graduate Advisor.

To switch from the MA or non-thesis MS Earth Sciences to the MS Geosciences program, you will need to first take the GREs and identify a faculty member who is willing to serve as your thesis advisor. This faculty member will need to contact the Graduate Admissions Committee chair with your request to change programs. The Admissions Committee will consider your request. If approved, consult with the Graduate Advisor to plan your program.

To switch from the MA or MS to the PhD program, you are required to apply to the university. You must take the GREs (if not done already) and identify a faculty member who is willing to serve as your dissertation advisor. This faculty member will need to contact the Graduate Admissions Committee chair with your request to change programs. The Admissions Committee will consider your request. If approved, consult with the Graduate Advisor to plan your program.

#### 18. When and how do I choose an advisor?

MS students must choose an advisor by the end of their first semester enrolled in the program. PhD students must choose an advisor by the end of their second semester. Both MS and PhD students indicate their choice of advisor by filing the *Declaration of Advisor* form with the department office.

It is assumed that your advisor will be the chair of your thesis/dissertation committee. Therefore, your advisor must be a tenured or tenure-track faculty member in the Department of Geosciences.

#### 19. When and how do I form my thesis/dissertation committee?

A committee can be formed at any time, but no later than the end of the third semester of enrollment (for both MS and PhD programs). Fill out the <u>Committee appointment</u> form, collect signatures, and submit it to the department office.

#### 20. Who can be on my thesis/dissertation committee?

A committee has a minimum of three members (one chairperson/advisor and at least two members). The chairperson must be a tenured or tenure-track faculty member in the Department of Geosciences. For the MS program, at least one member (in addition to the chairperson) must be from within the Geosciences department. For the PhD program at least one member must be from outside of the Geosciences department. See the Thesis & Dissertation Policy document for additional details. Please

make sure to inform Lisah Crall and the Graduate Advisor if you have an external committee member – as that committee member will need to be approved by the Graduate College.

#### 21. How do I change advisors (or change who is on my thesis/dissertation committee)?

If you have not yet formed a thesis/dissertation committee, you may indicate a change of advisor simply by filing a new *Declaration of Advisor* form with the department office. If you have already formed a thesis/dissertation committee and wish to change your advisor or your committee membership, you must file a new Committee appointment form with the main office and the Graduate College.

If you have already passed your thesis/dissertation proposal defense, you may change your advisor, committee, and/or your thesis/dissertation topic. However, you will be required to pass a second thesis/dissertation proposal defense for your new project.

#### 22. When can I schedule my thesis/dissertation proposal defense?

After your committee chairperson and members have approved of the written proposal you may schedule your defense by submitted a signed copy of the *Presentation Scheduling Approval Form* to the main office. The form should be submitted at least two weeks prior to the defense date.

#### 23. How long will my thesis/dissertation proposal defense take?

A 2 hour block should be scheduled to accommodate the 20 minute public presentation and 20-30 minutes of public questioning, plus up to 1 hour for the closed-door oral examination. Proposal defenses may only be scheduled during the **Fall, Spring, and Summer I semesters.** At the conclusion of the proposal presentation, audience members will have an opportunity to question the student about the intended research. Following the open questioning period, the student will remain with his/her committee for a closed-door oral examination. At the end of the oral examination, the committee will excuse the student and render a pass/no pass decision.

#### 24. When can I start taking thesis/dissertation credits?

You must have completed 3 credits of GEOS 6340 with your advisor and have formed a committee (by submitting the required form) before you will be permitted to enroll in thesis/dissertation credit hours. You may start taking thesis or dissertation credits in the semester in which you defend your thesis or dissertation proposal with permission from your internal committee members and a signed copy of the Permission to take thesis credits form. You are not permitted to enroll in thesis/dissertation credit hours for more than two semesters without having defended your proposal. You must file a *Permission to Elect* form (signed by your advisor) when you start taking thesis/dissertation credits.

#### 25. I've started taking thesis/dissertation credits. Do I have to keep taking them?

Yes, the Graduate College calls this "continuous enrollment." Once you begin taking thesis or dissertation credits, you must continuously enroll in at least 1 thesis/dissertation credit up to and including the semester of your graduation. You do not need to enroll in summer credits unless you plan to graduate during one of the summer sessions.

Please plan your schedule carefully! MS students may count no more than 6 hours in their programs, and PhD students may count no more than 15 hours.

#### 26. When can I schedule my thesis/dissertation defense?

All program requirements (including coursework, presentation and/or publications, and seminar attendance) must be met before you are permitted to schedule your defense. After your committee

chairperson and members have approved of the written thesis or dissertation you may schedule your defense by submitted a signed copy of the *Presentation Scheduling Approval Form* to the main office. The form should be submitted at least two weeks prior to the defense date. Doctoral students must also schedule their defense with the Graduate College using the <u>Dissertation Defense Scheduling</u> form. Please check the Graduate College website for deadlines.

#### 27. How long will my thesis/dissertation defense take?

Doctoral candidates should schedule a 2.5-hour block to accommodate the 50-minute presentation, 30-40 minutes of open questioning, and 1-1.5 hours of closed-door examination. Master's candidates should schedule a 2-hour block to accommodate the 30-45 minute presentation, 30-40 minutes of open questioning, and up to 1 hour of closed-door examination. **Defenses may only be scheduled during the Fall, Spring, and Summer I semesters.** Doctoral students will need to schedule their defense with both the department and the WMU Graduate College using the scheduling forms. MS Geosciences students only need to schedule their defense with the department – using the department scheduling form.

#### 28. How do I advance to doctoral candidacy?

A doctoral student advances to candidacy once all of the following conditions have been met: (1) you have earned a "BA" average across three core courses, (2) you have completed 3 credits of GEOS 6340 with your advisor with a grade of "B" or higher, (3) you have earned 18 hours of Geosciences coursework, exclusive of cores and independent study courses, (4) you have completed two research tools, and (5) you have passed both the written and oral dissertation proposal defense. Once these conditions have been met, you may file the <u>Admission to Doctoral Candidacy</u> form with the main office.

# THESIS & DISSERTATIONS DEADLINES

#### **Thesis and Dissertation Deadlines**

Please note deadlines sent out by either Lisah Crall or the Graduate Advisor. You can also check the Graduate College's webpage for current deadlines (<a href="https://wmich.edu/grad/dissertation-deadlines">https://wmich.edu/grad/dissertation-deadlines</a>).

#### 2023 Dissertation, Specialist Project, and Master's Thesis Deadlines

	Deadling to ask dula diagontation defence for Coming 2022
Eriday Fahrmany 24 2022	Deadline to schedule dissertation defense for Spring 2023
Friday, February 24, 2023	
E:1 W 140 2022	Last day for doctoral candidates to hold dissertation defense
Friday, March 10, 2023	for Spring 2023
	Defended dissertations due in the Graduate College for Spring
Friday, March 17, 2023	2023 graduation
	Defended specialist projects and master's theses due in the
Friday, March 24, 2023	Graduate College for Spring 2023 graduation
Saturday, April 29, 2023	Spring commencement
	Deadline to schedule dissertation defense for Summer I 2023
Friday, April 28, 2023	graduation
	Last day for doctoral candidates to hold dissertation defense
Friday, May 12, 2023	for Summer I 2023
	Defended dissertations, specialist projects, and master's theses
Friday, May 19, 2023	due in the Graduate College for Summer I 2023 graduation
	Deadline to schedule dissertation defense for Summer II 2023
Friday, June 23, 2023	graduation
Saturday, June 24, 2023	Summer I commencement
	Last day for doctoral candidates to hold dissertation defense
Friday, July 7, 2023	for Summer II 2023
	Defended dissertations, specialist projects, and master's theses
Friday, July 14, 2023	due in the Graduate College for Summer II 2023 graduation
Friday, August 11, 2023	Summer II semester ends; no commencement ceremonies
, , , , , , , , , , , , , , , , , , , ,	Deadline to schedule dissertation defense for Fall 2023
Friday, October 13, 2023	graduation
	Last day for doctoral candidates to hold dissertation defense
Friday, October 27, 2023	for Fall 2023 graduation
111449, 0000001 27, 2020	Defended dissertations due in the Graduate College for Fall
Friday, November 3, 2023	S
Friday, November 10,	Defended specialist projects and master's theses due in the
2023	Graduate College for Fall 2023 graduation
Saturday, December 16,	Fall commencement
2023	ran commencement
2023	

# IMPORTANT FORMS

# **Advising Forms**

Accele	erated MS Earth Sciences Progra	ım Timetable
ACTION NEEDED	TIMELINE	FORM NEEDED
Investigate program	Undergraduate junior year	None – meet with Graduate Advisor
		to discuss program options
Enroll in program	Senior year	Apply for admission to the
	(minimum 88 credits, 30	Accelerated MS Earth Science
	credits at WMU, and 20	degree program through
	credits in Geosciences)	wmich.edu/apply
Plan program of study	Senior year	Accelerated Graduate Degree
	(when accepted to the	<b>Programs Course Approval</b> form
	program)	*Located on Graduate College
		website: wmich.edu/grad/forms
Enroll in courses	All semesters until program	None
	requirements are met	
		Use <b>Authorization for Independent</b>
		Study form if taking independent
		study credits
Complete BS degree	Within 1 year (2 semesters)	None – schedule appointment with
	of acceptance into the MS	undergraduate College advisor
	program	
Complete Permanent Program	Deadlines:	Graduate Student Permanent
form and Application for	Dec. 1 (for spring grads)	<b>Program Master's Level</b> form
Graduation Audit	Feb. 1 (for summer I grads)	*Located on Graduate College
	Feb. 1 (for summer II grads)	website: wmich.edu/grad/forms
	Aug. 1 (for fall grads)	
		AND
		Application for Graduation Audit:
		Graduate Degree form
		*Located on Registrar's website:
		wmich.edu/registrar/students/forms
Complete MS degree	Within 2 years (4 semesters)	None
de la complete ma degree	of acceptance in the MS	
	program	
	h. 20. a	

	1	
MS Earth Science Program		
Timetable		
ACTION NEEDED	TIMELINE	FORM NEEDED
Enroll in courses	All semesters until program	None
	requirements are met	
		Use <b>Authorization for Independent</b>
		Study form if taking independent
		study credits
Complete Permanent Program	Deadlines:	Graduate Student Permanent
form and Application for	Oct. 1 (for spring grads)	<b>Program Master's Level</b> form
Graduation Audit	Feb. 1 (for summer I grads)	*Located on Graduate College
	Feb. 1 (for summer II grads)	website: wmich.edu/grad/forms
	Feb. 1 (for fall grads)	
		AND
		Application for Graduation Audit:
		Graduate Degree form
		*Located on Registrar's website:
		wmich.edu/registrar/students/forms

MS Geosciences Program		
Timetable	TINACLINE	FORM NIFEDED
ACTION NEEDED	TIMELINE NAVIGATION OF THE PROPERTY OF THE PRO	FORM NEEDED
Attend Weekly Seminars	Must attend weekly seminars	Seminar attendance forms are available at the seminar and must
	on Monday afternoons from 4-5 p.m. in both the fall and	be completed and turned into the
	spring semesters	seminar professor's mailbox directly
	spinig semesters	after the seminar.
Choose your advisor	By end of first semester	Declaration of Advisor Form
enesse year daviser	by end of mot semester	*located in department office
Enroll in courses	All semesters until program requirements are met	None
	'	Use <b>Authorization for Independent</b>
		Study form if taking independent
		study credits
Complete three credits of GEOS-6340 with primary	By end of third semester	Authorization for Independent Study
advisor		*located in department office
Form thesis committee to	By end of third semester.	Committee Appointment or
oversee your research	Form must be submitted two	Notification of Appointment to a
	weeks prior to date of	Thesis, Dissertation or Specialist
	defense	Project Committee
		*Located on Graduate College
Calcadada the cair area and	December of the land consents a	website: wmich.edu/grad/forms
Schedule thesis proposal defense	By end of third semester	Geoscience Department Presentation Scheduling Approval
defense	Submit completed scheduling	Form
	form to Kathy Wright 2 weeks	*located in department office
	prior to date of proposal	located in department office
	defense	
Give thesis proposal defense	By end of third semester	Proposal Approval or Doctoral
	,	Dissertation, Thesis or Specialist
		Project Proposal Approval Form
		*Located on Graduate College
		website: wmich.edu/grad/forms
Enroll in thesis credits	Upon Completion of GEOS	Permission to Elect courses 7000,
	6340 and thesis proposal	7200 and 7300 or Application for
	defense	Permission to Elect. This form only
		needs to be filled out the first time
	On with name is it is for a	you enroll in thesis credits.
	Or with permission from committee chair and internal	*located on Graduate College website: wmich.edu/grad/forms
	committee chair and internal	website. withcli.edu/grad/1011115
	committee members	AND
		Authorization for Independent
		<b>Study.</b> This form must be

		completed every time you enroll in thesis credits. *Located in department office
Complete Qualifying course requirements *Must earn an average of BA or better in two of four core graduate courses: GEOS-5120, 5550, 5600 and select 5000/6000 level sed/strat courses	No later than fourth semester	None
Complete Permanent Program form and Application for Graduation Audit	Deadlines: Oct. 1 (for spring grads) Feb. 1 (for summer I grads) Feb. 1 (for summer II grads) Feb. 1 (for fall grads)	Graduate Student Permanent Program Master's Level form *Located on Graduate College website: wmich.edu/grad/forms
	reb. 1 (for fail grads)	AND  Application for Graduation Audit:
		*Located on Registrar's website: wmich.edu/registrar/students/forms
Give at least one first- authored poster or paper presentation at an approved external venue or have one first-authored paper submitted for publication to an approved journal	Prior to graduation	Provide a copy of the acceptance notice or abstract from external presentation to graduate advisor
Schedule thesis defense with department	Submit completed form to graduate advisor at least two weeks prior to defense	Geosciences Department Presentation Scheduling Approval Form *located in department office
Give Thesis Defense		Final Dissertation/Project/Thesis Approval Form *located on the Graduate College website: wmich.edu/grad/forms
Submit thesis to Graduate College	Check the Graduate College website: Wmich.edu/grad/dissertation- deadlines	Thesis/Specialist Project or Master's Thesis/Specialist Project Check-in Form *located on Graduate College website: wmich.edu/grad/forms

PhD Geosciences Program		
Timetable ACTION NEEDED	TIMELINE	FORM NEEDED
Attend Weekly Seminars	Must attend weekly seminars	Seminar attendance forms are
Attend Weekly Seminars	on Monday afternoons from	available at the seminar and must
	4-5 p.m. in both the fall and	be completed and turned into the
	spring semesters	seminar professor's mailbox directly
		after the seminar.
Choose your advisor	By end of second semester	Declaration of Advisor Form
,	,	*located in department office
Enroll in courses	All semesters until program requirements are met	None
		Use <b>Authorization for Independent</b>
		Study form if taking independent
		study credits
Complete three credits of GEOS-6340 with primary	By end of second semester	Authorization for Independent Study
advisor		*located in department office
Form dissertation committee	By end of third semester	Committee Appointment or
to oversee your research		Notification of Appointment to a
		Thesis, Dissertation or Specialist
		Project Committee
		*Located on Graduate College
Schedule dissertation	By end of fourth semester	website: wmich.edu/grad/forms  Geoscience Department
proposal defense	by end of fourth semester	Presentation Scheduling Approval
proposar derense	Submit completed scheduling	Form
	form to Kathy Wright 2 weeks	*located in department office
	prior to date of proposal	·
	defense	
Give dissertation proposal defense	By end of fourth semester	
Enroll in dissertation credits	Upon Completion of GEOS	Permission to Elect courses 7000.
Linon in dissertation credits	6340 and thesis proposal	7200 and 7300 or Application for
	defense	Permission to Elect. This form only
		needs to be filled out the first time
		you enroll in thesis credits.
	Or with permission from	*located on Graduate College
	committee chair and internal	website: wmich.edu/grad/forms
	committee members	
		AND
		Authorization for Independent
		<b>Study.</b> This form must be
		completed every time you enroll in
		thesis credits.
		*Located in department office

Complete Qualifying course requirements *Must earn an average of BA or better in three of four core graduate courses: GEOS-5120, 5550, 5600 and select 5000/6000 level sed/strat courses  Demonstrate proficiency in two appropriate research tools, one of which must outside your declared core area of study	No later than fourth semester  Before Advancement to doctoral candidacy	Have advisor email Graduate Advisor notification of your two research tools
Advance to doctoral candidacy	<ul> <li>Upon completion of:</li> <li>3 core courses with BA average</li> <li>3 credits of GEOS-6340 with grade of B or higher</li> <li>18 hours of GEOS coursework</li> <li>2 research tools</li> <li>Successful written and oral dissertation proposal defense</li> </ul>	*located on Graduate College website: wmich.edu/grad/forms
Complete Doctoral Program of Study and Application for Graduation Audit	Deadlines: Oct. 1 (for spring grads) Feb. 1 (for summer I grads) Feb. 1 (for summer II grads) Feb. 1 (for fall grads)	*Located on Graduate College website: wmich.edu/grad/forms  AND  *Application for Graduation Audit: Graduate Degree form  *Located on Registrar's website: wmich.edu/registrar/students/forms
have one first-authored paper accepted for publication to an approved journal	Prior to graduation	Provide a copy of the acceptance notice to graduate advisor
Present a first-authored paper or poster at an approved external venue	Prior to Graduation	Provide a copy of the abstract from the external presentation to graduate advisor
Present research at an approved internal or external venue each year following dissertation proposal	Each year following dissertation proposal	Provide copy of paper or abstract to graduate advisor

Schedule dissertation	Submit completed form to	Geosciences Department
defense with department	graduate advisor at least two	Presentation Scheduling Approval
	weeks prior to defense	Form
		*located in department office
Schedule dissertation	Check the Graduate College	Dissertation Defense Scheduling
defense with Graduate	website:	Form
College	Wmich.edu/grad/dissertation-	*located on Graduate College
	deadlines	website: wmich.edu/grad/forms
Give Dissertation Defense		Final Dissertation/Project/Thesis
		Approval Form
		*located on the Graduate College
		website: wmich.edu/grad/forms
Submit Dissertation to	Check the Graduate College	Thesis/Specialist Project or
Graduate College	website:	Master's Thesis/Specialist Project
	Wmich.edu/grad/dissertation-	Check-in Form
	deadlines	*located on Graduate College
		website: wmich.edu/grad/forms

Graduate Certificate in Hydrogeology		
ACTION NEEDED	TIMELINE	FORM NEEDED
Enroll in courses	All semesters until program	None
	requirements are met	
Complete Permanent Program	Deadlines:	Graduate Certificate Program
form and Application for	Oct. 1 (for spring grads)	<i>Outline</i> form
Graduation Audit	Feb. 1 (for summer I grads)	*Located on Graduate College
	Feb. 1 (for summer II grads)	website: wmich.edu/grad/forms
	Feb. 1 (for fall grads)	
		AND
		Application for Graduation Audit:
		Graduate Certificate form
		*Located on Registrar's website:
		wmich.edu/registrar/students/forms

#### **Accelerated MS Earth Sciences Student Review:**

Date of Review:
Student Information
Name:
Program of Study:
BS Program of Study:
Semester Enrolled into Program:
Semester Earning BS degree:
Admission Conditions:
Current GPA:
Summary Review Rating:
Continuation:
Continuation with Reservation:
Dismissal:
Comments:

	1 <sup>st</sup> Semester:	2 <sup>nd</sup> Semester:	3 <sup>rd</sup> Semester:	4 <sup>th</sup> Semester:	5 <sup>th</sup> Semester:	6 <sup>th</sup> Semester:	7 <sup>th</sup> Semester:	8 <sup>th</sup> Semester:
Graduate Credit Hours (Need 35 Total)								
6000 & 7000 Level Credit Hours (Need 18 Total)								
Graduate Credit Hours in GEOS (Need 24 Total)								
GEOS 7100 Credits (up to 4 allowed)								
GEOS 7120 Credits (up to 3 allowed)								
Permanent Program Form (1 semester prior to graduation)								

ι	J <b>ndergraduate</b>	courses ap	proved for	r incl	usion	in N	AS :	programa
_		TO GET SEE SEE	P-0,				_~~	P - 08

#### **Comments:**

#### **Accelerated MS Program Requirements:**

- 1. Complete 35 total graduate credits.
- 2. Complete 18 hours of 6000- and 7000- level credits.
- 3. Complete 24 hours of Geosciences credits.
- 4. No more than 4 hours of non-coursework credits are permitted in the program.
- 5. Complete BS degree requirements within 1 year (2 academic semesters) of enrolling in the Accelerated MS program.
- 6. Complete all program requirements within 2 years (4 academic semesters) of enrolling in the Accelerated MS program.
- 7. Attendance at weekly seminar is strongly encouraged.
- 8. File *Graduate Student Permanent Program: Master's Level* and *Application for Graduation Audit: Graduate Degree* at least one semester prior to graduation.

#### **MS Earth Sciences Student Review:**

Date of Review:
Student Information
Name:
Program of Study:
Date Enrolled into Program:
Admission Conditions:
Current GPA:
Summary Review Rating:
Continuation:
Continuation with Reservation:
Dismissal:
Comments:

	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>	5 <sup>th</sup>	6 <sup>th</sup>	7 <sup>th</sup>	8 <sup>th</sup>
	Semester:							
Graduate Credit								
Hours								
(Need 35 Total)								
6000 & 7000								
Level Credit								
Hours								
(Need 18 Total)								
Graduate Credit								
Hours in GEOS								
(Need 24 Total)								
GEOS 7100								
Credits								
(up to 4 allowed)								
GEOS 7120								
Credits								
(up to 3 allowed)								
Permanent								
Program Form								
(within 1								
semester of grad)								

#### **Comments:**

#### **MS Program Requirements:**

- 1. Complete 35 total graduate credits.
- 2. Complete 18 hours of 6000- and 7000- level credits.
- 3. Complete 24 hours of Geosciences credits.
- 4. No more than 4 hours of non-coursework credits are permitted in the program.
- 5. Attendance at weekly seminar is strongly encouraged.
- 6. File *Graduate Student Permanent Program: Master's Level* and *Application for Graduation Audit: Graduate Degree* at least one semester prior to graduation.

Date of Review:
<b>Student Information</b>
Name:
Program of Study:
Date Enrolled into Program:
Admission Conditions:
Current GPA:
Summary Review Rating:
Continuation:
Continuation with Reservation:
Dismissal:
Comments:

	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>	5 <sup>th</sup>	6 <sup>th</sup>	7 <sup>th</sup>	8 <sup>th</sup>
	Semester:							
Choose Graduate Advisor & File Form								
Choose MS Committee								
Complete 3 credits of GEOS 6340								
Core Courses - 2 of 4 (Enter course/grade)								
Written & Oral Proposal Defense								
Attend Seminar		•						
Publication OR Presentation (Enter below)								
Total Grad Credits (30 req)								
Total 6000/7000 Credits (15 req)								
Total GEOS grad credits (21 req)								

	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>	5 <sup>th</sup>	6 <sup>th</sup>	7 <sup>th</sup>	8 <sup>th</sup>
	Semester:							
GEOS grad								
credits, exclusive								
of 6340, 7100,								
7120, 7000, 7350								
(18 req)								
GEOS 7000								
credits (6 req)								
Permanent								
Program Form (1								
semester prior to								
graduation)								
Defend								
Thesis								
Submit								
Thesis								

#### **Comments:**

#### **MS Program Requirements:**

- 1. Choose a graduate advisor and file *Declaration of Advisor* form by the end of the first semester.
- 2. Choose a MS committee and file *Notification of Appointment to a Thesis*, *Dissertation, or Specialist Project Committee* form by the end of the second semester. Committee must be comprised of the primary advisor, one other GEOS faculty, and a third member who may be external to the department. Advisor must be GEOS faculty.
- 3. Complete three credits of GEOS 6340 with primary advisor by the end of the second semester.
- 4. Schedule oral thesis proposal defense during the third semester of study using the *Geosciences Department Presentation Scheduling Approval Form*.
- 5. Complete a written/oral thesis proposal defense by the end of the third semester & file *Doctoral Dissertation, Thesis, or Specialist Project Proposal Approval* form.

6.	Core Course requirement: Complete 2 of the following with an average grade of BA by the end of the fourth semester
	Introduction to Geochemistry (GEOS 5550)
	Introduction to Geophysics (GEOS 5600)
	Principles of Hydrogeology (GEOS 5120)
	Sed/Strat (GEOS 5110, 6460, or 6560)

- 7. Attend seminar.
- 8. Submit a first-authored publication OR present a paper at an approved external venue. Publication/Presentation Information:
- 9. Complete 30 hours of graduate credits.
- 10. Complete 15 hours of graduate credits at 6000 or 7000 level.
- 11. Complete 21 hours of graduate coursework in GEOS.
- 12. Complete 18 hours of graduate coursework in GEOS, exclusive of GEOS 6340, 7100, 7120, 7000 or 7350.

- 13. Complete 6 hours of GEOS 7000.
- 14. File *Graduate Student Permanent Program: Master's Level* and *Application for Graduation Audit: Graduate Degree* at least one semester prior to graduation.
- 15. Schedule oral thesis defense using the Geosciences Department Presentation Scheduling Approval Form.
- 16. Successfully defend thesis and obtain signatures on the Dissertation, Specialist Project and Thesis Approval form.
- 17. Submit signed thesis to graduate college with the *Master's Thesis/Specialist Project Check-In Form*.

#### **PhD Geosciences Student Review:**

Date of Review:
<b>Student Information</b>
Name:
Program of Study:
Date Enrolled into Program:
Admission Conditions:
Current GPA:
<b>Summary Review Rating:</b>
Continuation:
Continuation with Reservation:
Dismissal:
Comments:

	1 <sup>st</sup> Sem:	2 <sup>nd</sup> Sem:	3 <sup>rd</sup> Sem:	4 <sup>th</sup> Sem:	5 <sup>th</sup> Sem:	6 <sup>th</sup> Sem:	7 <sup>th</sup> Sem:	8 <sup>th</sup> Sem:	9 <sup>th</sup> Sem:	10 <sup>th</sup> Sem:
Choose Graduate Advisor & File Form										
Complete 3 credits of GEOS 6340										
Choose PhD Committee										
Written & Oral Proposal Defense										
Core Course 3 of 4 (Enter grade/course)										
Attend Seminar										
Publication (Enter below)										
External Presentation (Enter below)										
Annual Presentation										
Two Tools (Enter below)										

	1 <sup>st</sup> Sem:	2 <sup>nd</sup> Sem:	3 <sup>rd</sup> Sem:	4 <sup>th</sup> Sem:	5 <sup>th</sup> Sem:	6 <sup>th</sup> Sem:	7 <sup>th</sup> Sem:	8 <sup>th</sup> Sem:	9 <sup>th</sup> Sem:	10 <sup>th</sup> Sem:
Total Grad Credits (60 req)										
Total 6000/7000 Credits (30 req)										
GEOS grad credits, exclusive of cores and										
6340, 7100, 7120, 7000, 7350										
(18 req) GEOS 7300										
credits (15 req)										
Advance to Candidacy										
Permanent Program Form										
(1 semester prior to graduation)										
Defend Dissertation										
Submit Dissertation										

#### **Comments:**

#### **PhD Program Requirements**

- 1. Declare primary advisor & file *Declaration of Advisor* form within two semesters of starting the program.
- 2. Complete 3 credits of GEOS 6340 with primary advisor by the end of the second semester.
- **3.** Choose a doctoral committee comprised of the primary advisor, at least one other GEOS faculty, and at least one approved member from outside the department by the end of the third semester of study & file *Notification of Appointment to a Thesis*, *Dissertation, or Specialist Project Committee* form. Primary advisor must be a GEOS faculty member.
- **4.** Schedule oral dissertation proposal defense during the fourth semester of study using the *Geosciences Department Presentation Scheduling Approval Form*.
- **5.** Complete written and oral dissertation proposal by the end of the fourth semester of study & file *Doctoral Dissertation*, *Thesis*, *or Specialist Project Proposal Approval* form.

	Introduction to Geochemistry (GEOS 5550)	
	Introduction to Geophysics (GEOS 5600)	
	Principles of Hydrogeology (GEOS 5120)	
	Sed/Strat (GEOS 5110, 6460, or 6560)	
7.	Attend weekly departmental seminars.	
8.	Have one first-authored paper accepted for publication prior to graduation.	
	Publication information:	
9.	Complete a presentation (poster or talk) at an approved external venue prior to graduation.	
	Presentation information:	

**6.** Complete 3 of 4 core courses with an average of BA by the end of the fourth semester of study.

- 10. Give an annual research presentation (poster or talk) at an approved venue internal or external to WMU.
- **11.** Demonstrate proficiency in two research tools. Tool areas include: working knowledge of statistics (B in class or demonstrated ability); competency in computer science (B in class or programming application in research); proficiency in area related to research (math, bios, chem., geog, remote sensing, physics or engineering) via grade of B in grad course; mastering design, repair, or development of instrumentation as part of course or research; other approved skills via B in course; reading competency in foreign language if related to research.

Tool one:

Tool two:

- **12.** File *Admission to Doctoral Candidacy* form when the following are completed: (1) "BA" average across three core courses, (2) 3 credits of GEOS 6340 with a grade of "B" or higher, (3) 1 credit of GEOS 5010 with a grade of "B" or higher, (4) 18 hours of Geosciences coursework, (5) two research tools, and (6) written and oral dissertation proposal defense are passed.
- **13.** Complete 60 graduate credit hours.
- **14.** Complete 30 graduate credit hours at 6000- or 7000- level.
- 15. Complete 18 graduate credit hours of GEOS coursework, exclusive of three cores, GEOS 6340, 7100, 7120, 7300, or 7350.
- **16.** Complete 15 hours of doctoral dissertation (GEOS 7300).
- 17. File Doctoral Program of Study and Application for Graduation Audit: Graduate Degree at least one semester prior to graduation.
- **18.** Schedule oral dissertation defense using the *Geosciences Department Presentation Scheduling Approval Form* and the *Dissertation Defense Scheduling Form (Graduate College)*.
- 19. Successfully defend dissertation and obtain signatures on the Dissertation, Specialist Project and Thesis Approval form.
- **20.** Submit dissertation to graduate college with the *Dissertation Check-In Form*.

# Thesis & Dissertation Forms

#### DEPARTMENT OF GEOSCIENCES

#### Declaration of Advisor Sheet

Student Name	
Advisor	
Expected general thesis/emphasis area/topic:	
Signaturasi	
Signatures: Student	Date
Advisor	Date



## **Notification of Committee Appointment**

For a Dissertation, Thesis, or Specialist Project

Date:	Degree Sought:				
Student Name:			WIN:		
Email:					
Department:					
(Check only one)					
Initial Appointme	ent	Revise	d Appointment (attach ra	itionale for request)	
Proposed Committee Me	mbers				
Name	Institution		Department	Date (mm/dd/yyyy)	
(Committee Chair)					
			-,		
Chairperson, Department			Dean or Associate Dean of (Required for Disser	~	
Advisor, Graduate Program		_			
Dean, Graduate College			Date Ap	proved	

#### WESTERN MICHIGAN UNIVERSITY

Call Number

#### APPLICATION FOR PERMISSION TO ELECT

Please circle one course (use a separate form to elect each course):

<b>*</b> 7000	Master's Thesis	6 hours
7100	Independent Research	2-6 hours
7120	Professional Field Experience	2-12 hours
<b>*</b> 7200	Specialist Project	6 hours
7250	Doctoral Research Seminar	2-6 hours
<b>*</b> 7300	Doctoral Dissertation	15 hours
7350	Doctoral Research	15 hours

<sup>\*(</sup>These courses are subject to a continuous enrollment requirement. This form is only filled out the first time you wish to enroll in 7000, 7200, or 7300 hours.)

#### Please indicate your plan for enrolling in the course:

1st Enrollment - Semester/Sessi	on	Year	Hours
2nd Enrollment - Semester/Sessi	on	Year	Hours
3rd Enrollment - Semester/Sessi	on	Year	Hours
Name		WIN Number	
Address			
Email Address	Phone		
Department		Degree	

Description of Study (including methodology, if research or description of field experience [including name of site and supervisor])

I understand that research involving human or animal subjects, recombinant DNA, chemical hazards, or radioactive material must have prior approval of the research proposal by the appropriate University review body, thus assuring compliance with the regulations for the protection of such subjects or for the use of such materials. (See the reverse side of this form for the specific requirements.) In addition, I understand that The Graduate College will not approve any master's thesis, special project, or doctoral dissertation which does not comply with these requirements, and in that event no credit will be granted for the course.

Signature Date Signature of Faculty Member under whom bate study is to be completed

Signature of Department Chairperson Date \*Signature of The Graduate College Date

Representative (needed for 7000, 7200, and 7300 only)

Distribution: Department Chairperson, Faculty Advisor, Student, Records Office, \*Graduate College

Revised 4/06 (over)

#### REQUIREMENTS FOR RESEARCH INVOLVING REGULATED SUBJECTS AND HAZARDOUS MATERIALS

All research conducted at Western Michigan University which involves regulated subjects and hazardous materials is subject to the following requirements, as described in the Policies of Western Michigan University and mandated by federal and state requirements:

#### Human Subjects

Any research involving contact with human research subjects must be approved in advance by WMU's Human Subjects Institutional Review Board (HSIRB). No research involving human subjects is exempt from review by the HSIRB. HSIRB application materials may be obtained from the Research Compliance Coordinator, 251W Walwood Hall (East Campus), phone (269) 387-8293.

HSIRB approval must be obtained prior to any contact with human subjects; the HSIRB will not review or give approval to any protocols in which contact with human subjects has already occurred.

#### Vertebrate Animals

The use of any vertebrate animals in research, testing, or instructional projects requires prior approval of Western Michigan University's Institutional Animal Care and Use Committee (IACUC). Application materials are available from the Research Compliance Coordinator, 251W Walwood Hall (East Campus), phone (269) 387-8293.

The IACUC reviews applications as received and within two weeks of receipt. Investigators are provided a signed IACUC Certificate upon approval.

#### Recombinant DNA

Any activity involving the construction or handling of recombinant DNA molecules or organisms and viruses containing recombinant DNA molecules requires prior notification to and, if necessary, approval from Western Michigan University's Recombinant DNA Biosafety Committee (RDBC). The forms for notification and review are available from the Research Compliance Coordinator, 251W Walwood Hall (East Campus), phone (269) 387-8293. These documents are reviewed as received and investigators are notified (and, if required, receive signed approval forms) within two weeks of submission.

#### Chemical Hazards and Radioactive Materials

Projects involving the use of any chemical hazards or radioactive materials require the approval of the Radiation Safety Committee (RSC). Contact the Radiation Safety Officer at 3928 Wood Hall, phone (269) 387-5933, before initiating research. Such projects also involving animal subjects must be reviewed by the Radiation Safety Officer prior to review by the IACUC.

Additional information on research compliance and application forms is also available online at www.wmich.edu/research.



## Graduate College Admission to Doctoral Candidacy

(submit via email to <a href="mailtograd-awards@wmich.edu">grad-awards@wmich.edu</a>, paper copies not accepted)

Date:			
First name	Middle name	Last na	ame
WIN#:	WMU email:		_
Date of admission to yo	our doctoral program:	Term:	Year:
Anticipated graduation	term and year:	Term:	Year:
Graduate program:			
Department:		College:	_
Dissertation title:			
If yes, then attac Research Compli			claration from the Office of
	n:		ım passed:
candidacy payon  The student named about  for admission to Doctor  Degree pro  Completed  All courses	rate. Please allow two weeks for ove has earned or satisfact ral Candidacy: ogram grade point averag	processing and apportunity complete ge of 3.0 or bett dissertation cor	ed the following requirements er nmittee (attach approval form)
Student signature		Date	

Program Advisor approval:		
Program advisor name (print)	Signature	 Date
Committee approval:		
We support above student's appliall requirements have been met:	cation for admission to Do	octoral Candidacy and acknowledge
Committee Chair Name (print)	Signature	Date
	Signature	 Date
Committee Member Name (print)	Signature	 Date
Committee Member Name (print)	Signature	Date
Committee Member Name (print)	 Signature	 Date

Thesis and Dissertation Submission and Guidelines

When you are preparing to submit your thesis or declaration, Jennifer Holm (Dissertation Specialist, WMU Graduate College) will send you the following letter. The letter is a checklist of the items you will need to complete in order to submit your thesis or dissertation. Jennifer is very responsive to emails – you can contact her with: <a href="mailto:jennifer.holm@wmich.edu">jennifer.holm@wmich.edu</a>

Hell	0	

We have transitioned to a new electronic thesis and dissertation submission process through the ProQuest ETD Administrator. This streamlines the process by allowing you to submit all of your information and materials in one place. Here are some tips to help you navigate the process smoothly.

Please turn in your thesis/dissertation and related materials by <u>date</u>. <u>Calendar of Deadlines</u>

#### Before Submitting:

**Review:** Please review the information regarding theses/dissertations and their submission found on our website. This includes Frequently Asked Questions about dissertation submission deadlines, forms and requirements, WMU-approved editors, and the <a href="WMU Guidelines for the Preparation of Theses, Specialist Projects">WMU-approved editors</a>, and the <a href="WMU Guidelines for the Preparation of Theses, Specialist Projects">WMU-approved editors</a>, and the <a href="WMU Guidelines for the Preparation of Theses, Specialist Projects">WMU-approved editors</a>, and the <a href="WMU Guidelines for the Preparation of Theses, Specialist Projects">WMU-approved editors</a>, and the <a href="WMU Guidelines for the Preparation of Theses, Specialist Projects">WMU-approved editors</a>, and the <a href="WMU Guidelines for the Preparation of Theses, Specialist Projects">WMU-approved editors</a>, and projects are the <a href="WMU Guidelines for the Preparation of Theses, Specialist Projects">WMU-approved editors</a>, and Dissertations. You can also view a <a href="tutorial">tutorial</a> on the submission process--select the "ETD Administrator--Student Submission Webinar" on the website.

Please note that theses/dissertations should not be submitted until you have passed your oral defense and the manuscript is in its final form (all revisions requested by your committee are complete and the dissertation adheres to WMU formatting guidelines, etc.).

**Create an account:** Visit <a href="http://www.etdadmin.com">http://www.etdadmin.com</a>, click on the "Submit my dissertation/thesis" link, select "Western Michigan University" from the school options, and set up your login information.

#### Have on hand:

- A PDF of your finalized, complete, and correct thesis/dissertation manuscript
- Your thesis/dissertation abstract
- Any supplementary files, such as sound clips or spreadsheets that might accompany your dissertation manuscript (this excludes approval forms and administrative paperwork)
- An <u>approval form</u> signed by your committee (original or electronic signatures): *please* note the dean will sign the form after you have submitted your materials
- Subject categories that best describe your subject area

 A credit or debit card for copyright registration (optional) and/or for ordering bound copies (optional)

#### **Submission Process:**

**Submission:** The website will walk you through the process step by step, but you can also refer to the submission tutorial linked above for more information.

\*Please be aware that you will need to download the WMU Exit Survey, fill it out, and then upload it to the ETD site--it is not editable on the website itself.

Filling out the Survey of Earned Doctorates is also required for your submission to be considered complete. Doctoral candidates only.

**Questions:** For questions related to the thesis/dissertation manuscript, deadlines, or review process, contact Jennifer Holm (<a href="mailto:jennifer.holm@wmich.edu">jennifer.holm@wmich.edu</a>) or her assistant (<a href="mailto:grad-dissertation@wmich.edu">grad-dissertation@wmich.edu</a>). For questions related to the submission process or technical difficulties, please contact a ProQuest representative (<a href="mailto:disspub@proquest.com">disspub@proquest.com</a>).

Also, here is the link to the dissertation forms and requirements page which has the Preparing to Submit a Dissertation or Thesis: <a href="https://wmich.edu/grad/dissertation-forms">https://wmich.edu/grad/dissertation-forms</a>

## Dissertation Forms and Requirements | Graduate College | Western Michigan University

Dissertation, specialist project, theses. Dissertation
Defense Scheduling; Graduate Faculty Nomination - All
who serve on any thesis or dissertation committee must
have Graduate Faculty status at WMU.; Committee
signature forms. Committee Appointment Form (Co-chair
Option). Committee Appointment Form
wmich.edu

## **Graduation Forms**

#### Accelerated Graduate Degree Programs Course Approval

Submit in person to:
Office of the Registrar
Seibert Administration Building, 3rd Floor
Monday through Friday
8 a.m. to 5 p.m.



Submit by mail:
Office of the Registrar
Western Michigan University
1903 W. Michigan Avenue Kalamazoo, MI 49008-5256
Telephone: (269) 387-4300
Fax: (269) 387-3545

The Accelerated Graduate Degree Programs (AGDP) allows students to begin accumulating credits towards the completion of a master's degree while still enrolled as undergraduates. Undergraduate students admitted to an AGDP with senior standing can take up to 12 hours of designated 5000 and/or 6000 level courses for graduate credit which can be used in both the Bachelor's degree and the Master's degree. The Accelerated Graduate Degree Program Course Approval form should be completed when admitted to the AGDP.

1. STUDENT	INFORMATION			2. PROGRAM	M INFORMATION				
Western Identi	fication Number (WII	N)		Department					
Last Name		First Na	ame	Program					
				Admission Terr	m				
3. APPROVE	ED AGDP COURSES	S - To be doul	ole counted	4. ALTERNA	TE COURSES (if fire	st choice is ur	navailable)		
Course	Course Number	Credit Hours	Term	Course	Course Number	Credit Hours	Term		
<ul> <li>Unless other the degree at the degree at a grade of "readmission will be admit degree. Stude"</li> <li>Graduate concontent but a content but a courses take</li> <li>The AGDP a courses take</li> <li>The courses</li> <li>Both underg</li> <li>Upon compliances</li> </ul>	ed to an Accelerated Gravise specified by AGI warded within one cale B" or above must be exitted as graduate students should check with urses substituting for redelivered with graduate courses (required or electourses will appear on n for graduate credit with which are double courraduate and graduate treation of the bachelor's	DP policies of the endar year after arned in each of gram. Students onts (with the rest their department equired course the level rigor. In the batthe student's trill be reflected ented will be idearnscripts will	the department or rinitial enrollmen of the AGDP cours who complete the elevant graduate cent to see if there is within the under achelor's degree manacript and graduate in student's graduate centified as such on show that the student or initial entities as within the student of the centified as such on show that the student or initial entities are considered.	school, requirement in the AGDP.  ses. Students who descredit) in the next seare additional requirements be taken at the less earned will be reported by the graduate transcellent completed the second secon	to not achieve a "B" of gree including a "B" of the emester or session after a direments for admission ust be designated by the graduate level to be deflected in the graduate cript.  Accelerated Graduate	r better must a prabove in the rreceiving the n to the AGDP are program as couble counted. GPA. All grace Degree Program	apply for AGDP courses bachelor's equivalent in des earned in		
5. SIGNATUI	RES ture:				Dat	e:			
_	ure:								



### Graduate Student Permanent Program Master's Level

- 1. The Registrar's Office audits each program for credits and grades and verifies all requirements for graduation. Changes in the program must have the signed approval of the advisor on a Graduate Program Change form. Approved undergraduate courses used in the program must have the signed approval of the advisor and the graduate dean on a Permission to Elect A 3000- or 4000-Level Course For Inclusion in a Graduate Program form.
- 2. Send the completed and signed to the Registrar's Office before the student completes the final 15 hours.

Name:

3. This form is not an application for graduation. The graduate level graduation application can be found online at www.wmich.edu/registrar/graduation.

Western Identification Number (WIN):					
Permanent Address:					
City:					
State:					
Zip:					
Field of Graduate Study:					
Concentration Area:					
Course Title	Course Number	Term Elected	Credit Hours	Grade	Transfer
				Use a second	page if needed
Signatures:					
Graduate Advisor:		Date P	rogram Ou	tlined:	
Student:		Date R	eceived: _		
Final Exam Completed:	inal Exam Completed: Thesis Approved:				



### **Doctoral Program of Study**

Last			First					
Name:			Name:				M.I.	WIN:
								Postal
Address:			Apt.		Cit	ty:	State:	Code:
Email Addres	s:					1	Phone:	
Department:								
Program of St								
				Re	quired Co	urses		
Course No.	Cour	se Name	Н	ours	Grade	Semester/Year	Institution	
						-		
				Maste	r/Transfe	r Courses		
Course No.	Cour	se Name	Н	ours	Grade	Semester/Year	Institution	
					Researcl			
Course No.	Cour	se Name	Н	ours	Grade	Semester/Year	Institution	
					Elective			
Course No.	Cour	se Name	Н	ours	Grade	Semester/Year	Institution	
					sertation			
Course No.	Cour	se Name	H	ours	Grade	Semester/Year	Institution	
Total Credit H	lours:							Continue to page 2

Student Name:			W	IN:		
		Identity	Research Tools			
From Name			Scheduled/Pass			
Exam Name		Scheduled	Passed	Comments		
		Other Requirements (forei	gn language(s), l	DGEs, prelims, etc.)		
Danis de Ciana de Constant						
Required Signatures	s:					
Student Signature:					Date:	
Program Advisor:					Date:	
<u> </u>						
Department Chair:					Date:	
	Copies to:	Graduation Auditing	Student	Advisors	Department	
	copies to:	Graduation Additing	Student	Advisors	Department	



## Graduate Certificate Program Outline

Kalamazoo, MI 49008-5256 (269) 387-4300 wmich.edu/registrar

Name:					
Western Identification Number (WIN):					
Permanent Address:					
City:					
State:					
Zip:					
Graduate Certificate Program:					
Date Admitted:					
Expected Completion Date:					
Actual Completion Date (month/year):					
Present Field of Graduate Study:					
Date Admitted:					
Expected Graduation Date (month/year):					
P	ROGRAM REQUIR	REMENTS			
Course Title	Course Number	Term Elected	Credit Hours	Grade	Transfer
Signatures:					
Graduate Certificate Program Advisor:			Date	:	
Student:					
Submit original outling	ne to the Registrar's Off	ice Copies to: Advi	isor and Stud	ent	



## Application for Graduation Audit: Graduate Degree

(269) 387-4300 www.wmich.edu/registrar						
Deadlines to apply for gra	duation: (comple	eted form must be su	bmitted to the Re	gistrar's office)		
Graduation Term Spring Summer I Summer II* Fall	Last Day to A December 1 February 1 February 1 August 1	apply *	No commencem Summer II doct Fall commencen	oral candidates	participate i	
<ul> <li>A Graduate Progr degree requirement</li> </ul>	and of Study form ats be mailed to the	two semesters prior to must be submitted permanent address a	to the Registrar's o	office before you		cord can be audited for
Please print name as you wa	int it to appear on	your diploma.				
Student Name (Last):			First:			Middle:
Maiden or other name(s) on fi	I		Western Identification Number:			
Address:			City:		State:	Zip Code:
Phone Number (include area	code):	Email Address:				
Graduation Term:	Fall   Spring	□ Summer I □	Summer II Year: _			
Degree Sought:						
☐ Master ☐ Program:	1	□ Doctoral				
Student Signature:				Office of the Ro		
Note: Graduation info		-	our audit,			

Please allow ten (10) weeks for processing.



## Application for Graduation Audit: Graduate Certificate

www.wmich.edu/registrar											
Deadlines to apply for graduation: (completed form must be submitted to the Registrar's office)											
Graduation Term  Last Day to Apply  Spring  December 1  Summer I  February 1  Summer II*  February 1  Fall  August 1  A fee of \$45 will be charged to your student account  A Graduate Certificate Program of Study form must be submitted to the Registrar's office before your academic record can be audited for degree requirements  For students receiving a graduate certificate independent from a degree, no commencement ceremony will be held.  Certificate will be mailed to the permanent address approximately three weeks after the semester ends (please verify accuracy of your address through your GoWMU account).											
Please print name as you want it to appear on your certificate.											
Student Name (Last):				First:					Middle:		
Maiden or other name(s) on file (if applicable):				Western Identi				cation Number:			
Address:			City:	State:				Zip Code:			
Phone Number (include area code): Email Address:								1			
Graduation Term: ☐ Fall ☐ Spring ☐ Summer I ☐ Summer II Year:											
Certificate Program:											
□ Alcohol & Drug Abuse □ English			English as a Seco	ond Language Teachin	ıg		Learni	ing for Sustainability			
☐ Applied Statistics ☐ Geograp			Geographic Info	ormation Science   Music Performance							
□ Biostatistics □ Gerontology			Gerontology				Nonprofit Leadership & Administration				
☐ Clinical Trials Administration ☐ Health Care Administration			ministration			Spiritu	pirituality, Culture and Health				
☐ Educational Technology ☐ History of Mor			astic Movements			Student Affairs in Higher Education					
□ Ethnohistory □ Integrated Holis			tic Health and Wellne	ess	S						
Student Signature:							[	Date:			
	Office of the Registrar Use Only										

Note: Graduation information, including the results of your audit, will be sent to your wmich.edu email account.

Please allow ten (10) weeks for processing.

## **Other Forms**



## 2019 **Delayed Tuition Remission Waiver**

\*For Teaching Assistant Appointees only

#### Per TAU Contract Article 11, section three

Delayed Use of the Tuition Remission Waiver. TAU unit members who are on appointments and do not use the full amount of their allotted credits of tuition remission during either of Fall/Spring semesters may defer the unused credits to the Summer I and/or Summer II session subsequent to the Fall/Spring semester in which the credits were granted.

- a. To qualify for delayed use of tuition remission credits, the Employee must meet the following conditions:
  - *i.* Hold an active appointment as a teaching assistant during the spring semester immediately prior to summer session/s for which delayed tuition remission is being sought.
  - ii. Be registered for the classes in the Summer I and/or Summer II term for which use of the delayed remission is sought, and
  - iii. Have submitted notification to the Graduate College at least 30 calendar days prior to the start of the session in which the Employee wishes to apply for use of delayed tuition remission (by use of the Graduate College-approved form of his/her intent to utilize delayed tuition remission credits).

#### To receive delayed tuition remission:

- (1) Obtain a copy of one of the following: (a) your permanent program of study, (b) program requirements from the Graduate Catalog, or (c) program requirements from your graduate program website/handbook. The tuition remission may only be used for classes that are part of your advisor-approved graduate program of study.
- (2) Complete Delayed Tuition Remission Waiver form and obtain graduate advisor signature.
- (3) Submit Delayed Tuition Remission Waiver form along with a copy of your selection from item (1) to <a href="mailto:grad-awards@wmich.edu">grad-awards@wmich.edu</a> no later than: Summer I -April 8, 2019 Summer II -May 28, 2019 (form submission is the responsibility of the TA, late forms will not be accepted)

\*\*Tuition remission will be applied after drops/adds\*\*

First Name		Last Na	ame		Student WIN#		
Degree Program				Name o	of Graduate Advisor		
SUMMER I	CRN#	<u>DEPARTMENT</u>	COURSE #	# CR. HRS.	*for office use only		
1.					Using Cr. Hrs. S1		
2.					S1 \$		
					Fund Code(s)		
SUMMER II	CRN#	DEPARTMENT	COURSE #	# CR. HRS.	Using Cr. Hrs. S2		
SOMMEN II	OIXIV#	DEI ARTIMENT	COUNCE #	# OK. 1110.	S2 \$		
1.					Fund Code(s)		
2.							
I, Graduate A used as part	Advisor (Print of the appo	name) intee's advisor-appro	ved graduate pro	gram of study.	, certify that the courses listed here will be		
Graduate Ad	<b>visor</b> (Signatu	re)			Date		
Student (Print	name)		Student (Signa	ture)	Date		
Graduate Co	llege Signat	ure			Date		

## WESTERN MICHIGAN UNIVERSITY Department of Geosciences

#### AUTHORIZATION FOR INDEPENDENT STUDY

(Please use a separate form for each request.)

Date of Request							
Date of Birth							
Student Name							
Local Phone Number							
Status Please check the appropriate status. Graduate Undergraduate  Semester							
Please write the year of your request and check the appropriate semester.							
Year Spring							
Summer I							
Summer II							
Fall							
I AM TAKING THIS AS GEOS							
Course Number Credit Hours Call #							
Course Name:							
SIGNATURE OF FACULTY AUTHORIZING THIS ENROLLMENT							
Advisor: Date:							

#### Review of Independent Credits

Independent credits include thesis and dissertation credits, independent research credits, and internship (professional field experience) credits. These credits require the approval of a faculty member – who oversees the student's work for those credits. Below is a list of courses that your advisor (or another faculty member in the case of some courses) must sign off on for registration. Starting with Summer I 2022, a student taking one of these courses will need to register themselves for the course – this will require following these steps:

- 1) Email Cristine, copying your advisor and Dr. Voice telling her which independent course and the number of credits you want to take.
- 2) Cristine will set up an override in the system that will allow you to register for the desired credits.
- 3) Cristine will send you a reply which will tell you that a) you can register for the credits, and b) provide a CRN that you would use for those credits when registering.
- 4) Please be patient this is not an easy process

If you try to sign up for a traditional course but are getting any error message when attempting to register, please make sure to send the exact error message to Cristine. Often these problems are due to pre-requisites. You may have taken the pre-requisite during a previous degree – but it will not show up in Western's records. In these cases, we will need to request permission from the instructor of the course for you to take it. Once approval is granted, Cristine will create an override and send you the CRN to register for the course.

#### For any Geological and Environmental Science Undergraduate Major:

- 1) GEOS 4340 Independent Study (1 to 3 credits)
- 2) GEOS 5020 (repeatable for credit; variable credit) if a faculty member teaches a "new" class without going through the process of getting a formal number we use these course numbers and require permission of instructor to take.
- 3) HNRS 4990 Honors Thesis (minimum 1 credit) Note if you wish to sign up for this course, you will need to talk to the Executive Assistant at the Honors College. We cannot sign you up for these credits.
- 4) If the student has not taken a pre-requisite or co-requisite for an undergraduate course (1000-5000 level), the faculty member teaching the course can use permission of instructor to allow Cristine to force-add the student to the course.

#### For Non-thesis MS Earth Sciences Students:

- 1) GEOS 5020 or GEOS 6500 (both repeatable for credit; variable credit) if a faculty member teaches a "new" class without going through the process of getting a formal number we use these course numbers and require permission of instructor to take. GEOS 5020 is also used for Graduate Students who need to take an undergraduate course as part of their conditional admission requirements. In both cases, the faculty member teaching the course needs to sign off on the student's enrollment in the class.
- 2) GEOS 7100 Independent Research (max 4 credits)

- 3) GEOS 7120 Professional Field Experience (max 3 credits); Please see the Internship Policy in the Graduate Handbook for policy governing these credits.
- 4) If the student has not taken a pre-requisite or co-requisite for a 5000+ level course or took the prerequisite/corequisite at another university, the faculty member teaching the course can use permission of instructor to allow Cristine to force-add the student to the course.

#### For Thesis-track MS Geosciences Students

- 1) GEOS 5020 or GEOS 6500 (both repeatable for credit; variable credit) if a faculty member teaches a "new" class without going through the process of getting a formal number we use these course numbers and require permission of instructor to take. GEOS 5020 is also used for Graduate Students who need to take an undergraduate course as part of their conditional admission requirements. In both cases, the faculty member teaching the course needs to sign off on the student's enrollment in the class.
- 2) GEOS 6340 Research in Geology and Earth Science Student is required to take a **minimum of 3 credits towards their program of study** but can take up to 6 max. This number is used for both thesis and dissertation proposals.
- 3) GEOS 7000 Master's thesis (at least 6 credits can take more, but only 6 credits count towards the program of study; Does require continuous enrollment once student takes a credit of 7000, they need to sign up each subsequent semester (Fall and Spring) for at least one credit of 7000 and must be enrolled in at least one credit of 7000 in their final semester).
- 4) GEOS 7100 Independent Research (max 4 credits)\*
- 5) GEOS 7120 Professional Field Experience (max 3 credits); Please see the Internship Policy in the Graduate Handbook for policy governing these credits.
- 6) If the student has not taken a pre-requisite or co-requisite for a 5000+ level course or took the prerequisite/corequisite at another university, the faculty member teaching the course can use permission of instructor to allow Cristine to force-add the student to the course.

#### For PhD Geosciences Students

- 1) GEOS 5020 or GEOS 6500 (both repeatable for credit; variable credit) if a faculty member teaches a "new" class without going through the process of getting a formal number we use these course numbers and require permission of instructor to take. GEOS 5020 is also used for Graduate Students who need to take an undergraduate course as part of their conditional admission requirements. In both cases, the faculty member teaching the course needs to sign off on the student's enrollment in the class.
- 2) GEOS 6340 Research in Geology and Earth Science. Student is required to take a **minimum of 3** credits towards their program of study but can take up to 6 max. This number is used for both thesis and dissertation proposals.
- 3) GEOS 7100 Independent Research\*
- 4) GEOS 7120 Professional Field Experience (max 3 credits); Please see the Internship Policy in the Graduate Handbook for policy governing these credits.
- 5) GEOS 7300 Doctoral Dissertation (at least 15 credits can take more, but only 15 credits count towards the program of study; Does require continuous enrollment once student takes a credit of 7300, they need to sign up each subsequent semester (Fall and Spring) for at least one credit of 7300 and must be enrolled in at least one credit of 7300 in their final semester).

- 6) GEOS 7350 Graduate Research (repeatable for credit, variable credit **minimum 2 credits** but can take up to 10 in one semester)\*
- 7) If the student has not taken a pre-requisite or co-requisite for a 5000+ level course or took the prerequisite/corequisite at another university, the faculty member teaching the course can use permission of instructor to allow Cristine to force-add the student to the course.

#### For MS Geosciences and PhD Geosciences Students

Thesis and Dissertation Credits can only be taken after one of these 2 conditions has been met:

- 1) The student has passed their thesis or dissertation proposal. The student can then take thesis or dissertation credits in the following semester, or
- 2) The semester the student defends their thesis or dissertation proposal, they may take thesis or dissertation credits with the permission of their Departmental Committee Members. A student pursuing this route, will need to have their committee members sign off on the approval form and the form returned to the Graduate Director.

\*GEOS 7100 and GEOS 7350 – these courses have a minimum number of credits – when you sign up for one of these independent studies, you need to sign up for at least 2 credits.

## Please return to the Geosciences Graduate Advisor.

## Graduate Exit Survey WMU Department of Geosciences

## **Semester of Graduation:**

1.	Which	Geosciences graduate program (MA, MS, or PhD) did you complete?
2.	What a	are your professional goals and objectives after graduation from WMU?
3.		a feel that your graduate program has provided you with the background and skills that ed to achieve these goals and objectives? Why or why not?
4.	What	course(s) did you find most useful in your graduate program? Why?
5.	What	course(s) did you find least useful in your graduate program? Why?
6.		assess the department's performance in development of the following skills. Did the Geosciences Department help you develop or refine skills in the gathering and analysis of field data (how/why?)
	b.	Did the Geosciences Department help you develop or refine skills in analysis and interpretation of geologic data (how/why?)
	c.	Did the Geosciences Department help you develop or refine skills in critical thinking and scientific reasoning (how/why?)
	d.	Did the Geosciences Department help you develop or refine skills in communication of geologic information through written and oral reports and presentations (how/why?)

7.	What are the most important changes that the department should make in the graduate
	program that you completed?

8. Other? E.g. Any incidences of un-professional conduct? Anything great?

# TEACHING ASSISTANTSHIPS

## Teaching Assistantships

From <a href="https://wmich.edu/geology/academics/graduate/teaching-assistantships">https://wmich.edu/geology/academics/graduate/teaching-assistantships</a>

Teaching assistantships (TAs) are awarded by the Department of Geological & Environmental Sciences in order to financially support graduate students and provide professional development in the form of teaching and research assistance. The TA consists of a tuition waiver and accompanying salary. TAs in the Department of Geological & Environmental Sciences are highly competitive and awarded once per year. The specific terms of our TAs vary each year depending on university and department budgets and needs. For more detailed information regarding tax implications, privileges and benefits available to graduate appointees, please consult the WMU Graduate College Assistantship information webpage.

The term for TAs in the Department of Geological & Environmental Sciences is one academic year (fall semester and the following spring semester). New to the university graduate students who are offered a TA are guaranteed appointments for two academic years (master's) or four academic years (doctoral) from the date of enrollment in the program, pending satisfactory performance in teaching and satisfactory progress in their program of study. TAs beyond these time periods are neither promised nor guaranteed. While appointed, the student must enroll in at least six graduate credit hours (5000-level or above) per semester.

TAs are typically assigned to teach one or more laboratory sections of introductory through 5000-level courses. Additional work may be assigned as laboratory coordinator of a multi-section course, grader, or lecture assistant for large-enrollment lecture courses. Please see the Teaching Assistantship Course Information sheet for a current list of courses that employ TAs, qualifications, and typical duties for each course. New and returning students are welcome to express preference for specific work assignments on the TA application form, however, the final assignment is determined by the department.

## **ELIGIBILITY**

To be eligible for a TA in the Department of Geological & Environmental Sciences, a student must first be formally accepted to either the Ph.D. Geosciences or the M.S. Geosciences programs for the term(s) that the award is given.

## CRITERIA FOR INITIAL AWARD

• **Program of study:** Teaching assistantships are preferentially awarded to students enrolled in the Ph.D. Geosciences program. A limited number of TAs may be available to students enrolled in the M.S. Geosciences programs.

- Students enrolled in the M.S. Earth Science (non-thesis) program are not eligible for awards.
- **Grade point average:** Teaching assistantships are preferentially awarded to graduate students with a GPA of 3.25 or above.
- Prior teaching experience: Teaching assistantships are preferentially awarded to students with prior experience teaching, especially positions in upper-level undergraduate courses.

## CRITERIA FOR CONTINUATION OF AWARD

**Satisfactory progress in the program of study:** TA's must receive a "satisfactory" evaluation in their audit letter for each semester of study that they hold the position. If a TA receives a "mostly satisfactory" or "unsatisfactory" audit, he or she will have one semester to attend to any outstanding items noted in the audit letter. Receiving a less than "satisfactory" evaluation in the audit letter for two consecutive semesters will be grounds for revoking the TA. The graduate adviser, <a href="Dr. Peter Voice">Dr. Peter Voice</a>, is responsible for auditing the progress of all students at the end of each semester. Both the student and his/her adviser will receive a copy of the audit letter.

## **Satisfactory performance in teaching:** TA's are expected to:

- Adhere to all University policies, regulations, directives, guidelines and student codes of conduct.
- Attend and participate in all course-related meetings, as required by the supervising course instructor and/or lab coordinator TA.
- Attend and assist with class sessions (beyond the assigned lab sections), as required by the supervising course instructor and/or lab coordinator TA.
- Communicate any absences to the supervising course instructor and/or lab coordinator TA. If a class must be missed, the TA will arrange a substitute and complete the "Absence from Class" form.
- Start and end all class sessions on time.
- Interact with students in a positive, ethical, attentive and professional manner.
- Grade student work consistently and fairly, and return all work in a timely fashion.
- Post weekly office hours in the course or laboratory syllabus, and be available to assist students at the stated office hours.
- Conduct end-of-semester WMU course evaluations; performance will be noted and taken into consideration in future awards.
- Adhere to any performance requirements specified in the current <u>TAU</u>
   <u>Agreement</u> in addition to those specified above.

TAs are also expected to comply with any employment restrictions as noted in their appointment letter.

Each semester, TAs will receive an evaluation by their course supervisor or laboratory coordinator using the criteria stated above. The graduate advisor is responsible for obtaining the teaching evaluation forms from faculty, and for communicating the

performance rating to each TA. TAs must receive a "satisfactory" or better <u>teaching</u> <u>evaluation</u> for each semester for which the student is a TA. They will have one semester to attend to any outstanding items as noted in the teaching evaluation letter. Receiving a less than "satisfactory" rating in the teaching evaluation letter for two consecutive semesters will be grounds for revoking the TA.

## APPLY FOR A TEACHING ASSISTANTSHIP

While the Department of Geological & Environmental Sciences has rolling admissions for all of its graduate programs, students who wish to be considered for a teaching assistantship must be formally accepted by the February 15 deadline.

- Prospective students: Prospective graduate students must: 1) Be formally accepted into either the Ph.D. or the M.S. Geosciences program, and 2) Submit the <a href="mailto:application form">application form</a> to <a href="Lisah Crall">Lisah Crall</a>. All prospective students who wish to be considered for a teaching assistantship are required to have their application complete at least four to six weeks ahead of the Feb. 15 deadline in order to give the Graduate Admissions Committee sufficient time to evaluate each candidate's qualifications and reach a decision. A complete application means that all required documents (transcripts, recommendations, etc.) have been received, processed and uploaded to your electronic application; this process can take several weeks. As such, prospective graduate students should begin the application process at least two to three months ahead of the Feb. 15 deadline in order to ensure consideration. Students who do not complete their application in the specified time-frame will not be considered and must wait until the following year to apply again. Prospective M.S. Earth Science (non-thesis) students are not eligible for teaching assistantships.
- Current students: Current graduate students in the Ph.D. or M.S. Geosciences programs may apply for a teaching assistantship by completing the <u>application</u> and submitting it to <u>Lisah Crall</u> no later than **Feb. 15** for the following fall semester. Current graduate students who have a TA and are eligible to continue their appointment into the coming year must also submit this form by **Feb 15**. M.S. Earth Science (non-thesis) students are not eligible for teaching assistantships.

# Department of Geological and Environmental Sciences Teaching Assistantship Application

Applicant's Name:			
	Last	First	Middle
WIN (If applicable):	<u> </u>	Today's date:	
Address:			
Phone: ()		E-mail:	
(Please note that o	nly PhD and MS Geosci	iences students are eligible for Teaching .	Assistantships)
When did/will you	begin graduate study in	n the department? Semester:	Year:
Doctoral students:	When will you apply fo	or doctoral candidacy? Semester:	Year:
Which semester(s)	are you requesting a T	eaching Assistantship?FallSpring_	Summer ISummer
TA Positions/schola	arships held to date:		
Other honors receive	ved:		

Teaching assistants are typically assigned to teach one or more laboratory sections of introductory through 5000-level courses. Additional work may be assigned as lead teaching assistant of a multi-section course, grader, or lecture assistant for large-enrollment lecture courses.

Please note which of the following courses you would be qualified for and interested in teaching. Required and preferred qualifications for each course are noted on the Teaching Assistantship website at the link for "Teaching Assistantship Course Information" (<a href="https://wmich.edu/geology/academics/graduate/teaching-assistantships">https://wmich.edu/geology/academics/graduate/teaching-assistantships</a>). You may select as many as you are qualified for. Final determination of all work assignments shall be made by the department.

GEOS 1000 Dynamic Earth or GEOS 1300 Physical Geology
GEOS 1020 Planetary Geology
GEOS 1900 Evolution of Life or GEOS 4700 Earth History
GEOS 3010 Introduction to Earth Materials
GEOS 4300 Structural Geology
GEOS 4320 Geomorphology
GEOS 4350 Sedimentology and Stratigraphy
GEOS 5100 Advanced Earth Materials
GEOS 5210 Geological and Environmental Remote Sensing or GEOS 5350 GIS Applications in Geological and Environmental Sciences
GEOS 5230-5240-5250-5250-5270-5280 Hydrogeology Field Camp Sequence ( <b>Summer only</b> )
GEOS 5600 Introduction to Geophysics
GEOS 5650-5660-5670 Field Mapping Sequence (Summer only)
GEOS 5730 UAV's: Geological and Environmental Applications
GEOS 5740 UAV's: Geophysical Applications
Do you have a current, valid US driver's license?YesNo

Return completed application to:
Lisah Crall, Department of Geological and Environmental Sciences, 1903 W. Michigan
Avenue Western Michigan University, Kalamazoo, MI 49008-5241
or EMAIL to lisah.crall@wmich.edu

## **Department of Geosciences TA Evaluation Form**

TA name:			Your name:		
Course:			Semester:		
Date:	_				
Overall rating (circle):	Outstanding	Satisfactory	Need Improvement	Poor	

Performance Criteria	Rating (Circle)	Comments
Adheres to all University	Outstanding Satisfactory	
policies, regulations, directives,		
guidelines, and student codes.	Needs improvement Poor	
Attends and participates in all	Outstanding Satisfactory	
course-related meetings as		
required by the supervising	Needs improvement Poor	
course instructor and/or head		
TA.		
Attends and assists with class	Outstanding Satisfactory	
sessions (beyond the assigned		
lab sections), as required by	Needs improvement Poor	
the supervising course		
instructor and/or head TA.		
Communicates any absences to	Outstanding Satisfactory	
the supervising course		
instructor and/or head TA, and	Needs improvement Poor	
arranges for a substitute		
should a class session need to		
be missed.		
Starts and ends all class	Outstanding Satisfactory	
sessions on time.		
	Needs improvement Poor	
During class sessions, interacts	Outstanding Satisfactory	
with students in a positive,		
ethical, attentive, and	Needs improvement Poor	
professional manner.		
Grades student work	Outstanding Satisfactory	
consistently and fairly, and		
returns all work in a timely	Needs improvement Poor	
fashion.		
Posts office hours and is	Outstanding Satisfactory	
available to help students at		
the stated office hours.	Needs improvement Poor	

If a specific criteria does not apply to this course or TA assignment, please write NA in the comment box.

## ABSENCE FROM CLASS COLLEGE OF ARTS AND SCIENCES

Name:		Date:		
Department:				
Dates of Absence:				
Purpose of Absence: _				
Location: Indicate address and phone number where you may be reached.				
INS	STRUCTIONAL RESPONSIE	BILITIES		
	asses which will be missed during hose classes will be met.	this absence and how the		
Course #	Date(s)	Class Coverage		
1.				
2				
3				
4				
5				
6				

Signature of Instructor of Record (and Coordinator in GEOS 1000 and GEOS 1300)

# Western Michigan University Teaching Assistants Union

For more information and to join, go to www.tauaft.org

## **POLICIES**

## **Definitions of Academic Honesty Violations**

If a student is uncertain about an issue of academic honesty, he/she should consult the faculty member to resolve questions in any situation prior to the submission of the academic exercise. Violations of academic honesty include but are not limited to the following.

## CHEATING

Definition: Cheating is intentionally using or attempting to use unauthorized materials, information, notes, study aids or other devices or materials in any academic exercise.

#### Clarification

- 1. Students completing any examination are prohibited from looking at another student's examination and from using external aids (for example, books, notes, calculators, conversation with other) unless specifically allowed in advance by the faculty member.
- 2. Students may not have others conduct research or prepare work for them without advance authorization from the faculty member. This includes, but is not limited to the services of commercial term paper companies.

## FABRICATION, FALSIFICATION AND FORGERY

Definition: Fabrication is the intentional invention and unauthorized alteration of any information or citation in an academic exercise. Falsification is a matter of altering information while fabrication is a matter of inventing or counterfeiting information for use in any academic exercise or University record. Forgery is defined as the act to imitate or counterfeit documents, signatures, and the like.

#### Clarification

- 1. "Invented" information shall not be used in any laboratory experiment, report of results or academic exercise. It would be improper, for example, to analyze one sample in an experiment and then "invent" data based on that single experiment for several more required analyses.
- 2. Students shall acknowledge the actual source from which cited information was obtained. For example, a student shall not take a quotation from a book review and then indicate that the quotation was obtained from the book itself.
- 3. Falsification of University records includes altering or forging any University document and/or record, including identification material issued or used by the University.

## MULTIPLE SUBMISSION

Definition: Multiple submission is the submission of substantial portions of the same work (including oral reports) for credit more than once without authorization from instructors of all classes for which the student submits the work.

#### Clarification

Examples of multiple submission include submitting the same paper for credit in more than one course without all faculty members' permission; making revisions in a credit paper or report (including oral presentations) and submitting it again as if it were new work.

## **PLAGIARISM**

Definition: Plagiarism is the use of someone else's language, ideas, or other material without making the source(s) evident in situations where there is a legitimate expectation of original work. Plagiarism does not occur when efforts to promptly identify sources by making source use apparent to the audience of the submitted material are obvious. Plagiarism may not necessarily include mistakes in citation style.

A legitimate expectation of original work exists for numerous circumstances, including (but not limited to): scholarly writing, technical presentations and papers, conference presentations and papers, online discussion postings, grant proposals, patents, book and other manuscripts, theses and dissertations, class assignments, artistic works, computer code, algorithms, and other creative works.

This definition applies to the entire WMU community, which includes all faculty; students; staff; visiting faculty, scholars, administrators; and any other person governed by academic research and other policies of the University.

## COMPLICITY

Definition: Complicity is intentionally or knowingly helping or attempting to help another to commit an act of academic dishonesty.

#### Clarification

Examples of complicity include knowingly allowing another to copy from one's paper during an examination or test; distributing test questions or substantive information about the materials to be tested before the scheduled exercise; collaborating on academic work knowing that the collaboration will not be reported; taking an examination or test for another student, or signing another's name on an academic exercise.

Collaboration and sharing information are characteristics of academic communities. These become violations when they involve dishonesty. Faculty members should make clear to

students expectations about collaboration and information sharing. Students should seek clarification when in doubt.

## ACADEMIC COMPUTER MISUSE

Definition: Academic computer misuse is the use of software to perform work which the instructor has told the student to do without the assistance of software.

More information can be found at WMU's Student Conduct Page: wmich.edu/conduct

#### **Department of Geological and Environmental Sciences**

#### **Internship Policy**

#### **Internship Graduate Credit (GEOS 7120)**

Students occasionally have opportunities to gain direct, practical work experience through internships. The Department of Geological and Environmental Sciences supports internship opportunities and offers credit for these experiences. Students may enroll in 2-12 credits of GEOS 7120 while participating in an internship.

To earn a grade in GEOS 7120, the following must be completed:

- 1. The student should contact a faculty member to supervise the internship and serve as the instructor of record for GEOS 7120. This faculty supervisor will assign a grade for the course.
- 2. The student will obtain the form to enroll in GEOS 7120 from the main office and is responsible for obtaining all appropriate signatures.
- 3. The faculty supervisor must have had direct communication with the supervisor in the company or organization that offers the internship in order to confirm internship activities.
- 4. The student must submit a report to his/her faculty supervisor at the end of the internship period, summarizing the activities and detailing what he/she has learned.
- 5. The faculty supervisor will contact the company supervisor to confirm the report and obtain input on the student's performance before assigning a grade.

## Department of Geological and Environmental Sciences Thesis and Dissertation Policies (Approved 9/14/17)

This document summarizes what is required for successful completion of the Geosciences MS thesis and PhD dissertation requirements in terms of both student and faculty responsibilities. Exceptions to any policy item can only be granted by a majority vote of the Geosciences faculty.

#### 1. Definition of Advancement to Candidacy (PhD Program)

A doctoral student advances to candidacy once all of the following conditions have been met: (1) the student achieves a "BA" average across three core courses, (2) the student completes 3 credits of GEOS 6340 with a grade of "B" or higher, (3) the student completes 1 credit of GEOS 5010 with a grade of "B" or higher, (4) the student successfully completes 18 hours of Geosciences coursework, exclusive of cores and independent study courses, (5) the student successfully completes at two research tools, and (6) the student passes both the written and oral dissertation proposal defense.

#### 2. Thesis and Dissertation Committees

#### 2a. Committee Formation and Membership

A thesis or dissertation committee may be formed at any time, but no later than the end of the student's third semester of enrollment in both the MS and PhD programs. A committee is considered set once the <a href="Committee Appointment Form">Committee Appointment Form</a> has been signed and filed with the Geological and Environmental Sciences Department and the Graduate College. Changes to committee membership may be made by filing a new copy of this form with the department and the Graduate College.

A committee consists of the thesis or dissertation chairperson, plus a minimum of two additional members. All members must be full or associate members of the graduate faculty at WMU. The chairperson must be a tenured or tenure-track member of the Geosciences department faculty who is also a full member of the graduate faculty at WMU.

For MS committees, at least one member (in addition to the chairperson) must be from within the Geological and Environmental Sciences department. The third member may be from outside of the department, college, or WMU. Any outside member will participate fully in the thesis process.

For PhD committees, at least one of the committee members <u>must</u> be from outside of the Geological and Environmental Sciences department. This person may be from a related discipline, from outside the College of Arts and Sciences, or from outside of WMU. The outside member will participate fully in the dissertation process.

Both students and faculty are expected to adhere to the full policy on thesis and dissertation committees, as set forth by the WMU Graduate Catalog.

#### 2b. Committee Responsibilities

The committee is charged with the supervision and evaluation of work toward the thesis or dissertation. This task includes but may not be limited to the following: (1) advise the student on selection and/or development of a research topic; (2) review and approve the written proposal for the thesis or dissertation; (3) evaluate and approve the oral portion of the thesis or dissertation proposal, including the public defense and closed-door examination; (4) provide consultation regarding progress on the thesis or dissertation research; (5) evaluate the final written thesis or dissertation; and (6) evaluate the oral portion of the thesis or dissertation, including the public defense and closed-door examination.

In addition, the chairperson of the committee assumes the following additional responsibilities: (1) advise the student regarding selection of other thesis or dissertation committee members; (2)

routinely monitor and provide constructive feedback on student progress toward the thesis or dissertation; (3) call committee meetings and provide committee members with regular updates on the student's progress; (4) evaluate the readiness of both the written and oral thesis or dissertation proposal for committee review and action; (5) evaluate the readiness of the final written and oral thesis or dissertation for committee review and action; (6) administer the proposal and final defense oral examinations; and (7) inform the student of the need to adhere to the *Guidelines for the Preparation of Theses, Specialist Projects, and Dissertations*.

The committee chairperson and all members must be present for an oral proposal examination or defense to proceed. Any committee member from outside of WMU is strongly encouraged to attend the student's oral proposal examination and final oral defense in person. When this is not possible, the outside committee member may attend virtually, or the outside member may send questions in advance to the committee chairperson to ask on his or her behalf during the defense. In an emergency situation, a proposal examination or defense may proceed with one member missing, as long as the chairperson is present.

#### 3. Proposal and Proposal Defense

The thesis or dissertation proposal is a research proposal that should at minimum contain the following elements: abstract; problem statement; specific goals, questions, or hypothesis to be addressed by the research; literature review; methods; and work completed to date. The exact structure of the document is at the discretion of the committee. A proposal has two parts: the written document and an oral defense and examination.

Once approved by the thesis or dissertation chairperson, the written proposal should be submitted to the student's committee for review. The proposal should be submitted for committee review a minimum of two weeks before the intended date of the oral defense. The student will continue to work on the proposal until the committee is satisfied with the written document. Once the student's committee has received the written proposal, the student may schedule his/her proposal defense by submitting the signed presentation scheduling form to the Geological and Environmental Sciences main office (see next page). Students should schedule the presentation with the Geological and Environmental Sciences office at least two weeks prior to the presentation date. A 2 hour block should be scheduled to accommodate the 20 minute public presentation and 20-30 minutes of public questioning, plus up to 1 hour for the closed-door oral examination. Proposal defenses may only be scheduled during the Fall, Spring, and Summer I semesters.

At the conclusion of the proposal defense presentation, students and faculty in attendance will have an opportunity to question the student about the intended research. Following the open questioning period, the student will remain with his/her committee for a closed-door oral examination. The committee chairperson will guide the examination, allowing each committee member the chance to further question the student about his/her research and general understanding of the research area. At the end of the oral examination, the committee will excuse the student and render a pass/no pass decision. At this point, students may be asked to revise the written thesis or dissertation proposal to take into account any questions or concerns raised in the oral defense. Once the proposal has been approved by the committee, the student is able to complete his or her research. If a student does not pass the oral or written proposal defense, he or she may make one additional attempt as outlined in the MS and PhD program descriptions in the WMU Graduate Catalog.

#### 4. Thesis/Dissertation Credits

Upon successful defense of the thesis/dissertation proposal the student may start enrolling in thesis/dissertation credits. Students may request an exemption allowing them to take thesis/dissertation credits during the same semester that their proposal defense is scheduled. Exemption will require the unanimous support of the Department of Geological and Environmental

Sciences faculty on the student's committee. Students will need to complete an approval form signed by all committee members. Form must be completely filled out prior to students enrolling in thesis/dissertation credits.

#### 5. Final Thesis or Dissertation Defense

The final thesis or dissertation describes the full extent of the student's research and is expected to include at minimum the following elements: abstract; problem statement; specific goals, questions, or hypothesis addressed by the research; literature review; methods; results; discussion and implications; and conclusions. The exact format of the written thesis or dissertation is at the discretion of the student's committee. Like the proposal, the final thesis or dissertation has two parts: the written document and an oral defense and examination.

It is the shared responsibility of the student and the committee chair to keep all committee members informed of research progress as the student works on his/her thesis or dissertation. This regular communication will ensure that the committee has shared expectations of the project and can give the student consistent and timely feedback. Students should expect to be set multiple revisions to the written document until the committee is fully satisfied.

All program requirements (e.g., coursework, presentation and publication requirements, and seminar attendance) must be met before the oral defense may be scheduled. The final thesis or dissertation should be submitted for committee review a minimum of two weeks before the intended date of the oral defense. Once the student's committee has received the written document, the student may schedule his/her thesis or dissertation defense by submitting the signed presentation scheduling form to the Geological and Environmental Sciences main office at least two weeks prior to the presentation date. **NOTE** that doctoral students must also schedule the final defense with the Graduate College a minimum of two weeks prior to the defense date. At this point (two weeks prior to the defense), a printed copy of the thesis or dissertation should be submitted to the Geological and Environmental Sciences main office for general faculty review. Doctoral candidates should schedule a 2.5 hour block to accommodate the 50 minute presentation, 30-40 minutes of open questioning, and 1-1.5 hours of closed-door examination. Masters candidates should schedule a 2 hour block to accommodate the 30-45 minute presentation, 30-40 minutes of open questioning, and up to 1 hour of closed-door examination. Defenses may only be scheduled during the Fall, Spring, and Summer I semesters.

At the conclusion of the public defense presentation, students and faculty in attendance will have an opportunity to question the student about the intended research. Following the open questioning period, the student will remain with his/her committee for a closed-door oral examination. The committee chairperson will guide the examination, allowing each committee member the chance to further question the student about his/her research and general understanding of the research area. At the end of the oral examination, the committee will excuse the student and render a pass/no pass decision. At this point, students may be asked to revise the written thesis or dissertation to take into account any questions or concerns raised in the oral defense. If changes to the written document are required, it the committee chairperson's responsibility to ensure that these are completed prior to submitting the written document to the Graduate College. Once the written thesis or dissertation is approved by the committee, it may be submitted to the Graduate College. If a student does not pass the oral portion of the defense, he or she may make one additional attempt in a closed-door session with the thesis or dissertation committee.

## **Geological and Environmental Sciences Department Presentation Scheduling Approval Form**

Student's Name:	
Presentation type:	
Thesis Proposal Defense	Thesis Defense
Dissertation Proposal Defense	Dissertation Defense
Proposed presentation date:	Time:
Approval Signatures:	
	d members indicate that the written thesis proposal, ssertation has been received and that the student is ready to
Committee Chairperson:	Date:
Committee Member:	Date:
Committee Member:	Date:
Committee Member:	Date:
	:]: Signature of the Graduate Advisor indicates that the nd may proceed with the thesis or dissertation defense.
Graduate Advisor:	Date:
**************************************	ted by Geosciences Office****************
Received by:	Date Received:
Presentation Date/Time:	Date of Fmail to Faculty:

## Geological and Environmental Sciences Department Presentation Scheduling Approval Form (to be circulated at the time that the presentation is scheduled)

Student's Name:		
Presentation Title:		
Abstract (250 words, maximum):		

## **Geological and Environmental Sciences** Department Approval form for thesis/dissertation credits prior to defense

Students may request an exemption allowing them to take thesis/dissertation credits during the same semester that their proposal defense is scheduled. Exemption will require the unanimous support of the Department of Geological and Environmental Sciences faculty on the student's committee. Students will need to complete an approval form signed by all committee members. Form must be completely filled out prior to students enrolling in thesis/dissertation credits.

Student's Name:	
Approval Signatures: Signatures of the committee chairperson and enroll into thesis/dissertation credits.	l members indicate that they agreed on allowing student to
Committee Chairperson:	Date:
Committee Member:	Date:
Committee Member:	Date:
Committee Member:	Date:
********************To Be Completed by <b>Gec</b>	ological and Environmental Sciences Office************
Received by:	Date Received:

## **Geosciences Department Presentation Scheduling Approval Form**

Student's Name:	
Presentation type:	
Thesis Proposal Defense	Thesis Defense
Dissertation Proposal Defense	Dissertation Defense
Proposed presentation date:	Time:
If you and your committee choose to do your Lisah Crall with the Webex information, so she	presentation via video-conference, then please provide e can distribute it.
Approval Signatures:	
·	members indicate that the written thesis proposal, ertation has been received and that the student is ready to
Committee Chairperson:	Date:
Committee Member:	Date:
Committee Member:	Date:
Committee Member:	Date:
	Signature of the Graduate Advisor indicates that the d may proceed with the thesis or dissertation defense.
Graduate Advisor:	Date:
**************************************	ed by Geosciences Office*****************
Received by:	Date Received:
Presentation Date/Time:	Date of Email to Faculty:

## Geosciences Department Presentation Scheduling Approval Form (to be circulated at the time that the presentation is scheduled)

Student's Name:		
Presentation Title:		
Abstract (250 words, maximum):		

## Department of Geological and Environmental Sciences Approved 5/19/16

#### **Graduate Readmission Policy**

Graduate students who have been academically dismissed from the Department of Geological and Environmental Sciences or other WMU departments may apply for readmission. Geosciences has rolling admissions for all graduate programs; thus, students may apply for admission at any time. However, students seeking readmission should submit the online application at least six weeks ahead of enrollment deadlines. Once all the required components of the application have been received/processed by WMU and attached to the online application, the student file will be considered complete and forwarded to the Graduate Admissions Committee for review. The review process takes three weeks. Once the committee has reached a decision, the student will be notified immediately. If accepted, the student will then need to make an appointment with the departmental Graduate Adviser to complete readmission paperwork. Once the university processes this paperwork and the academic status has been changed, the student will then need to make another appointment with the Graduate Adviser to enroll in courses. All of this must take place ahead of enrollment deadlines.

The department has adopted the following policies and procedures:

- 1. Students seeking readmission will only be considered for the MS-Earth Sciences degree program or the certificate program in applied hydrogeology.
- 2. Applications for readmission will only be accepted through the online system. Only complete applications will be considered. To apply, visit <a href="http://www.wmich.edu/apply/graduate/readmission">http://www.wmich.edu/apply/graduate/readmission</a>
- 3. Applications received less than three weeks before the final day of the open enrollment (add/drop) period will only be considered for enrollment starting in the following academic semester or summer session.
- 4. Students applying for readmission will be held to the same admission requirements as new graduate applicants. For program-specific admission requirements please see:

Applied Hydrogeology (Certificate): <a href="https://wmich.edu/geology/academics/certificate">https://wmich.edu/geology/academics/certificate</a>
MS-Earth Sciences: <a href="https://www.wmich.edu/geology/academics/graduate/earth-science">http://www.wmich.edu/geology/academics/graduate/earth-science</a>

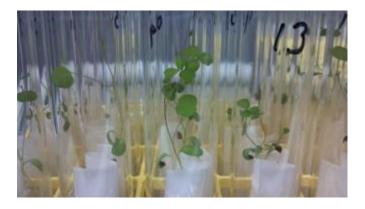
5. Students may re-submit materials from their original graduate study application, such as undergraduate transcripts, resume or CV, and letters of support. However, students must submit a new written statement pertaining to graduate study in the selected program, and a supplemental program application form. For a complete list of program-specific application requirements, please see:

Applied Hydrogeology (Certificate): <a href="https://wmich.edu/grad/admissions/single.php?id=174">https://wmich.edu/grad/admissions/single.php?id=174</a>
MS-Earth Sciences: <a href="http://www.wmich.edu/grad/admissions/single.php?id=110">https://www.wmich.edu/grad/admissions/single.php?id=174</a>

- 6. All readmitted students will be subject to the condition of maintaining a GPA of 3.0 or higher in the first academic semester of study following readmission. Other admission conditions, such as coursework deficiencies, will be determined by the departmental Graduate Admissions Committee (GAC).
- 7. Students may only be admitted or readmitted to geosciences graduate degree programs by a majority vote of the departmental GAC. The vote will be tallied by the GAC chairperson and reported to the graduate advisor. If the GAC votes to readmit a student, the graduate advisor may approve the readmission.

# GRANTS & FELLOWSHIPS

## Graduate Student Research Grant



## **GRADUATE STUDENT RESEARCH GRANTS (2019)**

## **Purpose:**

The Graduate Student Research Grants are established to support graduate students engaged in independent scholarly research, scientific inquiry, inventive technology and artistic/creative activity. WMU graduate students may receive a maximum of two Research Grants, or two Travel Grants, or one of each grant type at each degree level: Ph.D.,master's,specialist.

## Applications for this current award cycle are due April 5, 2019, no later than 5 p.m.

The application is available here: <u>Graduate Student Research Grant Application - Late Spring</u> 2019

Note: The typing of theses, dissertations, and project paper, as well as the purchase of computers or supplies and equipment commonly provided by departments or by other existing grants or funds do not qualify as a legitimate budget expense under a GSRG.

#### **Award amount:**

Grants range up to \$1,000

## Eligibility

WMU graduate students must be:

- 1. Admitted to a graduate degree program
- 2. In good academic standing (3.0 GPA)

- 3. Enrolled full time in the semester that the application is made (one credit hour only if at dissertation/thesis hours)
- 4. The individual responsible for the research described in the project, but for the purposes of research compliance, listed as the student investigator

## **Guidelines for the application process:**

- Access the online application for the Graduate Student Research Grants here: <u>Graduate</u>
   <u>Student Research Grant Application Late Spring 2019</u>
- In addition to this online application, applicants are REQUIRED to have an advisor or another faculty member familiar with your project write a Letter of Support for your project and email it to: <a href="mailto:graduate-center@wmich.edu">graduate-center@wmich.edu</a>. The letter must clearly address the following elements:
- 1. Student's name
- 2. The purpose that the letter of support is for an application for a Graduate Student Research Grant
- 3. The significance of the project
- 4. The feasibility of completing it in the stated time frame with the requested resources
- 5. The applicant's qualifications for carrying out the project.
- 6. Department fund and cost center number.
- Applications for this current award cycle are due April 5, 2019, no later than 5 p.m.

#### **Future Award Deadlines**

The Graduate Student Research Grant is offered three times a year. Following are the application deadlines for future award cycles:

Fall 2019: October 18, 2019
Winter 2020: February 7, 2020
Spring 2020: April 3, 2020

For Updated Information on WMU Graduate College Grants and Fellowships: https://wmich.edu/grad/fellowships-grants

## **Graduate Student Travel Grants**

## **GRADUATE STUDENT TRAVEL GRANTS (2019)**

## **Purpose**

The Graduate Student Travel Grants are established to support graduate students engaged in independent scholarly research, scientific inquiry, inventive technology, and artistic/creative activity. The grants support graduate student travel to meetings or events sponsored by professional organizations for the purpose of reporting the results of their research, exhibiting or performing creative works or otherwise disseminating results of their scholarly activity. These grants do not cover conference attendance for other purposes (e.g. as a non-presenting attendee or workshop participant.)

## Applications for this current award cycle are due April 5, 2019, no later than 5 p.m.

Application is available here: Graduate Student Travel Grant Application - Late Spring 2019

WMU graduate students may receive a maximum of two Research Grants, or two Travel Grants, or one of each grant type at each degree level: Ph.D.,master's,specialist. Note: The typing of theses, dissertations, and project paper, as well as the purchase of computers or supplies and equipment commonly provided by departments or by other existing grants or funds do not qualify as legitimate budget expenses under a Graduate Student Travel Grant.

#### **Award Amount**

Grants range up to \$700 (\$900 for travel to Alaska and Hawaii)

## **Eligibility**

WMU graduate students MUST be:

- 1. Admitted to a graduate degree program
- 2. In good academic standing (3.0 GPA)
- 3. Enrolled full time in the semester that the application is made (one credit hour only if at dissertation/thesis hours)
- 4. The invited presenter via a letter/email of invitation from the conference/exhibit officials
- 5. The sole or principal investigator of the research project (PI) but for the purposes of research compliance, listed as student investigator, author or performer of the artistic/creative activity and the individual invited or selected to make the presentation

## **Guidelines for the Application Process**

- Access the online application for the Graduate Student Travel Grants here: <u>Graduate</u> <u>Student Travel Grant Application - Late Spring 2019</u>
- In addition to this online application, applicants are REQUIRED to have an advisor or another faculty member familiar with your project write a Letter of Support for your project and email it to: <a href="mailto:graduate-center@wmich.edu">graduate-center@wmich.edu</a>. The letter must clearly address the following elements:
- 1. Student's name
- 2. Please ensure the student is currently enrolled
- 3. The purpose that the letter of support is for an application for a Graduate Student Travel Grant
- 4. The significance of the project
- 5. The student's role in the project
- 6. The significance of the conference or event where the project will be presented
- 7. Selectivity level of the conference or event (e.g., the main national conference in our field, highly competitive with less than half of submissions accepted, etc.)
- Applications for this current award cycle are due April 5, 2019, no later than 5 p.m.

#### **Future Award Deadlines**

The Graduate Student Travel Grant is offered three times a year. Following are the application deadlines for future award cycles:

Fall 2019: October 18, 2019Winter 2020: February 7, 2020Spring 2020: April 3, 2020

If you have questions about the application process for this award, please contact Dr. Brian Horvitz at brian.horvitz@wmich.edu

For Updated Information on WMU Graduate College Grants and Fellowships: https://wmich.edu/grad/fellowships-grants

# Other Grants – Apply through Graduate College:

- 1. Gwen Frostic Doctoral Fellowship
- 2. Thurgood Marshall Fellowship
- 3. Martin Luther King, César Chavez and Rosa Parks Future Faculty Fellowship
- 4. WMU GEP Fellowship
- 5. Graduate College Dissertation Completion Fellowship

Application materials and eligibility criteria can be found here: <a href="https://wmich.edu/grad/fellowships-grants">https://wmich.edu/grad/fellowships-grants</a>

WMU Office of the Vice President for Research also maintains a list of resources (both internal WMU and external) for both undergraduate and graduate students – includes Research funding:

https://wmich.edu/research/funding/students

# OTHER RESOURCES

## 2023-24 Academic Calendar

## **ACADEMIC YEAR 2023-24**

Calendars are subject to change. Dates and events are added or changed as information becomes available. Please <u>contact us</u> for a PDF version of the 2023-24 calendar.

Item	Fall 2023	Spring 2024	Summer I 2024	Summer II 2024
Course offerings open for viewing	Feb. 27	Oct. 9	Jan. 22	Jan. 22
Registration begins	March 13	Oct. 23	Feb. 5	Feb. 5
Tuition and fees due	Aug. 23	TBA	TBA	TBA
Advising Days	Aug. 28- 29	Jan. 4-5	N/A	N/A
Fall Welcome	Aug. 24- 29	N/A	N/A	N/A
Classes begin at 8 a.m.	Aug. 30	Jan. 8	May 6	June 27
Last day to drop/add; Census	Sept. 7	Jan. 16	May 13	July 5
\$100 late add fee begins*	Sept. 8	Jan. 17	May 14	July 6
Begin recording withdrawals with a final grade of "W" on the transcript	Sept. 8	Jan. 17	May 14	July 6
Last day to withdraw from classes	Oct. 30	March 18	June 3	July 22
Final exam week	Dec. 11- 14	April 22- 25	N/A	N/A
Semester Ends	Dec. 16	April 27	June 26	Aug. 16
Refunds				
Last day to receive a 100% refund	Sept. 7	TBA	TBA	TBA
Last day to receive a 90% refund for a complete withdrawal**	Sept. 11	TBA	N/A	N/A
Last day to receive a 50% refund for a partial withdrawal***	Sept. 13	TBA	N/A	N/A
Last day to receive a 50% refund for a complete withdrawal**	Sept. 26	TBA	TBA	TBA
Last day to receive a 25% refund for a complete withdrawal**	Oct. 23	TBA	TBA	TBA
Grades				
Midterm grades due	Oct. 16	March 11	N/A	N/A
Final grades due	Dec. 19	April 30	July 2	Aug. 20
Graduation				
Last day to submit your application for graduation	Feb. 1	Oct. 1	Feb. 1	Feb. 1
Commencement	Dec. 16	April 27	June 29	N/A

Item	Fall 2023	Spring 2024	Summer I 2024	Summer II 2024
Holidays and Recesses				
Labor Day	Sept. 4			
Fall break	Oct. 18- 20			
Thanksgiving break (begins at noon)	Nov. 22			
Dr. Martin Luther King Jr. Day Convocation and Activities		Jan. 15		
Spirit Day		March 1		
Spring break		March 4-8		
Memorial Day			May 27	
Independence Day				July 4

 $<sup>^{*}</sup>$  \$100 late add fees apply to all students adding their first class after the census has taken place.

A 24-hour grace period is provided to students who drop a course that meets for the first time on or after the end of the drop/add period. Students dropping a class within 24 hours of the start date should contact the Registrar's Office to make sure they receive the correct refund.

<sup>\*\*</sup> A complete withdrawal is withdrawing from all classes (please note: a final grade of "W" will appear on the academic transcript)

<sup>\*\*\*</sup> A partial withdrawal is withdrawing from one or more but not all classes (please note: a final grade of "W" will appear on the academic transcript)

## Poster Printing Guidelines

The Department does not presently have poster printing capabilities. Please plan to have your poster printed at the new FedEx in the WMU student center.

## SUCCESSFULLY CREATING A POSTER

- Use Microsoft PowerPoint, Publisher, or similar software to create your poster. Most print shops will accept posters in .ppt(x), .pdf, .jpg or .png formats; other file formats will not be accepted for printing. The following templates may be modified as needed and are designed to produce a 48" x 36" poster.
  - o PowerPoint poster template
  - PowerPoint poster template (2007)
- Contact the print shop to find out the largest possible printable area most shops will accommodate posters up to 42" by 96". You can use custom page sizing to make your poster half the final size. (e.g., page size set at 21" x 42" and ultimately prints at 200 percent).
- Use a minimum of 18pt font; 24pt is preferred (choose either 9 or 12pt if poster will print at 200%). If using PowerPoint, type the text in Microsoft Word or notepad and copy and paste it into PowerPoint as it can be somewhat tricky working with a huge page size.
- Use a **plain white or light-colored background**. Drawn boxes around text can be useful. The University provides specific guidelines when using its <u>visual</u> <u>identity</u> (logos).
- Sample poster guidelines: GSA Annual Meeting, Designing Conference Posters.

There may be times when faculty, staff or students find themselves concerned about a student's welfare or observe uncharacteristic behavioral changes.

## How to recognize a student in distress

## A student in distress might indicate a need for assistance with

- Repeated requests for special consideration, extensions, etc.
- Unusual or exaggerated emotional responses
- Withdrawal from activities or friends
- Significant change in sleep or eating patterns
- Declining academic performance
- Excessive absences, especially if attendance was previously consistent
- Perfectionism, procrastination, excessive worrying
- Markedly changed patterns of interaction (avoiding participation or dominating discussion)

## REPORT A NON-ACADEMIC CONCERN

To submit a concern and make a referral, complete the form at wmich.edu/studentaffairs/concern

The most effective way to get help for students is to submit a concern using the online form.

## These signs might indicate a student in severe distress

- Depressed mood
- Marked changes in personal hygiene; swollen, red eyes; falling asleep in class; excessively active and talkative
- Inability to communicate
- Garbled, slurred, disjointed or incoherent speech
- Loss of contact with reality
- Seeing/hearing things that do not exist
- Suicidal thoughts or intentions
- Overtly discussing, joking or hinting that suicide is a current and viable option
- Highly disruptive behavior
- Homicidal threats
- Hostile, threatening or violent behavior

## How to share your concern with a student

If you have a concern, talk to the student first. The student may have an explanation for the behavior or may ask for assistance.

- Talk to the student in private when both of you have time
- Give the student undivided attention
- Express your concerns in behavioral terms
- Share an observation "I've noticed you've been acting differently than you usually do and I'm concerned"
- Listen in a non-judgmental, non-threatening way
- Communicate your understanding by repeating back the core of what the student has said
- Avoid judging, evaluating, or criticizing
- Respect the student's value system, even if you disagree



## Make a referral for assistance

## When to make a referral

## You are encouraged to submit a concern form to make a referral if students

- Do not respond appropriately when you share your concern
- Exhibit erratic or sudden changes in classroom performance
- Exhibit uncharacteristic behavioral, mood, attitude or appearance changes
- Are uncharacteristically inattentive, unresponsive, angry, argumentative or aggressive
- Disclose mental health concerns and indicate a need for assistance
- Exhibit behavior that is getting worse

## You may also choose to make a referral when you

- Feel overwhelmed or unsure of how to proceed
- Need to talk with someone about your observations or concerns

## How to encourage students to seek assistance

- Let students know that it is not necessary to know exactly what is wrong in order to seek assistance
- Assure students that seeking help does not mean their problems are unusual or extremely serious
- Show students how they can seek assistance by using the concern form to refer themselves

## After you submit a non-academic concern

You will be contacted by email to confirm that the concern was received. The submitted concern will be reviewed by trained staff in student affairs who will contact students to let them know a concern has been expressed about them and determine the kind of assistance needed.

Depending on the nature of the concern, a referral may be sent to a multidisciplinary team of trained professionals with medical, mental health and legal expertise.

Student affairs staff will confirm to the referring person that the student has been contacted. Students do not always respond to offers of assistance. If students accept assistance or share personal information with student affairs staff, privacy regulations will be followed to determine any subsequent sharing of the information.

## Resources

Aggressive or threatening behavior	WMU Public Safety wmudps.wmich.edu	(269) 387-5555 or 911			
Disruptive behavior	Student Conduct wmich.edu/conduct	(269) 387-2160			
Emotional / psychological distress	Counseling Services wmich.edu/healthcenter/coun	(269) 387-1850 seling			
	Case Management Office of the VP for Student Affairs wmich.edu/studentaffairs/cas				
Medical or psychiatric illness	Sindecuse Health Center wmich.edu/healthcenter	er (269) 387-3287			
After hours:	Borgess Hospital ER	(269) 226-4815			
	Bronson Hospital ER	(269) 341-6386			
Sexual	FIRE Place	(269) 387-2990			
assault support	wmich.edu/healthcenter/healthpromotion/fireplace				
зарроге	YWCA	(269) 385-3587			
More	Behavioral Health Services				
resources	wmich.edu/unifiedclinics/beha	(269) 387-7000 avioral/			
	Disability Services wmich.edu/disabilityservices	(269) 387-2116			
	Gryphon Place	(269) 381-HELP			

## **Suicide Prevention Program**

This program does not provide counseling services. (269) 387-1887

wmich.edu/suicideprevention

wmich.edu/studentaffairs

REPORT A STUDENT **NOT ATTENDING**, EXCESSIVE ABSENCES, MISSING MULTIPLE ASSIGNMENTS OR OTHER ACADEMIC CONCERNS

A form for reporting student academic concerns is located on **GoWMU**. Navigation directions may be found at