



UNIVERSITY OF  
ARKANSAS

# DEPARTMENT OF GEOSCIENCES

## GRADUATE STUDENT HANDBOOK

2019-2020

## INTRODUCTION

This handbook describes graduate admissions and degree requirements for the Department of Geosciences at University of Arkansas. Geosciences graduate students are required to read this handbook and **sign the contract page** that states that the student understands the procedures and guidelines, and agrees to abide by them throughout his/her tenure within the program. The signed contract will be placed in the student's file. This handbook is designed to supplement the information provided in the University of Arkansas [Graduate School Catalog](#). The [Graduate School](#) is located in 213 Gearhart Hall, University of Arkansas, Fayetteville, AR 72701, Phone: 479-575-4401.

Degrees offered through Geosciences are a Master of Science in geology (MS), a Master of Science in geography (MS), and a doctorate in geosciences (PhD). Each degree program has separate admission requirements, requirements for fulfilling the degree, and graduate coordinators. Current graduate coordinators:

**MS Geology** Celina Suarez, Gearhart 226, 479-575-4866, [casuarez@uark.edu](mailto:casuarez@uark.edu)

**MS Geography** – Fiona Davidson, Gearhart 115, 479-575-3879, [fdavidso@uark.edu](mailto:fdavidso@uark.edu)

**PhD Geosciences** John Shaw, Gearhart 30, 479-575-7489,

[shaw84@uark.edu](mailto:shaw84@uark.edu). Starting Fall 2020, Matt Covington will serve as PhD Coordinator (Gearhart 028, 479-575-3876)

The department also is part of the interdisciplinary graduate programs in Environmental Dynamics (ENDY) and Space and Planetary Sciences (SPAC). ENDY offers only the PhD. SPAC offers the MS and PhD. Students may also obtain the MS in Geology or MS in Geography with a concentration in Space and Planetary Sciences. For additional information contact:

**ENDY** Peter Ungar, 330 Old Main Hall, 479-575-6361, [pungar@uark.edu](mailto:pungar@uark.edu)

**SPAC** Larry Roe, 479-575-3750

The main office for Geosciences is located in 216 Gearhart Hall. The members of the office staff are here to keep the department running smoothly and to help with whatever problems and concerns that may occur. Each staff member is responsible for specific aspects of the department. Please give them the utmost respect as they will be invaluable to your success. Our department chair is Christopher Liner, 216 Gearhart Hall, 479-575-5667, [liner@uark.edu](mailto:liner@uark.edu)

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## GEOSCIENCES WEB SITE

The department [web site](#) contains a current and complete [list of faculty](#) (with research concentrations), instructors and staff.

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## ADMISSIONS REQUIREMENTS

Students wishing to pursue a degree through Geosciences must be admitted to both the Graduate School and International Education and the department. Detailed requirements for regular admission to the Graduate School are outlined in the Graduate School Catalog. Application forms and catalogs can be obtained from the [Graduate School's website](#). If interested in a teaching assistantship, the student must indicate so in the application process. To be eligible for a teaching assistantship All files must be complete by **January 15th** for admission in the **fall** semester and by **October 15th** for admission in the **spring** semester. **For PhD students seeking financial assistance all files must be received by January 15.** The department requires the GRE for admission into all programs. Each program also has specific prerequisites as follows:

**MS GEOLOGY** - Students must have completed an undergraduate geology program similar to that required for the B.S. Degree in geology at the University of Arkansas. The required courses for the B.S. include: Physical Geology (GEOS 1113/1111L), Mineralogy and Petrology (GEOS 2313), Sedimentary Rocks (GEOS 3413), Structural Geology (GEOS 3514), Stratigraphy and Sedimentation (GEOS 4223), Earth System History (GEOS 4924), and Geology Field Camp (GEOS 4686). In addition, students are required to complete **one year** of College or University Physics, one

year of University Chemistry, and one year of Calculus. Students lacking the appropriate background may satisfy deficiencies while enrolled in the Graduate School.

**MS GEOGRAPHY** - Students must have completed satisfactory undergraduate preparation in geography, including fulfillment of all the required courses for an undergraduate degree in Geography at the University of Arkansas. These courses include Human Geography (GEOS 1123), Earth Science (GEOS 1133 and GEOS 1131L), World Regional Geography (GEOS 2003), Introduction to Cartography (GEOS 3023) and Geospatial Applications and Information Science (GEOS 3543) or equivalent classes. Students may satisfy deficiencies while enrolled in the Graduate School.

**PhD GEOSCIENCES** - Applicants for the doctoral program must have completed the baccalaureate degree with a major in geosciences or an allied discipline. Students with academic preparation at the undergraduate or masters level in other disciplines of physical science, engineering, and mathematics are also encouraged to apply ([specific admission requirements](#)).

## FINANCIAL ASSISTANCE

**Departmental Teaching Assistantships:** There are a limited number of teaching assistantships available for qualified students. Students who wish to be considered for an assistantship must have a complete application packet (acceptance into the Graduate School, three letters of recommendation, statement of goals and an indication that an assistantship is requested on the online application **January 15<sup>th</sup>** for PhD and MS student admission in the fall semester, and **October 15<sup>th</sup>** for admission for the spring semester. Students are advised that assistantship possibilities for entry in the spring semester are limited. MS assistantships are generally awarded for a maximum period of two years (the normal completion period for a master's de-

gree) contingent upon adequate progress toward the degree. Additionally, assistantships can be withdrawn at the end of any semester if a student is demonstrably not carrying out his/her assigned duties. Duties normally include lab teaching, lab assistant duties, classroom assistance (grading, etc.) and limited research and service assistance. Duties are designed to account for 20 hours per week and the assistantship period is from August 15 to May 15. All students on assistantship will receive a 9-month stipend plus paid tuition for up to 21 hours of graduate credit per year. The stipend is paid in 10 installments (1/2 check August 31, full checks Sept-April, 1/2 check May 15.) Students interested in assistantships should contact the department for the current level of the MS and PhD stipends.

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## REQUIREMENTS FOR MS GEOLOGY

**Areas of concentration:** General geology, space and planetary sciences

**Program Description:** Instruction in geology at the graduate level focuses on preparation of students to become practicing professional geologists in industry or to pursue, without deficiencies, doctorates at established programs. Students intending to enter the industrial workforce are encouraged to maintain a broad perspective with an emphasis in an area of geology that has a demonstrated record of past employment, such as petroleum geology or environmental geology.

The greatest strength of the program in geology at the University of Arkansas is instruction in practical geological interpretation, with emphasis on field relationships. This instructional strength includes all levels of teaching and supports an active research program that serves to strengthen the research and communication skills of the student through writing assignments, oral presentations, and participation in professional societies.

**Admission to Degree Program:** Students admitted to graduate study should have completed an undergraduate geology program similar to that required for the B.S. degree at the University of Arkansas. Applicants lacking an appropriate background may satisfy deficiencies while enrolled in Graduate School. Prospective students who wish to be considered for financial support from the Department of Geosciences should submit application forms, three letters of recommendation, and a statement of their graduate and professional goals before January 15 for the fall semester, and before October 15 for the spring semester in order to be considered.

**Requirements for the Master of Science Degree:** The program in Geology requires 30 graduate course credit hours, six of which will be derived from a thesis reporting the results of an original research problem. All course work, a thesis topic, and the final thesis must be approved by the student's thesis committee. This committee is selected by the student and the student's thesis director and

will consist of a minimum of three members. At least two of the committee members will be chosen from geology faculty whose areas of expertise coincide with the research interests of the student.

Each student will complete 30 credit hours that include 6 thesis credit hours and an additional 24 credit hours consisting of GEOS 5612 Geosciences Research Methods (fall) and GEOS 5011 Colloquium (fall/spring), plus 12 credit hours of 5000-level courses (not to include unnamed special topic and independent study) taught by the Geology Faculty, and an additional 9 credit hours determined in consultation with the thesis Advisor and advisory committee. A listing of Geology Faculty can be found [here](#).

Courses transferred or previously taken as an undergraduate may not be used for graduate credit toward the 24-credit hour requirement. Students should be aware that courses taken to fulfill deficiencies as graduate students will incur graduate tuition.

To complete the requirements for the degree, the candidate must complete all course work with a minimum grade-point-average of 3.00, submit an acceptable thesis, and pass a comprehensive examination based primarily on a defense of the student's thesis.

Students should also be aware of Graduate School requirements with regard to [master's degrees](#).

**Suggested Courses:**

**Geochemistry/Petrology Track:** see Drs. Suarez/Potra

**Geoinformatics Track:** see Dr. Aly

**Hydrogeology Track:** see Dr. Hays

**Petroleum Track:** see Drs. Sharman/Liner

## REQUIREMENTS FOR MS GEOGRAPHY

Requires a total of 30 semester hours. A minimum of 24 semester hours of course work (including a 6-hour core and 6 hours of quantitative or computational electives), six semester hours of thesis, and a comprehensive examination (defense of thesis) conducted by the candidate's thesis committee are required for all students who obtain an MS degree in Geography. Core courses (6 hours) include GEOS 5093 History and Philosophy of Geography, GEOS 5612 Research

Methods in Geosciences, and GEOS 5011 Colloquium. Quantitative and computational electives (minimum of 6 hours) must be approved by the department or master's advisory committee. Other electives (12 hours) include courses in consultation with the master's advisory committee. The remaining 6 semester hours are associated with the master's thesis. Students should also be aware of Graduate School requirements with regard to [master's degrees](#).

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## REQUIREMENTS FOR PhD GEOSCIENCES

The requirements to complete a PhD in Geosciences are given in the [Graduate Catalog](#) where PhD-related [degree requirements](#) and Geosciences-specific [program requirements](#) can be found. The materials outlined here are meant to be supplemental in the absence of specific guidance from the advisor.

### Committees

Two committees guide PhD degree progress:

1. Doctoral advisory committee  
4-6 members, formed in semester 1
2. Doctoral dissertation committee  
3-5 members, formed after candidacy exam

### Examination for Candidacy

Two rigorous candidacy examinations include: **1) a written review paper and 2) an oral defense of the written dissertation proposal.** Both examinations are intended to evaluate the level of scholarship of the student by assessing the student's command of information learned in required courses and determining the adequacy of the student's intellectual preparation to engage in significant research leading to completion of the dissertation. As such, successful completion of these examinations marks an important milestone in the student's progress toward the degree as she/he makes a transition from largely classroom-oriented study to independent research that is the hallmark of the doctoral tradition of academic achievement.

### Scheduling

Students may begin the written examination after they have completed the Graduate School residency requirement (at least 12 hours as a PhD student, with a grade point average of at least 3.25), and have taken GEOS 5612 Research Methods in Geosciences and GEOS 5011 Colloquium. This is typically the start of their third semester. The written exam will be taken over a 30-day period during the fall or spring semester when classes are in session, but not during final exams. The written exam may also be taken during the summer, although the committee may choose not to evaluate it until the following fall semester.

The written exam should be taken in semester 3 or 4. Students that have not attempted the candidacy exam two full semesters after they have become eligible may be dismissed due to lack of academic progress by a vote of the advisory committee, or by the decision of the department chair if an advisory committee has not been formed. Please see the University policy for academic probation for details (<http://catalog.uark.edu/graduatecatalog/objectivesandregulations/#academicdismissalacademicrobation>). Those who have begun the exam process before the end of semester 4 are considered in good standing. This exam must be taken at least one year prior to completing all requirements for the degree.

The exam will be organized by a meeting of the advisory committee, ideally in semester 2 or beginning of semester 3. The student will make a <30 minute presentation on the topic they wish to study and choose a 30 day window to take the exam, under the constraints outlined above. If the student has already begun a dissertation proposal (see below), they should summarize that work. The student's preparation (research experience and courses taken) should be presented. The group will also discuss how the research plan fits within the primary adviser's research program, so a sufficient level of independence (as determined by the committee) can be confirmed. The student may suggest topics that they may wish to review for the written exam at this time. After exploratory questioning, the committee will meet without the student to determine a prompt for the review paper (see below). This prompt will be given to the student at the beginning of the 30 day exam period, and the committee chair will provide a written memo to the Geosciences PhD Coordinator indicating the starting date of the student's examination. At the end of the 30 day exam period, the student will submit (1) the review paper, and (2) the dissertation proposal to the committee. No extensions to this time frame will be permitted except under the most extraordinary conditions.

The advisory committee may alter the requirements for the candidacy exam so long as they conform to the requirements in the Graduate Catalog. These altered re-

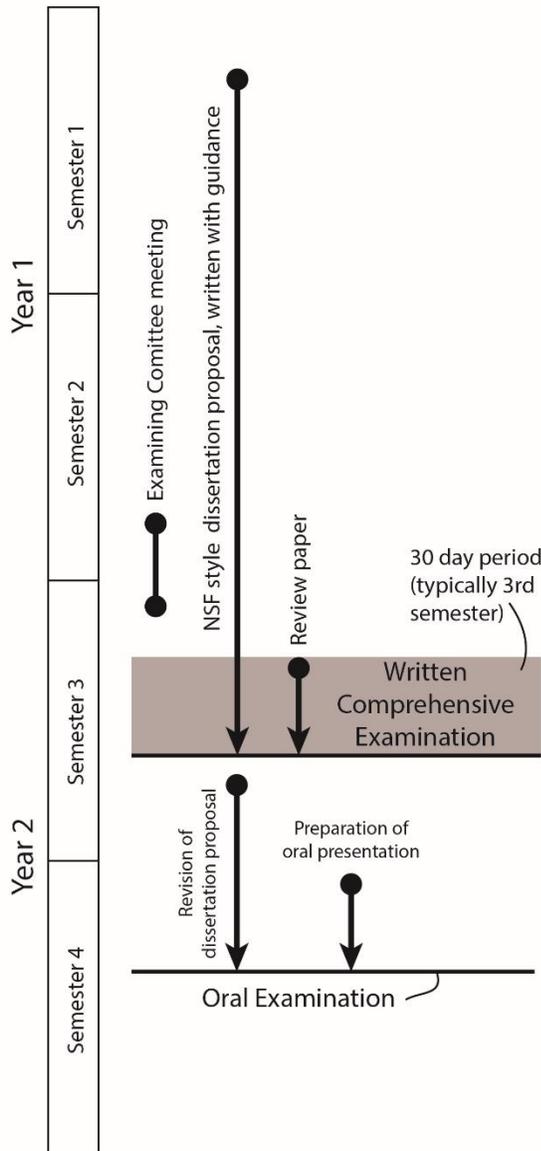
quirements should be outlined during the planning meeting, and should be communicated in writing to the graduate coordinator.

3. Discusses gaps in knowledge or open questions related to the topic that may lead to new understanding

The paper should conform to formatting requirements of a specific academic journal to be determined and agreed upon by the advisory committee. If no format is recommended, then the American Geophysical Union's style guide may serve as a default (<https://publications.agu.org/agu-grammar-and-style-guide/>). The paper should be of page length appropriate for that journal, double-spaced, with full citations, figures and tables compiled at the end of the manuscript. A typical manuscript prepared for submission to an academic journal will be approximately 25-30 pages of text with tables, figures, and references cited added as necessary.

**Written Exam Evaluation** At the end of the 30-day exam period, the student will provide each member of the advisory committee both the written exam and a copy of the dissertation proposal (see below); both printed and electronic versions should be submitted if requested by committee members. It is the duty of the advisory committee to review the document promptly, critically, and objectively. The committee will convene without the student to discuss the strengths and weaknesses of the written review paper. Evaluation will take the form of "Pass" or "No Pass" depending whether the student has sufficiently addressed the criteria for the review outlined above. Students must receive "Pass" assessments from at least four committee members in order to be permitted to move on to the oral defense of the dissertation proposal (second exam), which may be scheduled as soon as is convenient for the student and advisory committee. Following evaluation of the first exam (review paper), the committee will report their assessment directly to the student and the Graduate Coordinator.

Should the student not pass the first exam, they will receive detailed written guidance about the insufficient aspects of their previous work. A second and final opportunity will be granted to rewrite the review paper at a later date to be determined by the Advisory committee. Additional work may be required. Students may appeal a not-passing grade in writing to the advisory committee and Ph.D. coordinator, with additional faculty members convened by the department chair if a conflict of interest is determined. A second failure of the written exam will be final, and the student will leave the program by the end of the current semester or as determined by the committee.



Timeline of Ph.D. candidacy exams

**Candidacy Exam 1: Written review paper**

The first of two candidacy exams will be a comprehensive, scholarly review of a topic relevant to the student's intended dissertation research based on a prompt given by the committee at the beginning of the exam period. This review paper will be considered sufficient for passing based on three equally weighted criteria:

1. Critically examines and synthesizes extant knowledge in the topic area, including any any recent work (less than 2 years old)
2. Adequately describes significant concepts and controversies related to the topic

**Exam 2: Oral Defense of Dissertation Proposal**

**Written Proposal.** The written dissertation proposal describes the primary research project planned for the dissertation. Although the scope and format of finished dissertations vary, it is recommended that the proposal include three significant objectives that could become three dissertation chapters or publishable papers. These objectives are sometimes altered over the course of a Ph.D., but this document serves as an initial project description. The

document should provide motivation for the work, justification of important research choices, and a plan of work.

The dissertation proposal document may be begun as soon as the student has decided on a research project, although it is highly recommended that the project be discussed in depth with research advisers and other faculty for initial feedback. Writing may commence in semesters 1 or 2, although the proposal may also be written during the 30 day examination period. Although the written proposal will not be directly evaluated by advisory committee, the oral defense will be based on material in the written proposal.

Unless otherwise specified by the advisory committee, the proposal will be composed in the format typical of a long form grant proposal submitted to the National Science Foundation, and will conform to all proposal formatting requirements as specified in the [NSF Grant Proposal Guide](#). In order to make the writing tasks for this examination more manageable, proposals prepared by students will contain only the following sections as specified in the NSF Grant proposal Guide (GPG):

- 1) Project Summary (NSF GPG item 2b): 1 page single spaced
- 2) Project Description (NSF GPG item 2d) including figures, captions and tables: 15 pages
- 3) References Cited (NSF GPG item 2e): no limit
- 4) Biographical Sketch (NSF GPG item 2f): 2 pages
- 5) Budget (GA salary, fringe benefits, travel, materials/supplies, other direct costs, facilities & administration costs, tuition)
- 6) Facilities and Equipment (this will be short, but should include access to computers, software, field equipment and vehicles of various kinds, instrumentation such as microscopes or other analytical devices).

**Oral Defense.** When the written exam has been passed, a date will be set to orally defend the dissertation proposal. A minimum of 120 minutes should be allotted for the exam. The oral exam consists of ~30 minute presentation of the research in the written proposal followed by open questioning by the committee. Teleconferencing may be used for committee members that are off-site for the oral exam, although technological failures may force the exam to be rescheduled. The advisory committee may alter the specifics of this schedule.

The oral exam will evaluate the quality of the written proposal, as well as the preparation of the student to execute the work.

The proposal will be considered passing if within the context of the Geosciences PhD program it sufficiently answers the questions of the Merit Review Criteria used by the National Science Foundation (criteria 1-5 are equally weighted):

1. What is the potential for the proposed activity to:
  - a. Advance knowledge and understanding within its own field or across different fields (Intellectual Merit); and

- b. Benefit society or advance desired societal outcomes (Broader Impacts)?

2. To what extent do the proposed activities suggest and explore creative, original, or potentially transformative concepts?
3. Is the plan for carrying out the proposed activities well-reasoned, well-organized, and based on a sound rationale? Does the plan incorporate a mechanism to assess success?
4. How well qualified is the individual, team, or organization to conduct the proposed activities?
5. Are there adequate resources available to the PI (either at the home organization or through collaborations) to carry out the proposed activities?

The committee will then evaluate the students exam and vote “Pass” or “No Pass,” with four “Pass” votes required. A passing grade will complete the candidacy exam, and the student must fill out a [Candidacy Exam Notification Form](#), and turn it in to the Geosciences Office and the Graduate School. Should the student not pass the first exam, the student will receive detailed written guidance about the insufficient aspects of their oral exam. A second and final opportunity will be granted to take the oral exam at a later date to be determined by the advisory committee. Additional review may be required. Students may appeal a not-passing grade in writing to the advisory committee and PhD coordinator, with additional faculty members convened by the department chair if a conflict of interest is determined. A second failure of the oral exam will be final, and the student will leave the program by the end of the current semester or as determined by the committee.

## Dissertation, Defense and Graduation

The process of submitting and defending a Ph.D. dissertation is long, and should be begun at least 3 months before the intended graduation date. The important dates for (i) applying to graduate, (ii) defending a dissertation, and (iii) submitting all materials can be found on the [Graduate School's checklist calendar](#).

The dissertation must be written in the format specified by the Graduate School and International Education in the [Thesis and Dissertation Guide](#). This includes a required formatting pre-check before the defense.

The dissertation is ideally provided to the doctoral dissertation committee two weeks before the defense date in order to provide time to read the document. The dissertation defense date and time must be officially announced through the graduate school using an [online form](#). The defense must be scheduled at least two weeks before the last day of the semester. This window is required so that the student can address all issues raised by the doctoral dis-

sertation committee before it is officially submitted. Additional requirements for the defense are given in the [Thesis and Dissertation Guide](#).

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## REQUIREMENTS FOR A CONCENTRATION IN SPACE AND PLANETARY SCIENCES

A student may choose to obtain either the MS Geology or the MS Geography with a concentration in space and planetary sciences. For information on space and planetary

sciences, please see the [Degree Programs page](#) for the interdisciplinary Space and Planetary Sciences program.

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### ADVISORY COMMITTEE

All students are assigned an advisor on entering the program. **During the first semester** a student should ascertain which faculty member in the program would provide the best direction for his/her program and, in consultation with that person should establish a three person advisory committee for the MS programs and a 4-6 person advisory committee for the PhD program. The chair of the advisory committee may or may not become the student's principal adviser. The role of the principal adviser is to guide the student's program, both in terms of course selection and graduate research.

Once the committee has been formed, the student should maintain regular contact with the principal advisor and should keep the rest of the committee informed of his/her program progress on a regular basis. Composition of the advisory committee varies by program.

In Geology, the committee can be made up of faculty entirely from the Geology division, or can include an outside member of the principal advisor wishes.

In Geography, the committee must include a member from outside the division of Geography.

All faculty who serve on graduate committees must have graduate faculty status; it is not the responsibility of the student to ensure this, but it is useful if the student reminds the adviser of this fact as the committee is formed. The advisory committee is generally also the thesis/dissertation committee but changes can be made. However, once the committee forms have been submitted to the Graduate School it becomes more difficult to change the composition of the committee. The thesis/dissertation committee form is identical to the advisory committee form and the two can be submitted as a single document.

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### THESIS OR DISSERTATION RESEARCH

The primary requirement for almost all students in the program will be the satisfactory fulfillment of the thesis or dissertation. Students should begin to discuss possible topics as soon as they have identified an appropriate principal advisor. As soon as a proposal has been identified, the Master's Thesis Title form or the **PhD Dissertation Title** form should be submitted to the Graduate School and International Education. Any student planning to undertake research of human (i.e. survey research) or animal subjects or the use and storage of radioactive, toxic, or biohazardous substances must file the relevant forms and obtain prior approval from the appropriate Campus Research Compliance Committee before beginning research. The student must file these forms before he/she submits the Thesis or Dissertation Title form. The thesis must report the results of an

original research problem on a topic, and using methodology approved by the principal advisor and the rest of the thesis or dissertation committee.

MS students must complete at least 6 credit hours of thesis and may not begin to take thesis hours until the Thesis Committee form has been filed with the Graduate School. PhD students must complete at least 18 hours of dissertation credit to be taken after admission to candidacy. MS students should anticipate filing their thesis committee form at the beginning of their third semester. PhD students should file their dissertation title form after completion of the candidacy exams. At the absolute latest, students must file the form *at least three months prior* to their anticipated defense date to allow sufficient time for the committee to provide input into the thesis or dissertation.

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### RESEARCH COMPLIANCE

University of Arkansas has established six committees to facilitate the review process designed to protect the rights and welfare of research participants and provide guidance on research integrity issues. The guidelines are

dictated by state and federal laws and by policies of funding agencies. The six committees are: the Institutional Review Board (human subjects), the Institutional Animal Care and Use Committee, the Institutional Biosafety Committee, the

Radiation Safety Committee, the Toxic Substances Committee, and the Conflict of Interest and Commitment Oversight Committee. Students who engage in research that potentially requires review by any of these committees must file the appropriate forms and obtain approval by the relevant committee prior to initiating the research. Additional information is available [online](#). Students should discuss with

their major advisors if their research requires prior approval from one of these committees. If students and/or faculty advisors are unsure if approval is required, they can contact the Research Compliance officer in the Research and Sponsored Programs office.

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## SUBMITTING THE COMPLETED THESIS or DISSERTATION

Students must adhere to the official [Graduate School guide on theses and dissertations](#). After the document is accepted by the graduate school, information is mailed to the student regarding the digital submission.

The Department of Geosciences requests that each student donate one loose-bound paper copy of their final thesis or dissertation, suitable for binding for the department's library.

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## GRADUATION

A student cannot be cleared for graduation until an application for the degree has been filed and the appropriate graduation fee has been paid ([details here](#)).

If the student does not graduate in the indicated semester, the student must reapply for graduation by contacting the Registrar's office. Please refer to the [Academic Calendar](#) for specific deadline dates.

The University of Arkansas offers a number of ceremonies for graduates who have completed graduation requirements. Graduate students are recognized at the All-University Commencement ceremony. Degree applicants for the

future summer and fall semester *may* participate with approval of their advisor. A student can have their diploma presented by an immediate family member (spouse, parent, child) who is a member of the academic faculty at the University of Arkansas, Fayetteville. Please contact the Graduate School for arrangements.

The Graduate School and International Education makes the effort to include as many graduate students in the commencement program as possible. Keep in mind that there are printing deadlines. Students are told that their name will be included if they apply for graduation by late February. All past degree recipients for the academic year are automatically included.

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## HONOR CODE AND ACADEMIC INTEGRITY

The following description is excerpted from the Graduate Catalog of Studies of the University of Arkansas and repeated in this handbook to ensure that students in the Department of Geosciences understand their responsibilities and the gravity of any infractions. The All University Judiciary is defined, and its composition described in the [UA Graduate Student Handbook](#).

The mission of the Graduate School is to provide post-baccalaureate students with the opportunity to further their educational goals through programs of study, teaching, and research in an environment that promotes freedom of expression, intellectual inquiry, and professional integrity. This mission is only possible when intellectual honesty and individual integrity are taken for granted.

The graduate student at the University of Arkansas is expected to a) know and abide by the regulations for all students, as described in the Student Handbook published by the Vice Chancellor for Student Affairs, and b) know and abide by the regulations contained within the Academic Honesty Policy for Graduate Students and the Research

Misconduct Policy. It is expected that graduate students will refrain from all acts of academic and research dishonesty and will furthermore report to the Graduate School any acts witnessed.

The pledge of the Honor Code is this: "On my honor as a graduate student at the University of Arkansas, I certify that I will neither give nor receive inappropriate assistance on the work I do for my degree." Students will be asked to sign this pledge when they are admitted to the Graduate School. Faculty may also require students to sign this pledge before completing the requirements of a course or a program of study. Students will be asked to sign this pledge upon admittance to the Graduate School. Faculty, Department Chairs and/or Program Directors may also require students to sign this pledge before completing the requirements of a course or a program of study. The Department of Geosciences requires that students sign this pledge. They further require that the signed pledge be placed in the student's file. Lack of a signed pledge on file in the Department office may result in delay of graduation from the Master Program.

## ANNUAL ACADEMIC REVIEWS

Near the end of the second semester of the student's program, he/she will meet with their committee advisor to establish that the student is making adequate progress toward the degree. A record of this meeting, the annual [Academic Review form](#) (under Student Academic Progress Forms) including date, attendance and outcome, will be placed in the student's file. Unsatisfactory progress may result in the student receiving a warning. Progress can be assessed again after one additional semester and lack of improvement may result in the withdrawal of assistantship support.

At a minimum the review will examine progress toward completing required course work with the minimum GPA defined by the Graduate School, completing thesis/dissertation requirements including but not limited to establishing Advisory and Thesis/Dissertation Committees as prescribed in the Geosciences Graduate Handbook, preparing a formal, written thesis proposal as prescribed in the Geosciences Graduate Handbook, conducting an initial meeting with members of the Advisory and Thesis/Dissertation committees as prescribed in the Geosciences Graduate Handbook, conducting research related to the thesis/dissertation, writing the thesis/dissertation, and completing other specified requirements for the degree (e.g. satisfactory evaluations of teaching, participation in the Department or University of Arkansas service activities, etc.

The *Annual Academic Review* will be enacted by the Department of Geosciences using the following procedure: During the spring semester of each academic year, each graduate student will be reminded to initiate a meeting with his/her advisor for the purpose of evaluating student progress toward the degree. The student should plan sufficiently so that this review can be completed on or before April 15.

The *Annual Academic Review* will consist of a face-to-face interview with the student. In situations where it may be impractical to meet the student face-to-face, the review may be conducted with the advisor via telephone or email correspondence, or other vehicle agreed to by the involved parties.

Upon completion of the review, the advisor will articulate his/her assessment regarding progress toward the degree directly to the student by indicating that the student is making normal progress, adequate progress, or inadequate progress. **Normal** and **Adequate progress** is defined as a combination of the items listed below appropriate to the student's seniority and assistantship responsibilities within the program:

1. Establishing an advisory or thesis/dissertation committee.
2. Completing required core courses during the first year of enrollment and residence, satisfying any academic deficiencies.

3. Completing the required hours of course work per academic year, or comparable work toward completion of the degree.
4. Maintaining a minimum GPA as required by the graduate school and the individual departmental degree program.
5. Be working with advisor to secure funding for research leading to the thesis, making significant progress toward defining a thesis/dissertation topic.
6. Being in the process of writing a formal thesis proposal to be presented to advisory or thesis/dissertation committee.
7. Conducting research related to the thesis/dissertation.
8. Writing thesis/dissertation.
9. Being on pace to complete the degree in required time frame (4 semester for MA and MS, 6 to 8 semesters for Ph.D.)
10. Performing assistantship duties satisfactorily.

**Inadequate progress** toward the degree is defined as a combination of the items listed below appropriate to the student's seniority within the program:

1. Core courses not completed during first 3 semesters of enrollment
2. Less than 12 hours of coursework per academic year or comparable work toward completion of the degree
3. Minimum grade point average falls below 2.85
4. Not being on schedule to complete degree during the 5th semester of enrollment (i.e. in 2.5 years)
5. Not establishing an Advisory or Thesis Committee
6. Not making significant progress toward defining a thesis topic
7. Not writing a formal thesis proposal to be presented to advisory or thesis committees
8. Not performing teaching duties satisfactorily
9. Academic deficiencies not satisfied

Following the *Annual Academic Review*, the form will be completed to include written comments regarding the student's progress, as well as recommendations for continued progress or recommendations to remediate inadequate progress within a realistic time frame (since the review occurs during late spring semester, either end of summer or midway through fall semester might be a reasonable time frame.) At the conclusion of the review, the student and advisor will sign the form, and copies will be distributed to the student, the advisor, and the Chair of Geosciences. The *Annual Academic Review* forms will become part of the student's permanent file.

The Chair of Geosciences will report the progress of each student in the program to the Graduate Committee, including necessary remediation steps for those students whose progress was evaluated as inadequate. The Graduate Committee will make the final decision regarding student progress. Once this final decision is rendered, the

Chair will forward the original signed review forms of all students to the Graduate School for inclusion in the students' permanent files.

***Students who refuse to participate in the review process will be placed on short term probationary status while reasons for their refusal are heard.*** If adequate cause for refusing the review cannot be determined, and the student still refuses to participate in *Annual Academic Reviews*, a statement reporting the student's refusal to be reviewed will be forwarded to the Dean of the Graduate School, and dismissal proceedings will be initiated.

If a student who receives an evaluation of inadequate progress fails to meet the minimum remedial steps specified by the review committee within the specified time frame, a *Report-of-Non-Progress* will be provided to the Chair of Geosciences by the Chair of the student's evaluation committee (ordinarily the principal advisor.) This report will provide details of the failed steps.

1. The *Report-of-Non-Progress* will be treated as confidential information and will be forwarded to members of the Graduate Committee for review. If a majority of the Graduate Committee members agree with the findings of the *Report-of-Non-Progress*, this report will be forwarded to the Graduate School for additional action
2. At each stage of this process, the student will be informed by the Chair of Geosciences about what actions are being taken. The student may appeal decisions regarding inadequate progress in accord with guidelines of the Graduate School at the University of Arkansas through the formal grievance process.

In developing guidelines for the *Annual Academic Review*, the Department of Geosciences recognizes that extenuating circumstances of employment, research funding, or other relevant conditions may impact on student progress. As such, the Department of Geosciences reserves the right to consider such circumstances on a case-by-case basis.

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## ACADEMIC DISMISSAL / ACADEMIC PROBATION

Graduate degree programs have the right to dismiss graduate students who a) do not make adequate academic progress; b) engage in academic or research misconduct; or c) engage in illegal, fraudulent, or unethical behavior as defined in the Code of Student Life. There may also be other unusual situations in which a student may be dismissed from a degree program. In each case, the dismissal should follow the following procedures:

**Lack of Adequate Academic Progress** - Students may be dismissed per the academic probation policy of the Graduate School, and students should familiarize themselves with this policy. In addition, students who have not been placed on probation, but who are not making adequate academic progress must be warned in writing of the possibility of dismissal. They will be given a clear statement about what must be done within a specified time period to alleviate the problem. These expectations must be reasonable and consistent with expectations held for all students in the program. If the student does not meet the requirements within the time frame specified, he/she may be dismissed by the degree program with notification to the student and the Graduate School. Students dismissed in this way will not necessarily be dismissed by the Graduate School. Students may appeal this dismissal to the Graduate School, following the procedures outlined in the Graduate Student Grievance Policy.

**Academic or Research Misconduct/Illegal, Fraudulent, or Unethical Behavior** - The process for dismissing students as a result of academic or research misconduct; or as a result of illegal, fraudulent, or unethical behavior is outlined in the Code of Student Life.

**Other Situations** - Departments may dismiss students for situations other than those specified above. When doing so, the department must notify the student in writing of the possibility of dismissal. If it is possible for the student to rectify the situation, he/she must be given a clear statement about what must be done within a specified time period to alleviate the problem. These expectations must be reasonable and consistent with expectations held for all students in the program. If the student does not meet the requirements within the time frame specified, he/she may be dismissed by the degree program with notification to the student and the Graduate School. Students dismissed in this way will not necessarily be dismissed by the Graduate School.

If the situation cannot be rectified, the student will be notified in writing of the grounds for dismissal and the date when the dismissal will be effective. This will normally be the end of the semester in which the student is enrolled, but the circumstances of the dismissal will be important in determining this date.

Students may appeal their dismissal to the Graduate School, following the procedures outlined in the Graduate Student Grievance Policy.

## ASSISTANTSHIP CONTRACTS

All students who receive assistantships have a number of responsibilities in the department. Assistantships are 9-month appointments which begin on August 15 and end each year on May 15. Students should expect to be available in the Department throughout that period. It is expected that students will be absent from the end of finals week in December until the week before classes start in January. All new students should report to the main office by August 15 to ascertain what their assigned duties will be. Returning students should report either to the main office or to their supervisors sometime during the week before classes begin. During the semester, students are ex-

pected to fulfill their duties in a professional and competent manner. Lab TAs may only be absent in an emergency (or for professional commitments such as conferences) and must have made arrangements to have some other qualified student cover their labs. Non-teaching TAs must clear any absences with their supervisor. All TAs must discuss their work schedule with their supervisors before classes begin and they must post their work schedules in a visible location outside their offices and must be present in the department during those scheduled hours. Failure to fulfill any of these conditions is grounds for the withdrawal of assistantships.

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## STUDENT ACTIVITIES

Graduate Students are encouraged and expected to take part in the student activities of the department. There are many organizations that encompass both graduate and undergraduate students. SGE and GTU are the honor societies for Geology and Geography respectively, and graduate students are an integral part of these organizations. In addition, the local Association of Women Geoscientists (AWG) chapter (hAWG) offers outreach activities, research support, and field support. There are also student chapters of the American Association of Petroleum Geologists (AAPG) and the Society of Exploration Geophysicists (SEG). These organizations provide extensive service and social opportunities for all graduate students.

**Office Space** A limited number of desks are available for Geoscience (GEOS) graduate students and ENDY/SPAC PhD students with a Geoscience advisor. Spaces are allocated by the Chair of the Department in consultation with the Graduate Advisor(s) according to the following criteria:

1. Funded GEOS PhD (TA, DAF, DDF, RA)
2. Funded GEOS MS (TA, RA)
3. Funded ENDY/SPAC PhD with GEOS advisor
4. Unfunded GEOS PhD
5. Unfunded ENDY/SPAC PhD with GEOS advisor
6. Unfunded GEOS MS

Limited space means that office space is rarely allocated to any student that is not receiving department support (i.e. only priorities 1, 2, 3, and 4 get desk space.) Non-teaching GAs include all students on research assistantships (RAs.)

Students will be informed that they have desk space close to the start of classes. The allocation of individual desks is decided by the Chair in consultation with faculty members who are the supervisors of the students and the Graduate Advisor(s). You will retain your desk from one semester to the next unless notified by the Chair or your supervisor.

**Good Citizenship** The Department of Geosciences has

limited space to accommodate classrooms, laboratories, as well as the offices of faculty, staff and student offices. The student offices typically house desks or cubicles for several students, resulting in space shared by many. It is imperative that everyone treat his/her neighbor with respect to ensure tranquility and a comfortable environment for study and research. Do not take over unclaimed space. If additional storage is necessary for scientific samples, contact the Department Chair or your major advisor. Do not rearrange the furniture, which is ergonomically placed, taking into consideration privacy, efficiency, overall space, and common work areas. Do not display materials that others may find offensive. Do not borrow items from fellow students without their permission. Be good citizens toward your colleagues in the Department of Geosciences.

**Pets** Pets of any kind are prohibited by the University in campus buildings. Exceptions are granted only in the case of service animals for people with disabilities and animals used by academic departments for approved research projects, teaching purposes and artistic performances.

**Alcohol** Alcohol is prohibited in any space occupied by the Department of Geosciences. This includes individual student, staff, and faculty offices, as well as laboratories, classrooms, and department vans. The policy is in keeping with that of the general alcohol policy of the University of Arkansas.

**Department Colloquium** Graduate students are expected to attend the Geosciences colloquium on Friday afternoons at 3:05 pm throughout each semester. Other colloquia may occur throughout the semester, and graduate students are strongly encouraged to attend all that their schedule will permit.

**Professional Activities** The faculty of the Department of Geosciences expect that graduate students will be active

in professional activities, particularly in professional meetings. Both Geology and Geography offer local, regional, and national meetings and the Graduate School offers limited

travel funds for students who present papers at national meetings.

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## DEPARTMENT VANS

Vans are an integral part of the Department of Geosciences. As with all department equipment, vans are to be used only when authorized and only for legitimate university business. Priorities are for field trips associated with GEOL, GEOG, and GEOS classes. Vans must be reserved and signed out in the log book maintained by the Geosciences Office, Gearhart Hall room 216. As a graduate student, particularly if you are a TA, you may be asked to drive a van for a field trip. To be eligible to drive a department van, you must have a clean driving record and a valid driver's license. A [Student Authorization to Operate Vehicles form](#) must be completed, signed and submitted to the Office of Risk Management prior to driving any Geoscience vehicle.

Prior to departing on a field trip outside of Washington County, Arkansas, the filing of forms for insurance purposes is required (see office staff). Students engaged in travel and/or field work should familiarize themselves with [university insurance coverage](#). Keys for the vans are checked-out from the Geosciences office, Gearhart Hall 216 when the proper forms are completed. The forms must be turned in to the office forty-eight (48) hours prior to departure to insure that the information is conveyed to the proper campus entities.

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## SIGMA XI SCIENTIFIC RESEARCH HONORARY SOCIETY

Any student doing research is eligible for membership in Sigma Xi, the research society. Students must be nominated by two members with current membership. Benefits include a subscription to American Scientist, a journal that

highlights ongoing research. Dr. Cleaveland is the departmental representative for Sigma Xi and would be happy to nominate or second the nomination of any student active in research.

## GENERAL DEGREE CHECKLIST

This is general guide/timeline for MS and PhD Degrees and is subject to change. Degree requirements and timing described by the Graduate School should be considered the official requirements and timeline. You can find an official timelines and degree requirements and regulation in the [Graduate School Student Handbook](#).

### MS – Degree checklist

- 24 credit hours of coursework
  - 24 credit hours of coursework
  - 6 credit hours of thesis research
- Advisory Committee Form
- Thesis Committee Form and Thesis Title Form
- Annual Academic Progress Form (every spring)
- Thesis proposal presentation
- Written thesis proposal
- Thesis comprehensive oral examination/defense
- Written thesis – submitted to graduate school

### Max Deadline

- End of 1<sup>st</sup> semester
- End of 2<sup>nd</sup> semester
- Every Spring
- End of 2<sup>nd</sup> semester
- End of 2<sup>nd</sup> semester
- End of 4<sup>th</sup> semester
- End of 4<sup>th</sup> semester

### PhD – degree checklist

- 24 course hours beyond MS degree = 54 credit hours
  - GEOS 5023 – Technical and Proposal Writing
  - (2 courses should be outside of GEOS)
- Advisory Committee Form
- Doctoral Dissertation Committee Form and Dissertation Title Form
- Completion of 12 credit hours – prior to qualification of candidacy
- Annual academic progress form (every spring)
- PhD Candidacy exams (GPA must be at 3.25 on 12 credit hours)
  - Comprehensive Review paper (30 days to complete)
  - Written Dissertation Proposal and oral defense
- Completion of 18 PhD credit hours\* – after admitted to candidacy.
- Dissertation defense
- Dissertation submitted to graduate school
  - Deadline varies, see [online graduation checklist](#)

### Deadline

- End of 1<sup>nd</sup> semester
- End of 2<sup>nd</sup> semester
- End of 2<sup>nd</sup> semester
- Every Spring
- End of 3<sup>rd</sup> or 4<sup>th</sup> semester
- End of 6<sup>th</sup> – 8<sup>th</sup> semester
- End of 6<sup>th</sup> or 8<sup>th</sup> semester
- End of 8<sup>th</sup> semester

\*Note, after promotion to candidacy, you must be continuously enrolled in courses.

**Failure to meet these deadlines may result in a delay of graduation, probation, or dismissal from the program.**



# UNIVERSITY OF ARKANSAS

I certify that I have read and agree to abide by the procedures and guidelines established in this Department of Geosciences Graduate Student Handbook. In addition, I will follow the [Honor Code of the Graduate School](#) of the University of Arkansas:

“On my honor as a graduate student at the University of Arkansas, I certify that I will neither give nor receive inappropriate assistance on the work I do for my degree.”

\_\_\_\_\_  
(printed or typewritten name of student)

\_\_\_\_\_  
(signature of student)

\_\_\_\_\_  
(date)

\_\_\_\_\_  
(signature of Department Chair)