EARTH AND PLANETARY SCIENCES FACULTY

CHAIRPERSON: Peter Fawcett, Ph.D., Pennsylvania State University
DIRECTOR, INSTITUTE OF METEORITICS: Carl B. Agee, Ph.D., Columbia University
GRADUATE ADVISOR: TBN for Fall/ Brandon Schmandt, Ph.D., University of Oregon (Spring 2021)
GRADUATE ADMISSIONS: Lindsay Worthington, University of Texas at Austin

PROFESSORS:
Carl A. Agee, Ph.D., Columbia University
Yemane Asmerom, Ph.D., University of Arizona
Adrian Brearley, Ph.D., University of Manchester, Great Britain
Laura J. Crosse, Ph.D., University of Wyoming
Peter Fawcett, Ph.D., Arizona State University
Tobias Fischer, Ph.D., Arizona State University
Joseph Galewsky, Ph.D., University of California, Santa Cruz
David S. Gutzler, Ph.D., Massachusetts Institute of Technology
Karl E. Karlstrom, Ph.D., University of Wyoming
Louis A. Scuderi, Ph.D., University of California, Los Angeles
Zachary Sharp, Ph.D., University of Michigan
Gary Weissmann, Ph.D., University of California, Davis

ASSOCIATE PROFESSORS:
Lindsay Lowe Worthington, Ph.D., University of Texas at Austin
Brandon Schmandt, Ph.D., University of Oregon

ASSISTANT PROFESSORS:
Eric O. Lindsey, Ph.D. University of California, San Diego
Corinne Myers, Ph.D., University of Kansas
Tyler J. Mackey, Ph.D. University of California,
Jin Zhang, Ph.D. University of Illinois at Urbana-Champaign

RESEARCH PROFESSORS:
Horton Newsom, Ph.D., University of Arizona
James J. Papike, Ph.D., University of Minnesota
Franciscus J.M. Rietmeijer, Ph.D.,
   Rijksuniversiteit-Utrecht, Netherlands
Charles Shearer, Jr., Ph.D., University of Massachusetts
Karen Ziegler, Ph.D., University of Reading, UK

RESEARCH SCIENTISTS:
Abdul Mehdi S. Ali, Ph.D. University of Arizona
Nicu-Viorel Atudorei, Ph.D., University of Lausanne, Switzerland
Ying Bing Jiang, Ph.D., University of New Mexico
Eric Peterson, Ph.D., University of New Mexico
Victor Polyak, Ph.D., Texas Tech University
Michael Spilde, M.S. South Dakota School of Mines & Technology

PRINCIPAL LECTURER III
Aurora Pun, Ph.D., University of New Mexico

ADJUNCT FACULTY:
Bruce Allen, Ph.D., University of New Mexico
Sidney Ash, Ph.D., University Reading (England)
W. Scott Baldridge, Ph.D., Caltech University
John D. Bloch, Ph.D., University of Calgary
Mark Boslough, Ph.D., University Montana
Eric (Rick) Klingel, University of Akron
Joseph McAuliffe, Ph.D., California Institute Technology
Sean McKenna, Ph.D., Colorado School of Mines
Duane M. Moore, Ph.D., University of Illinois
Claudia Mora, Ph.D., University of Wisconsin Madison
Walter C. Riese, Ph.D., The University of New Mexico
Charlotte Rowe, Ph.D., New Mexico Institute of Mining and Technology
John Shomaker, Ph.D., University of Birmingham, United Kingdom
Thomas E. Williamson, Ph.D., The University of New Mexico

EMERITUS:
Roger Y. Anderson, Ph.D., Stanford University
Michael E. Campana, Ph.D., University of Arizona
Maya Elrick, Ph.D., Virginia Polytechnic Institute
Rodney C. Ewing, Ph.D., Stanford University
John W. Geissman, Ph.D., University of Michigan
Rhian Jones, Ph.D., University of Manchester, Great Britain
Barry S. Kues, Ph.D., Indiana University
Grant Meyer, Ph.D., University of New Mexico
Leslie D. McFadden, Ph.D., University of Arizona
Jane Selverstone, Ph.D., Massachusetts Institute of Technology
Lee A. Woodward, Ph.D., University of Washington

Revised 8/6/2020
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>GRADUATE COMMITTEE</td>
<td>2</td>
</tr>
<tr>
<td>GENERAL PROCEDURES FOR NEW GRADUATE STUDENTS</td>
<td>6</td>
</tr>
<tr>
<td>COMPREHENSIVE EXAMINATION</td>
<td>14</td>
</tr>
<tr>
<td>REQUIREMENTS AND PROCEDURES FOR M.S. DEGREE IN EARTH AND PLANETARY SCIENCES</td>
<td>18</td>
</tr>
<tr>
<td>ABBREVIATED SCHEDULE FOR M.S. PROGRAM STUDENTS</td>
<td>22</td>
</tr>
<tr>
<td>REQUIREMENTS AND PROCEDURES FOR PH.D. IN EARTH AND PLANETARY SCIENCES</td>
<td>26</td>
</tr>
<tr>
<td>ABBREVIATED SCHEDULE FOR PH.D. PROGRAM STUDENTS</td>
<td>32</td>
</tr>
<tr>
<td>POLICY FOR GRADUATE THESIS AND DISSERTATION COLLECTIONS</td>
<td>36</td>
</tr>
<tr>
<td>FINANCIAL AID</td>
<td>40</td>
</tr>
<tr>
<td>FINANCIAL AID AGENCIES</td>
<td>43</td>
</tr>
<tr>
<td>DEPARTMENT EQUIPMENT AND FACILITIES</td>
<td>48</td>
</tr>
<tr>
<td>APPENDIX I: ADVISEMENT FORM</td>
<td></td>
</tr>
<tr>
<td>APPENDIX II: EPS PROGRAM OF STUDY FORM</td>
<td></td>
</tr>
<tr>
<td>APPENDIX III: ANNUAL SPRING PROGRESS REPORT and SCHOLARSHIP APPLICATION</td>
<td></td>
</tr>
<tr>
<td>APPENDIX IV: MS PROPOSAL COVER SHEET</td>
<td></td>
</tr>
<tr>
<td>APPENDIX V: Ph.D. ABSTRACT CHECKLIST</td>
<td></td>
</tr>
<tr>
<td>APPENDIX VI: Ph.D. PROPOSAL COVER SHEET</td>
<td></td>
</tr>
<tr>
<td>APPENDIX VII: GRADUATE STUDENT PETITION FORM</td>
<td></td>
</tr>
<tr>
<td>APPENDIX VIII: REIMBURSEMENT POLICY &amp; PROCEDURE</td>
<td></td>
</tr>
</tbody>
</table>
INTRODUCTION

The Graduate Student Handbook describes the rules, procedures, and timelines for M.S. and PhD students in the Department of Earth and Planetary, including the Institute of Meteoritics

This document reflects requirements as of August, 2016, and is revised annually. Please check with your advisor or the Earth and Planetary Sciences Graduate Advisor (Dr. Brandon Schmandt for 2018-2019) to clarify requirements about which you are in doubt. You should also review the University of New Mexico Online Catalog http://catalog.unm.edu/catalogs/2018-2019/courses/EPS/101.html for a detailed discussion of University regulations and information regarding graduate programs.

Please read this handbook and remember that it is your responsibility to ensure that you are taking all of the necessary steps to fulfill your graduate degree requirements. Welcome, and Good Fortune.
THE GRADUATE COMMITTEE

The Department of Earth and Planetary Sciences Graduate Committee, composed of 6-7 faculty members and currently chaired by Dr. Brandon Schmandt, handles most matters dealing with the Earth and Planetary Sciences graduate program. The Committee's responsibilities include assessing (with the advisor) deficiencies in the entering student's previous background, acting on petitions from graduate students relating to degree and course requirements through recommendations to the faculty, recommending awards of teaching assistantships, maintaining and evaluating the records of graduate students, periodically reviewing the graduate program requirements and procedures, and initiating changes, if needed. All of committee activities are subject to review and approval by the E&PS faculty as a whole.

A key responsibility of the Graduate Committee is to respond to the needs and interests of the graduate students. Students are encouraged to consult with members of the Graduate Committee concerning questions relating to their program, and the requirements that affect it. Students are also urged to bring general suggestions and concerns regarding the graduate program to the attention of the Committee.
DEPARTMENT OF EARTH & PLANETARY SCIENCES

GENERAL PROCEDURES FOR GRADUATE STUDENTS
GENERAL PROCEDURES FOR NEW AND CONTINUING GRADUATE STUDENTS

INTRODUCTION

New students are required to arrive at least five days before the beginning of a semester. On arriving in the Department of Earth and Planetary Sciences, each new graduate student should report to the department main office (Room 141) for information relating to their entrance into the graduate program. During the week preceding the beginning of the semester:

1. All new graduate students are assigned an office by the Department Chairperson. Students wishing to change their office should talk to the Department Chair.

2. Students are assigned mailboxes and should fill out key authorization forms in order to obtain keys to their offices and other rooms as authorized by their temporary advisors (see Front Office Personnel). The keys must be obtained in person from the University Locksmith, located in the UNM Service Building on the North Campus.

3. Students supported as Teaching Assistants MUST attend the Teaching Assistants meeting, at which specific teaching assignments are made. This meeting is usually held on the Thursday before the beginning of classes.

4. Many students entering the graduate program will be required to drive a UNM owned vehicle. Those who do must first acquire a New Mexico driver’s license from any of the state’s motor vehicle department’s locations. The fee is approximately $18.00 for a four-year license. Upon securing the license students must then apply for and complete the online Safety and Risk Services (SRS) Defensive Driving Course https://srs.unm.edu/training/self-training.php#driving. A copy of your license and completed certification must be brought to the EPS main office to be placed in your graduate file.

5. At the beginning of the Fall semester, the Department Chairperson, Graduate Advisor, and Department Administrator will meet with all new graduate students to introduce them to the Department, discuss aspects of the Graduate Program, and answer any questions.

6. All new students entering in the Fall should attend the introductory first meeting (please see schedule of classes for time and location) of the E&PS 401 / 501 seminar on Friday afternoon.

7. Students should refer to the abbreviated schedules for M.S. and Ph.D. programs (pages 19 and, 27 respectively) in order to keep track of important deadlines.

ADVICEMENT

Each graduate student is required to have a principal advisor who will chair the student’s M.S. or Ph.D. Examination Committee and Thesis or Dissertation Committee. The student should arrange to meet with the advisor during the week prior to the start of classes. The purpose of this advisement interview is to assess deficiencies (as indicated by the Graduate Committee in the student's application file), recommend a general plan of course work, recommend the scheduling of course work (including first-semester courses), and discuss the program of study form which is required to be completed, discuss the M.S. or Ph.D. oral exams, answer any questions the student may have concerning the graduate program and registration, and to convey to the student the department’s expectations regarding satisfactory progress towards the M.S. or Ph.D. degree. Following the advisement interview, the student must turn in the Advisement Form to the Graduate Advisor, no later than Friday of the 1st week of the semester.

During the first semester of residence the graduate student should meet members of the faculty, discuss research interests and possible thesis or dissertation topics, and pick a permanent advisor who most closely matches the student's interests. It is not unusual for students to switch advisors during this time. The graduate student should
consult the advisor at regular intervals on courses, deficiencies, progress on thesis or dissertation research, financial support and any other academic, problems.

Prior to the completion of the first semester, the student is required to hold a full committee meeting and to complete the Program of Study Form (see Appendix II), which lists planned coursework for all semesters in residence.

REGISTRATION

New graduate students are urged to talk to their advisors before registering. Registration for classes must be done on the web. Go to LoboWeb:

- Go to myunm (UNM's portal) at http://my.unm.edu/
- Login with your UNM NetID and password
  (if you do not yet have a UNM Net ID and password, please visit http://my.unm.edu/ for info on how to obtain one).
- Select the Student Life tab

Registration should be done during the weeks PRIOR to the beginning of the semester.

HOURS OF REGISTRATION AND COURSE LOAD

Graduate students should consult the current UNM Catalog to learn policies pertinent to hours of registration relative to employment time. Generally a full-time teaching or research assistant must register for 6 - 9 hours of courses per semester, 6 of which must be at the graduate level. A student not on an assistantship is expected to register for a full-time course load of about 12-15 credit hours per semester.

All graduate students are required to register for at least one semester of EPS 501 (Colloquium) during their time in residence.

GRADUATE PREREQUISITE POLICY

Entering graduate students are expected to have completed the equivalent of Math 162 Calculus I and 163 Calculus II, Chemistry 121L General Chemistry I and 122L General Chemistry II, and Physics 160 General Physics and 161 General Physics Lab (calculus I and II, general chemistry I and II, and calculus-based physics that includes mechanics, electricity, heat, and magnetism). Additional coursework in math, chemistry, physics, statistics, or biology is encouraged. If one or more of these courses has not been taken, it will be formally identified as a deficiency that must be made up within the student’s first year in the graduate program. No graduate credit can be earned for 100- or 200-level math and science classes.

Because the E&PS Department offers graduate training in many aspects of the earth sciences, there is no single list of courses that must have been completed prior to graduate study. Necessary background courses must instead be mutually agreed upon by the student, thesis advisor, and thesis committee, and must be approved by the Graduate Committee. It is expected that some students will need to take one or more 300-level EPS courses in order to prepare them adequately for their graduate programs; such courses must be taken as early in those students’ programs as possible. No graduate credit can be earned for 300-level classes in E&PS.

GRADUATE CREDIT

With the exceptions noted below, graduate credit is earned only by students admitted to the University for Graduate Study and properly registered in courses approved for graduate credit. Graduate credit cannot be earned by examination as in the College Level Examination Program (CLEP).
**REGULAR GRADUATE STUDENTS**

Students enrolled in graduate status will receive graduate credit for all courses approved for graduate credit numbered 500 or higher. They will receive graduate credit for upper division undergraduate courses (3XX or 4XX level) provided the courses are listed in the Catalog as approved for graduate credit (noted by a single asterisk), and the additional work required for graduate credit is completed.

If a course is listed in the Catalog as approved for graduate credit only for those students outside the particular program (double asterisk), a Graduate Credit Authorization card must be completed by those students who are eligible (see section below).

**GRADUATE CREDIT AUTHORIZATION FORM**

By signing the Graduate Credit Authorization form, a course instructor acknowledges that a student taking a 3XX or 4XX level course available for graduate credit will be held accountable for graduate-level work and requirements. The forms must be filed with the Records and Registration office by the last day of the fourth week of classes during the regular semester, by the end of the first week of class during four-week sessions, or by the end of the second week of class during eight-week sessions.

**PETITIONS**

A student may petition to remove a deficiency by substitution of an alternative class. The student must have a compelling reason to request such a course substitution, and the petition must be submitted as soon as possible following entry into the graduate program, ideally within the first two weeks of the first semester. In most cases, petitions to avoid taking introductory calculus, physics, and chemistry classes will be denied.

Petitions may be submitted at any time for other issues that arise, but should always be submitted as soon as possible prior to relevant deadlines.

The Petition Form is available in the Appendix and on the EPS Intranet, and should be submitted to the Chair of the EPS Graduate Committee. The Graduate Committee discusses each petition, and presents a recommendation to the entire faculty for further discussion and a vote. The final decision on the petition is communicated to the student shortly thereafter by the Graduate Advisor.

**PROBATIONARY POLICY**

A student must maintain a cumulative Grade Point Average of at least 3.0 on all graduate work taken at UNM to avoid being placed on probation. Generally the records of all graduate students and overall progress are reviewed by the Graduate School after 12 credit hours have been completed, and students with a cumulative GPA of less than 3.0 for courses taken for graduate credit at that time are placed on probation. A student is suspended after two successive or three cumulative semesters of probationary status. A student is also placed on probation when he or she receives two grades of NC (no credit) and/or F, and will be suspended if a third NC or F grade is received. In addition, the Department emphasizes the importance of adequate progress in the degree program; inadequate progress can result in dismissal from the program.

It is University and Department of Earth and Planetary Sciences policy that financial aid is not given to students who have a cumulative GPA below 3.0. By University policy, a student is also prohibited from taking his/her comprehensive exam while on academic probation. For additional information on rules governing academic standing, refer to the UNM Graduate Catalog ([http://registrar.unm.edu/catalog.htm](http://registrar.unm.edu/catalog.htm)).
COURSE LIST

The following courses taught by the Department of Earth and Planetary Sciences faculty may carry graduate credit. The current Schedule of Classes should be consulted to determine which of these courses are being given during a particular semester. Note that many graduate courses are only offered once every two years. Courses to be included in a student's graduate program should be discussed with the advisor.

* Course allowed for graduate credit to students enrolled in a graduate program. Normally a student enrolled in a starred course numbered below 500 is required to do extra work.

** Available for graduate credit except for graduate majors in the department.

∆ May be repeated for credit because subject matter varies.

*400. TOPICS IN EARTH AND PLANETARY SCIENCES (1-4 may be repeated once) ∆

*411L. INVERTEBRATE PALEONTOLOGY (4)

General principles and familiarization with diagnostic features of fossils. Introduction to environmental implications. Eight hours of EPS or Biology recommended. Corequisite must enroll in lab.

*439. PALEOCLIMATOLOGY (3)

History of the earth's climate. Examination of methods in climatic reconstruction and methods of climatic change. Emphasis on Pleistocene and Holocene climatic records. Prerequisite: EPS 101 or ENVSC 101.

*490. GEOLOGIC PRESENTATION (1)

Student reviews of geologic literature preparation and critique of oral presentations. Prerequisite: 301 or ENVSC 330, co-requisite 401.

501/401. SEMINAR (1 to a maximum of 3) ∆

Current topics in Geology. Does not count for degree elective credit for undergraduates. For graduate students, may be repeated once for credit towards degree. Prerequisite: junior standing. Offered on CR/NC basis only.

505L/405L. STABLE ISOTOPE GEOCHEMISTRY (3)

Examination of principles governing the distribution of stable isotopes in geological materials and their applications in understanding geochanical processes. Prerequisite: CHEM 121 and MATH 163.

507L. THERMODYNAMICS AND PHYSICAL FOUNDATIONS OF GEOCHEMISTRY (4)

Thermodynamics and application to geologic systems, phase equilibria, phase rule, ideal and non-ideal solutions. Prerequisites: 303L, CHEM 121 and 123L and MATH 163.

510/410. FUNDAMENTALS OF GEOCHEMISTRY (3)

Geochemistry of igneous, metamorphic, and sedimentary rocks. Geochemical methodology.

513. PLANETARY MATERIALS AND THE EVOLUTION OF THE SOLAR SYSTEM (3)

Discussion of the origin and evolution of the planets, including Planet Earth, based on study of lunar samples, terrestrial samples, and meteorites; theory; earth-based observations; and space missions.

515/415. GEOCHEMISTRY OF NATURAL WATERS (3)

Principles of aqueous chemistry and processes controlling the composition of natural waters: streams, lakes, groundwater, and the oceans.

516. SELECTED TOPICS IN GEOMORPHOLOGY (3, may be repeated 5 times) ∆

(Offered upon demand)

518L. ELECTRON MICROPROBE ANALYSIS (3)

Theory and practice of electron microprobe analysis emphasizing geological materials. Restriction: permission of instructor and a demonstrated need for the use of instrument.

520L/420L. TOPICS IN ADVANCED FIELD GEOLOGY (4)

Advanced geological field techniques; special field problems concentrating on the tectonic evolution of the Rocky Mountain region. Offered as a 3-week course (20 consecutive days). (Summer) (2-4 to a maximum of 8 ∆)

522. SELECTED TOPICS IN GEOPHYSICS (3, may be repeated 5 times) ∆

Prerequisite: permission of instructor.

523. TOPICS IN TECTONICS (3, may be repeated 5 times) ∆

Prerequisite: permission of instructor.

527/427. GEOPHYSICS (3)

(Also offered as Physics 327) Applications of gravity, magnetics, seismology, heat flow for the structure constitution and deformation of earth. Related aspects of plate tectonics and resource exploration. Prerequisites: 101 or ENVS 101, MATH 163, and PHYS 161.
528/428. APPLIED MATHEMATICS FOR Earth and Environmental Sciences (3)
Introduction to linear algebra, differential equations, and vector calculus with applications to hydrology.

534. RADIOGENIC ISOTOPE GEOCHEMISTRY (3)
Examination of principles governing the abundance of naturally occurring radiogenic isotopes and their use in the study of global geochemical processes.

535. FRESHWATER ECOSYSTEMS (3)
(Also offered as Bio. 535) Integration of physical and chemical components of drainage basins and groundwater systems with biological metabolism, growth and reproduction along functional gradients of stream, wetland, reservoir, lake and groundwater ecosystems.
Prerequisite: MATH 162 or 180, CHEM 122 and 124L and BIO 495;

536/436. CLIMATE DYNAMICS. (3)
A quantitative introduction to the Earth's climate system, emphasizing processes responsible for maintaining the current climate and governing climate change on global and regional scales, including interactions between the atmosphere, ocean and biosphere. MATH 162, PHYS 160 recommended.

538L. ANALYTICAL ELECTRON MICROSCOPY (3)
Principles and practical techniques of transmission and analytical electron microscopy for materials characterization. Topics covered include: diffraction and phase contrast image formation, selected area and convergent beam electron diffraction; energy-dispersive x-ray spectroscopy.
Prerequisites: 587 and 518L or permission of instructor.

543/443. AQUIFERS AND RESERVOIRS (3)
Approaches of describing, evaluating, and modeling aquifer and reservoir character, focusing primarily on sedimentary systems. Techniques include well log analysis, cross-section construction, structure and isopach map contouring, and geostatistical simulation. Prerequisites: EPS 101. Recommended EPS 304L

545/445. TOPICS IN SEDIMENTOLOGY AND STRATIGRAPHY (1 – 4, may be repeated 5 times) ∆
Variable course content depending on student interest. Topics may include Physical Sedimentology, sequence Stratigraphy, Basin Analysis, Cycle Stratigraphy, and Chemostratigraphy, may be repeated with different content.

547/548. SEMINAR (2-3, 2-3, may be repeated 5 times) ∆

550L/450L. VOLCANOLOGY (4)
Characteristics and mechanisms of volcanic systems, volcanism in various continental and marine (including submarine) tectonic settings. Laboratory to include field and laboratory examination of volcanic rocks and structures, models of volcanic processes. Prerequisites: 303L.

551/552. PROBLEMS (1-3 hrs. each semester)
Maximum of 3 units of problems can count toward MS or Ph.D. course requirements.

555L/455L. COMPUTATIONAL AND GIS APPLICATIONS IN GEOMORPHOLOGY (3)
Techniques in acquisition, processing, analysis and display of digital, aerial photo, and remote-sensing data; Regional quantitative morphometry; Use of topography and geology with GIS in landscape evolution analysis. EPS101, or ENVS 101, 433, 481 recommended.

557/457. MATHEMATICAL MODELING IN THE GEOSCIENCES. (3)
Introduction to basic numerical modeling techniques with broad application to dynamic systems in the geosciences including sedimentology, geochemistry, hydrology, climatology and paleoclimatology.
Prerequisites: MATH 163L, PHYS 160.

558. GEOMICROBIOLOGY (3)
(Also offered as BIO 558) The role of microbes in mineral precipitation, dissolution and digenesis; interactions between microbes and geochemistry/mineralogy.

562/462. HYDROGEOLOGY (3)
Hydrologic and geologic factors controlling groundwater flow, including flow to wells. The hydraulic cycle; interactions between surface and subsurface hydrologic systems; regional flow systems. Groundwater geochemistry and contaminant transport.
Prerequisites: 105L, or ENVS 102L and MATH 162, and CHEM 121 and PHYS 160.

565/465. MARS EVOLUTION (3)
576/476. PHYSICAL HYDROLOGY. (3)
(Also offered as WR 576) Quantitative treatment of the hydrologic cycle – precipitation, evapotranspiration, infiltration, runoff and subsurface flow, global climate change and hydrology, catchment and hillslope hydrology, hydrologic system – ecosystem interactions, hydrology and water resources management. Prerequisites: Upper-division standing. MATH 163 and PHYS 160.

581L/481L. GEOMORPHOLOGY AND SURFICIAL GEOLOGY (4)
Origin and development of landforms with emphasis on weathering soils, hillslope processes, fluvial systems and surficial geology. Occasional field trips. Intro to Geology or Environmental Sciences recommended.

582L/482L. GEOARCHAEOLOGY (3)
(Also offered as ANTH 482/582.) Application of geological concepts to archaeological site formation with emphasis on pre-ceramic prehistory of the southwestern United States. Topics: Quaternary dating methods, paleo environment, landscape evolution, depositional environments, Quaternary stratigraphy, soil genesis, sourcing of lithic materials, site formation processes. Lectures, discussion sessions, field exercises. Required field trip. Prerequisites: EPS 101, 105L, or ENVS 101 and 102L, ANTH 220.

585L/485L. SOIL STRATIGRAPHY AND MORPHOLOGY (3)
Application of soils studies to stratigraphic analysis and mapping of Quaternary deposits and geomorphic surfaces; survey of soil classifications; field description of soil profiles; development of soil chronosequences and catenas. Prerequisites: EPS 101 or ENVSC 101.

587. ADVANCED MINERALOGY (3)
Crystallographic principles, structure, chemistry, physical properties of rock forming minerals. Prerequisites: 301, 302L, CHEM 122 and 124L.

599. MASTER'S THESIS (1-6 hrs. per semester)
No limit on units. Offered on a CR/NC basis only.

699. DISSERTATION (3-12 hrs. per semester)
No limit on units. Offered on a CR/NC basis only.
THE COMPREHENSIVE EXAMINATION (MS AND PHD)

The graduate comprehensive exam is intended to ensure that each student has both breadth and depth of knowledge about earth, atmospheric, and/or planetary sciences, and is well prepared to move ahead with graduate-level research. The examination includes preparation of one or two written proposals (see details for MS and PhD programs) followed by an oral exam on topics related to the proposed research and on general knowledge in relevant field(s) of the geosciences. A student must pass both the written and the oral portions in order to pass the comprehensive exam.

The purpose of the written proposal(s) is to ensure that the student can clearly articulate the nature of the scientific problem to be investigated (preferably by stating one or more testable hypotheses) and its significance, is knowledgeable about relevant background studies, can explain the methods that will be used in the study, and can make predictions about potential outcomes of the research. At the MS level, preparation of the proposal is likely to involve close consultation with the advisor and other members of the committee. At the PhD level, many advisors expect a greater degree of independence in preparation of the written proposals. Each student is encouraged to converse with his/her advisor and other committee members about the level of independence that is expected during preparation of the proposal(s). In all cases, however, the student is responsible for the content of a proposal, and is expected to be able to address questions on all aspects of the proposed work during the oral exam.

At the time of proposal submission, the student must also submit the MS or PhD Proposal Cover Sheet to the front office. Each member of the exam committee is required to provide ‘yes’ or ‘no’ answers to all of the questions on this checklist, no later than one week prior to the scheduled exam. The student should remind all committee members of this responsibility. Any ‘no’ answer regarding the readiness of the proposal to be defended will trigger an automatic committee meeting during the previously scheduled examination time. At this meeting, the concerns will be discussed and the student will receive guidance regarding changes that must be made to the written document. The exam will also be rescheduled for a time within the last four weeks of the semester. If for any reason the exam cannot be scheduled during this time frame, a petition to postpone the exam will be required. Once all committee members have indicated that the proposal is ready to be defended, the written portion of the exam is considered to have been passed.

The oral exam takes place at least two weeks after submission of the proposal(s). The exam begins with an oral presentation of the proposal(s) by the student, followed by questions from the exam committee. The committee generally assesses the student’s grasp on key aspects of the proposed work, and encourages the student to place the work in the larger context of the geosciences. Many faculty expect students to have a working knowledge of the earth sciences at the level of a comprehensive 101 textbook, along with higher level knowledge in areas directly related to the specific field of interest. In general, the oral exam focuses on finding the strengths and weaknesses in the student’s background knowledge and/or the research plan. Discussion of weaknesses may lead to identification of additional coursework or study needed to improve the research. Because each student comes to UNM with a unique background, the oral portion of the exam is necessarily individualized. A truly successful exam is one that evolves into a scientific discussion between the student and committee. In many cases, though, the oral exam uncovers one or more areas in which the student needs to shore up his/her knowledge or rethink a particular research approach. In all cases, the committee’s main goal is to help the student succeed in graduate school and prepare for his/her chosen profession.

At the conclusion of the oral exam, the student leaves the room while the exam committee discusses the outcome of the exam. There are three possible outcomes: (1) Pass, (2) Conditional Pass, and (3) Fail:

- **Pass** indicates that the student is ready to move ahead with his/her research.
- **Conditional Pass** indicates that the student’s knowledge of the discipline, ability to formulate research questions, and/or ability to think on his/her feet is not quite sufficient to earn an outright pass. In this case, the committee recommends a specific course of action to address the weakness(es). Examples of such actions include submission of written answers to questions prepared by the committee, administration of a second, more focused oral exam, or completion of a specific course with a high grade. In the first two cases, the requirements *generally* must be met within four weeks of the original exam date, and OGS rules require that all conditions be met before the end of the next semester.
Once the additional work has been completed, the committee reconvenes to change the Conditional Pass to either Pass or Fail.

- **Fail** generally results in the student being asked to leave the program. In some cases, however, the exam committee may recommend a second examination, generally within four weeks after the first exam but in all cases before the end of the next semester. For additional information, consult the GS Graduate Catalogue.

All students are strongly encouraged to talk in person with each member of the exam committee during the proposal-writing stage and subsequent preparation for the oral exam. Students are also encouraged to talk with all committee members at any time after the exam to obtain more detailed feedback on the oral portion of the exam and/or to obtain written comments on the proposal(s).
REQUIREMENTS AND PROCEDURES FOR A M.S. DEGREE IN
EARTH AND PLANETARY SCIENCES

A. Each student, upon arriving at UNM, will participate in an advisement interview during the week prior to the beginning of classes. This meeting must involve the student and his/her likely advisor, and may include additional faculty members deemed appropriate at this stage. The purpose of the interview is to:

1. Assess gaps in the student's undergraduate training, via the Advisement Form and student transcripts. Note that courses taken to make up deficiencies in math, chemistry, or physics must be taken for a letter grade and cannot count toward required hours for the degree.
2. Recommend a general plan of course work.
3. Recommend the scheduling of course work, including first-semester courses, and discuss the required Program of Study form.
4. Discuss procedures related to the M.S. examination.
5. Answer any questions the student might have concerning the M.S. program at UNM, and registration procedures.

B. As part of the advisement process, each new student will be informed of the department's general expectations for satisfactory progress towards the M.S. degree, which include:

1. Two semesters of full-time course work (12 hours per semester), followed by a third semester of additional course work, if needed;
2. Enrollment in EPS 501 for at least one semester.
3. Establishment of a thesis committee and a mandatory meeting with this committee prior to the end of the first semester in residence. The EPS Program of Study form is to be filled out and signed at this meeting, and delivered to the Departmental Graduate Advisor.
4. The M.S. oral exam must take place in the SECOND SEMESTER of residency - see detailed information below;
5. Intensive research in the second year, and beyond, if necessary; and
6. (Recommended) completion of the M.S. within 2 to 2½ years of residency.

C. Other important issues will also be communicated to the student:

1. Financial support, of any combination of TA and/or RA position, is generally limited to four (4) semesters of full-time support. No guaranteed TA support can be “banked” to use beyond the 4th semester.
2. Each student should attend the first meeting of Earth and Planetary Sciences 501 (see schedule of classes for date, time and room number) for an introduction to the Department.
3. Other activities the student should be aware of (e.g., meeting to assign teaching/grading positions, if the student is a teaching assistant).
4. The current advisor need not be the permanent advisor, if the student desires a change.

D. The Advisement Form must be filled out, signed, and turned in to the Graduate Advisor (chair of the Departmental Graduate Committee) no later than Friday of the first week of classes. This form summarize relevant coursework completed prior to entering UNM and will identify in writing any deficiencies that must be made up at UNM. This form will serve as an early indication that each student has met with his/her advisor and discussed past and future coursework.

E. Prior to the end of the first semester of residency, each MS student selects a thesis committee. The thesis committee consists of at least three members, two of whom must be full-time, tenure-track, E&PS faculty. MS students must establish and meet with the committee to define the general nature of the thesis research project before or within the last four weeks of the first semester in residence. Students must notify the Main Office Personnel of their choices before the end of the first semester.

F. During the last four weeks of the first semester of residency, the student shall complete the Departmental Program of Study Form (Appendix III) which lists the complete academic course schedule proposed to satisfy graduation requirements. The Program of Study Form is to be signed by the three M.S. thesis committee members and the student, and then submitted to the Graduate Committee for approval.
G. **Course Work and Thesis Credits:** The student must complete a minimum of **24 hours** of coursework at the 400- or 500-level in Earth and Planetary Sciences, with an average grade of 3.0 or above (B average) PLUS a minimum of **6 hours** of EPS 599 (MS Thesis) for a total of 30 credit hours. Note that it is a Department of Earth and Planetary Sciences policy that 300-level E&PS courses do not carry graduate credit. The following course distribution is required:

A. A minimum of 6 hours of 500-level courses,
B. A maximum of 3 hours of Problems courses can be taken for credit, although students may enroll for more hours.
C. Not more than half the minimum course hours may be taken with any one professor
D. A Minimum grade of B- is required for each course.

. **MS. EXAMINATION- see overview of comprehensive exam on p. 13:**

The examination emphasizes evaluation of an MS student's understanding of the chosen thesis topic and broad knowledge of subject areas pertinent to the thesis project. **The Examination must be taken during the second semester in residence, and may not be scheduled during the last three weeks before final exams, or during final exam week.**

**Before the Examination**

1. Following identification of the thesis committee and the thesis project, the student must write a memo to the Department Chair, requesting assignment of a fourth, 'outside' member of the MS exam committee. The Department Chair’s selection of the fourth faculty examiner will represent a specialty interest different from that of the other examiners.

2. Each student prepares a thesis proposal as the written component of the M.S. examination. The proposal should clearly indicate the nature of the project and its significance, the methods that will be used, and potential outcomes of the work. The proposal is limited to 15 pages of text, 11 point font double spaced, excluding references, tables, and figures. These latter materials can extend the length of the proposal beyond 15 pages. The proposal should be written such that a less specialized geoscientist (i.e., the fourth examiner) will be able to evaluate the proposed research.

3. The student must arrange a date for the oral exam that is mutually agreeable to all concerned. The date, time (2-hour time block), and room for the MS Examination should be arranged several weeks in advance of the exam. Please go to EPS room 141, front office to do so. All students are encouraged to get their exam dates on the calendar as soon as possible to avoid last-minute scheduling problems. The examination must be taken during the second semester in residence, prior to the last four weeks of semester. Petitions to delay the exam are discouraged, but if necessary must be submitted no later than the 4th week of the second semester.

4. The student will deliver copies of the Thesis Proposal to each member of the thesis committee, plus one copy to the main office (publicly available for reading in the main office), **no later than TWO weeks prior to the examination.** All copies will include, on the front cover, the date, time, and place of the examination, as well as the names of the committee members.

5. The student will turn in one copy of the **MS Proposal Cover Sheet** (see Appendix or EPS Intranet) to the front office at the time of submission of the proposal.

6. **At least ONE week prior to the examination, each member of the exam committee must answer the specific questions on the MS Proposal Cover Sheet**, to assure that each member of the committee agrees that the exam may take place as scheduled. See general information on comprehensive examinations.
During the Examination

1. The student orally presents a concise, well-prepared summary of the proposed thesis research including, but not limited to, the rationale for conducting the research, plans for conducting the research, fundamentals of the methods used to carry out the research, background on previous, related work, and potential implications of the proposed research. This presentation will not exceed 30 minutes in duration and will not be interrupted by questions from the examining committee.

2. The faculty examination committee will question the student, for a period generally not exceeding 90 minutes, on the thesis-proposal presentation, subject material broadly related to the field(s) of the thesis research, and assessment of the student’s basic geologic background to undertake the proposed research. This exam is open to the entire faculty, but not to other students.

3. Immediately following the oral exam, the committee will meet to discuss the outcome of the oral portion of the exam. A grade of "Pass", "Conditional Pass", or "Fail" will be assigned based upon a vote of the four members of the examination committee. See overview section on the Comprehensive Examination for an explanation of these outcomes.

I Program of Studies for the Master’s Degree: After successful completion of the M.S. Examination, M.S. students must submit the University’s office of Graduate Studies "Program of Studies" form for the Master’s Degree. This form is located on the web at:

http://grad.unm.edu/resources/gs-forms/index.html

Click on Academics then on the PDF for Program of Studies form. This form is to be completed and submitted by the end of the second semester. When you have obtained all EPS Departmental signatures bring the candidacy form to EPS front office. We will make a copy for your file and the original will be walked over to the office of Graduate Studies for approval of the Dean.

II Thesis Progress: Each student is encouraged to meet with his or her thesis committee (as a group) each semester following successful completion of the M.S. exam. The student shall write a short progress report in the Graduate Student Progress and Advisory Form (Appendix III) each year. The student’s advisor must approve the Progress and Advisory Form, which provides a record of the student’s continued progress.

III Thesis Defense: The thesis research is to be presented before an open meeting of the Department of Earth and Planetary Sciences and other interested individuals. This presentation will not exceed 40 minutes in duration. The student is to notify the Main Office Personnel, three weeks in advance of the defense, of the date and time, committee, and title in order to schedule a room and receive appropriate office of Graduate Studies approval forms. A copy of the thesis must be placed in the main office two weeks prior to the defense date. Questions pertaining to the thesis and supporting material may be asked by any members in attendance. Immediately following the presentation and open question period, a closed session will be conducted by the thesis committee. Any questions pertaining to the thesis and supporting material may be asked at this time. Defenses are usually scheduled during the academic year, excluding final exam weeks, but, depending on circumstances and the concurrence of the committee, defenses may take place during examination weeks as well as during winter or summer breaks.

IV Thesis: The student must submit copies of the final accepted thesis to the Graduate School within ninety (90) days of his/her final examination for the thesis. If the thesis is not submitted within that time, the student must schedule and complete a second final examination for the thesis. In all cases the results of the thesis defense must be submitted to GS no later than two weeks after the announced date of the thesis defense. See the GS website for up-to-date requirements for thesis submission (electronic vs. paper). One (1) BOUND hard copy and one electronic copy of the thesis must be turned in to the Department of Earth and Planetary Sciences. All copying and binding charges are at the student’s expense.
The thesis may either be written as a conventional thesis or as one or more coauthored manuscripts for publication in a peer-reviewed journals or similar publications. In the latter case, students and their committees should adhere to the following rules:

A. Regardless of the number of authors, the student must have done the bulk (i.e. "51 percent or more") of the research and preparation for publication.
B. The student must be the first author on the publication.
C. The thesis must include a preface or introductory chapter that briefly explains the role of each of the authors in any multi-authored section or chapter of the thesis.
D. Any manuscript submitted for outside publication should also be distributed to all members of the committee.

V All departmental charges, keys, reading room materials, etc. must be settled or returned before the thesis is approved. A carefully selected and properly curated thesis collection (if applicable) must be left in the department (see p. 28). See the Main Office Personnel for the Departmental Checklist. Students must complete this Checklist; otherwise the degree will not be awarded.

VI Time Limit: All work offered towards the Master's degree must be accomplished within a seven-year period.

VII Please refer to the UNM Catalog for additional information concerning the requirements for the Master's degree.
ABBREVIATED SCHEDULE FOR M.S. PROGRAM STUDENTS

YEAR 1:

SEMESTER I:

1. End of first week - turn in Advisement Form and any petitions to Graduate Committee Chair.
2. Select three thesis committee members and notify front office personnel. Write an email memo indicating these choices to the Department Chairperson and request assignment of additional appointment of external examination member.
3. Mandatory: convene a full thesis committee meeting prior to finals week to discuss courses that will apply towards MS requirements, thesis topic, and preparation for the MS exam.
4. Prior to finals week: complete the Departmental Program of Study Form, (appendices III) which must be signed by all three thesis committee members, and submit to chair of the E&PS Graduate Committee for approval.

SEMESTER II:

1. Schedule MS oral examination.
2. Submit MS Proposal and Proposal Cover Sheet at least two weeks prior to oral exam. Remind committee members to answer questions on Cover Sheet within one week.
3. Complete M.S. examination prior to last four weeks of the semester (last 3 weeks of classes).

YEAR 2:

SEMESTER I:

1. By end of second week - complete University’s office of Graduate Studies “Program of Studies for the Master’s Degree” form and submit through your advisor to the Graduate Committee Chairperson. (website http://grad.unm.edu/resources/gs-forms/index.html)

SEMESTER II:

1. In order to complete and defend thesis this semester -
   a. Comply with Master’s Thesis/Graduation Checklist
   b. By August 1, for Fall, December 1, for Spring, or May 1, for Summer, the student must inform Department in writing of intention to complete all degree requirements during that semester
   c. At least three weeks before intended thesis defense date: - arrange time and place of defense with E&PS Office and office of Graduate Studies, and confirm arrangements with all members of thesis committee.
   d. Two weeks before defense date: Provide copy of thesis in main office for faculty examination.
   e. The thesis must be submitted for approval by Dean of Graduate Studies by November 15, April 15, or July 15 for graduation during respective term. OR within ninety (90) days of passing his/her final examination for the thesis. If the thesis is not submitted within that time, the student must schedule and complete a second final examination for the thesis. In all cases the results of the thesis defense must be submitted to GS no later than two weeks after the announced date of the thesis defense.
DEPARTMENT OF EARTH & PLANETARY SCIENCES

REQUIREMENTS AND PROCEDURES FOR PH.D. DEGREE
REQUIREMENTS AND PROCEDURES FOR A PH.D. IN EARTH AND PLANETARY SCIENCES

The deadlines described here are intended to ensure rapid progress toward defining a dissertation topic, completing candidacy requirements, and successfully completing the Ph.D. Examination. In circumstances where it is deemed inappropriate for a student to maintain this schedule, a petition should be submitted to the Graduate Committee to establish specific deadlines that are consistent with the individual student's situation.

Advisement:

I. Students will participate in a formal advisement interview prior to the end of the first week of classes. The purpose of this interview is to:
   a. Assess gaps in the student's prior training, via the Advisement Form and student transcripts. Note that courses taken to make up deficiencies in math, chemistry, or physics must be taken for a letter grade and cannot count toward required hours for the degree.
   b. Recommend a general plan of course work and discuss the required Program of Study form.
   c. Students are required to enroll in EPS 501 (Colloquium) for at least one semester, and are encouraged to enroll every semester.
   d. Identify potential members of the Dissertation Committee.
   e. Discuss the timing and format of the Ph.D. examination, and the expected accomplishments leading up to this exam.
   f. Answer any questions the student might have concerning the Ph.D. program at UNM, and registration procedures.

II. As part of the advisement process, each new student will be informed of the department's general expectations for satisfactory progress towards the Ph.D. degree, which include:
   a. Completion of necessary coursework - see requirements below;
   b. Establishment of a dissertation committee and a mandatory meeting with this committee prior to the end of the first semester in residence. The EPS Program of Study form is to be filled out and signed at this meeting, and delivered to the Departmental Graduate Advisor.
   c. The Ph.D. oral exam must take place in the THIRD SEMESTER of residency - see detailed information below.;
   d. (Recommended) completion of the Ph.D. within 4 years of residency.

III. Other important issues will also be communicated to the student:
   a. Financial support, in any combination of TA, RA, or fellowship, is generally limited to eight (8) semesters of full-time support.
   b. Any student admitted with guaranteed TA support for a specified number of semesters (e.g., 6 semesters) may use that support any time during the first 8 semesters in residence. However, no TA commitment can be “banked” to use beyond the 8-semester limit.
   c. Each student should attend the first meeting of Earth and Planetary Sciences 401/501 (see schedule of classes for date, time and room number) for an introduction to the Department.
   d. Other activities the student should be aware of (e.g., mandatory meeting to assign teaching/grading positions, if the student is a teaching assistant).
   e. The current advisor need not be the permanent advisor, if the student desires a change.

IV. The Advisement Form must be filled out, signed, and turned in to the Graduate Advisor (chair of the Departmental Graduate Committee) no later than Friday of the first week of classes. This form will list all relevant coursework completed prior to entering UNM and will identify in writing any deficiencies that must be made up at UNM. This form will serve as an early indication that each student has met with his/her advisor and discussed past and future coursework.

V. Prior to the end of the first semester of residency, each student will select a preliminary four-member Dissertation Committee to serve as examiners in the Ph.D. exam (see below), in areas of special interest to the student. A MANDATORY Dissertation Committee meeting will take place during the last four weeks of the first semester in residence. This meeting will take place among the student and all members of the Dissertation Committee. Topics to be covered at the meeting include but are not limited to:
a. A potential dissertation topic and the specific topics for the two abstracts and proposals (see details below) required for the comprehensive examination.

b. Formal course of study planned in sufficient detail to complete the required EPS Program of Study Form and to allow the student to prepare the form for candidacy to the office of Graduate Studies. This is a plan of course work for the remainder of the student's tenure at UNM, including final clarification of and action on any deficiencies. The plan of course work will be included in the student's file and deviations from this course plan will require dissertation committee approval.

c. Consideration of any potential difficulties with the student's progress that necessitate submission of a petition to the Graduate Committee to delay completion of the Ph.D. Examination beyond the third semester.

d. Completion of the Departmental **Program of Study Form** (Appendix) which lists the complete academic course schedule proposed to satisfy graduation requirements. The Program of Study Form is to be signed by the four Ph.D. thesis committee members and the student, and then submitted to the Graduate Committee for approval.

**Dissertation Committee**

I. Tentative Dissertation Committee: During the **FIRST** semester of residency, the student is expected to select a permanent dissertation advisor, and three additional Committee members.

II. Permanent Dissertation Committee: During the **THIRD** semester of residency, the student is expected to finalize their dissertation committee (committee on studies). The GS “**Appointment of Dissertation Committee**” form (http://www.unm.edu/~grad/forms/forms.html) must be signed by the candidate, the dissertation director, and the EPS chairperson or graduate advisor.

III. Composition of the Dissertation Committee:

The committee will consist of at least **four** members approved for graduate instruction at UNM and with established competence in the field of the dissertation or some aspect of it.

a. The director of the dissertation must be a regular UNM faculty member approved by the student's **graduate unit**: he or she must have demonstrated research or professional competence in the general area of the dissertation and in the methodology applied. Individuals whose primary employer is UNM and who hold the titles of research professor, research associate professor, research assistant professor, may only chair committees if within the student’s major.

b. Two members must hold regular, full-time faculty appointments at UNM. One committee member must be a UNM faculty member from **within the student's graduate unit**.

c. A third member must hold regular, full-time appointment in a **graduate unit at UNM other than that of the student**, or at another accredited institution.

d. The Dean of Graduate Studies must approve all committee members who are not regular UNM faculty for graduate instruction, specifically for the student's graduate unit.

e. Graduate students may supplement the minimum committee membership described above. All supplemental appointments must be identified on the "Appointment of Dissertation Committee" form, and must be approved by the Dean of Graduate Studies.

f. Graduate units may supplement the minimum committee membership of four with qualified members from outside the University. The office of Graduate Studies will facilitate such efforts whenever possible. These supplemental appointments must be requested at the time of the formation of the dissertation committee, identified on the Appointment of Dissertation Committee form, and approved by the Dean of Graduate Studies.
Ph.D. Examination

The PhD examination consists of two written parts followed by an oral exam. Extended abstracts for two research projects must be submitted to the faculty for approval during the SECOND SEMESTER in residence. The research topics proposed in the abstracts should be with two different principal advisors with different research interests. One of the abstracts normally focuses on the student’s proposed dissertation topic. During the THIRD SEMESTER in residence, a PhD student must submit and orally defend two research proposals developed from his or her abstracts.

[A PhD student who lacks an MS degree and whose abstracts are not formally approved in the second semester will automatically be transferred to the MS program and will need to complete the MS exam. The total funding commitment in such cases will be reduced to two years.]

I. Ph. D. Examination - Submission and approval of extended abstracts.

a. In the second semester, the student must prepare two extended abstracts for the proposals that will represent the written component of the Ph.D. examination. The extended abstracts should consist of no more than three, double-spaced pages of text, including any tables and figures. As a general guideline, each abstract should consist of the following:
   i. The name of the main advisor for the abstract followed by the names of all committee members.
   ii. An “executive summary”, no more than a few lines in length, clearly outlining the significance of the proposed research, in terms that are understandable to nonspecialists (e.g. the full graduate committee).
   iii. A short introduction to the problem (1-2 paragraphs).
   iv. A summary of how the proposed research will contribute to solving the problem (2-3 paragraphs).
   v. A brief description of the methodology (1-2 paragraphs)
   vi. A final paragraph summarizing the expected outcome of the research.

b. One paper copy of the abstracts must be submitted to the Department office prior to the last six weeks of the second semester of residence (on or before April 1 or on or before November 1). An electronic copy of the abstracts should be submitted to the Chair of the EPS Graduate Committee by the same date. NOTE THAT ALL MEMBERS OF THE PHD COMMITTEE MUST HAVE READ THE ABSTRACTS PRIOR TO FORMAL SUBMISSION.

c. The “PhD Abstract Checklist” must accompany submission of the abstracts to the departmental office. All members of the PhD committee MUST sign off on this form within one week after abstract submission.

d. The abstracts will be circulated among the members of the Departmental Graduate Committee and then presented by the Committee to the entire faculty for approval. Following discussion by the faculty, the student will be notified whether the abstracts have been accepted, or whether modification is required. If modifications are necessary, a deadline will be set for submitting the revised abstract(s).

e. Once the abstracts have been approved, the student should inform the Department Chairperson of the four members of the Dissertation Committee, and request assignment of a fifth (“generalist”) member of the exam committee. The identity of this examiner will be made known to the student.

II. Ph. D. Examination - Submission and approval of research proposals.

a. In the third semester, the student must prepare two written research proposals that are based on the previously approved abstracts. The proposals must be prepared in consultation with members of the student’s Dissertation Committee, and the Committee should review at least one
draft of each proposal prior to submission to assure that the proposals are appropriately organized and that any weaknesses have been addressed.

b. Each student should communicate with all members of his/her exam committee as early in the semester as possible to schedule a date and time for the oral examination. As soon as the committee agrees on the timing, the student should work with the front office to schedule a room and to ensure that all necessary GS paperwork is prepared prior to the exam.

c. Dissertation Proposals must be submitted to and approved by the Dissertation Committee prior to taking the oral component of the Ph.D. Examination. The proposals must be submitted to the Dissertation Committee prior to the last six weeks of the THIRD SEMESTER in residence (on or before November 1 or on or before April 1). An additional copy of each proposal is placed in the main office at this time for inspection by other interested faculty. Comments by any non-committee faculty member should be directed to the student's major advisor.

d. The student will turn in one copy of the PhD Proposal Cover Sheet (see Appendix or EPS Intranet) to the front office at the time of submission of the proposals. At least ONE week prior to the examination, each member of the exam committee must answer the specific questions on the PhD Proposal Cover Sheet, to assure that each member of the committee agrees that the exam may take place as scheduled. See general information on comprehensive examinations regarding possible outcomes at this stage.

e. Once both proposals are accepted by the committee, the written component of the examination is considered to have been passed.

III. Ph.D. Examination - Oral Examination

a. The oral component of the examination must be completed before the last four weeks of the third semester in residence. The student must arrange a date for the oral exam that is mutually agreeable to all concerned. The date, time (3-hour time block), and room for the Ph.D. Examination should be arranged several weeks in advance of the exam. The Examination Committee consists of the four members of the Dissertation Committee (as defined by the Graduate Catalog and not exceeding one Senior Research Associate or Adjunct Faculty Member) and the additional examiner assigned by the Department Chair (see above). If there are more than four members of the Dissertation Committee, then the four voting members (as per criteria noted above) must be designated (all members of the committee, if greater than four, may participate in the examination, as well as any other interested faculty members). The role of the additional examiner is to assure that the student's work is communicable to generalists in the geosciences and to help assure that questions cover a reasonable range of fields.

b. The student will separately present both proposals in talks not to exceed 20 minutes each. The talks should be comprehensible to a non-specialist (e.g., the outside examiner), and should include clear statements regarding the nature and significance of the project, the approach the student will take in addressing the scientific problem(s), and potential outcomes of the research.

c. The student has the option to request the order of the presentations and questioning periods.

d. Questions by the examination committee generally originate out of the science discussed in the two proposals and presentations, but may include other topics deemed relevant by the exam committee.

e. After completion of the questioning, the student is asked to leave the room and the committee discusses the student's performance on the oral examination. A grade of "Pass", "Conditional Pass", or "Fail" will be assigned based upon a vote of the members of the examination committee. See overview section on the Comprehensive Examination for an explanation of these outcomes.

f. A student who feels that the examination was not administered fairly or who believes that circumstances exist for reconsidering a negative decision or administering a second examination should meet with the Department Chairperson within one week of the examination to discuss consideration of an appeal of the Examination Committee's decision.
IV. Procedures for students wishing to enter the Ph.D. Program immediately following their M.S. exam.

A student who enters UNM in the MS program but who subsequently wishes to convert the MS project into a PhD dissertation must inform his or her committee of this desire prior to taking the MS exam in the second semester. The committee will then use the oral examination as a tool to probe the student’s readiness to advance directly into the PhD program, and will make an appropriate recommendation to the full faculty. If the faculty endorses the recommendation, the student will then prepare a second proposal and defend it in the third semester in residence. This second oral examination must occur prior to the last 4 weeks of the 3rd semester.

Students who successfully transition from the MS to the PhD program via the above procedure will receive a maximum departmental commitment of 4 years of funding: 1 year while MS candidate, and 3 additional years as Ph.D. candidate.

If student fails the Ph.D. exam, he/she may revert back to the MS program.

Course Work

A PhD student must complete a minimum of 48 hours of coursework beyond the Bachelor’s degree that carry graduate credit in geology and other subjects relevant to his or her specialty. A maximum of 30 hours of coursework completed for the Master’s degree, including 6 hours of thesis credit, may be applied toward the 48-hour requirement. A minimum GPA of 3.0 (B average) must be maintained. The following requirements hold:

a. At least 18 hours of 500 – level coursework,

b. At least one semester of enrollment in EPS 501 (colloquium),

c. No more than half the total graduate course hours counted toward the required total may be taken with any one professor,

d. A maximum of 3 hours of problems courses may be taken for credit,

e. A minimum grade of B- is required for each course,

f. At least 18 hours of dissertation (EPS 699), in addition to at least 48 hours of other coursework that meets requirements a-e.

See the current Graduate Catalog [http://catalog.unm.edu/catalogs/2016-2017/courses/EPS/index.html](http://catalog.unm.edu/catalogs/2016-2017/courses/EPS/index.html) for other information on Ph.D. course requirements.

Advancement to Candidacy

After completion of at least 12 hours of course work beyond the M.S. and after the Ph.D. Qualifying Examination, Ph.D. students must submit the “Application for Candidacy” form for the Doctoral Degree. This form is located on the web at: [http://grad.unm.edu/resources/gs-forms/index.html](http://grad.unm.edu/resources/gs-forms/index.html). This form is to be completed and submitted through your advisor to the Graduate Committee Chairperson. When you have obtained all departmental signatures bring the candidacy form to the Department front office. We will make a copy for your file and the original will be walked over to the office of Graduate Studies for final approval.
Dissertation

I. At least **18 hours** of Earth and Planetary Sciences 699 (Dissertation) must be taken. The student must stay continuously enrolled in dissertation hours (excluding summers, unless defending) till completion of the dissertation.

II. Recognizing the fact that part or all of a dissertation will be published as a multi-authored contribution, the Department has established general guidelines to which students and their committees should adhere:

III. Regardless of the number of authors, the student must have done the bulk (i.e. "51 percent or more") of the research and preparation for publication.

IV. The student has to be the first author on each publication submitted as part of a dissertation.

V. The dissertation must include a preface in which the student briefly explains the role of each of the authors in any multi-authored section or chapter of the dissertation.

VI. Any manuscript submitted for outside publication should be distributed to all members of the committee.

VII. A copy of the dissertation must be in the hands of all members of the committee, and placed on file in the EPS main office, at least **two weeks** prior to the scheduled defense.

VIII. **Oral Defense of Dissertation:** An oral presentation dealing with the dissertation will be given by the student; this is open to the public. The Committee on Studies will then have a closed period for questioning the candidate. Dissertation defenses are typically scheduled during the academic year, excluding finals week. Again, notify the Main Office Personnel **three weeks in advance** of the date, time, committee and title to gain a room and appropriate approval forms. In all cases the results of the dissertation defense must be submitted to GS no later than two weeks after the announced date of the dissertation defense.

IX. The **final signed** dissertation must be submitted to the office of Graduate Studies, within ninety (90) days following the oral defense. If the manuscript is not submitted within that time, the student must schedule and complete a second final examination for the dissertation. See GS website for current guidelines regarding electronic vs. paper submission of the dissertation. One **BOUND** paper copy and one electronic copy of the dissertation must be delivered to the Department of Earth and Planetary (all copies and binding charges are the student’s expense). Each committee member should also be provided with a copy of the final dissertation (electronic or paper).

X. All departmental charges, keys, reading room materials and so forth must be settled or returned before the dissertation will be approved. A carefully selected and properly curated collection (if applicable) must be left in the department (see p. 28). See the Main Office Personnel for the Departmental Checklist. Students must complete this Checklist; otherwise the degree will not be awarded.

XI. Five-year time limit: The doctoral dissertation must be completed within five years following **formal** advancement to candidacy (i.e. comprehensive exam requirements).

Please refer to the office of Graduate Studies (http://www.unm.edu/grad/) for additional information concerning the requirements for the Ph.D.
ABBREVIATED SCHEDULE FOR PH.D. PROGRAM STUDENTS

YEAR 1:

SEMESTER I:
1. Meet with advisor during 1st week of first semester to complete Advisement Form and identify any deficiencies. Turn in form to EPS Graduate Advisor by Friday of the 1st week.
2. Identify membership of a tentative Dissertation Committee.
3. Formulate possible dissertation topics in preparation for MANDATORY Dissertation Committee meeting before the last four weeks of the first semester.
4. Submit completed Program of Study Form prior to finals week of the first semester in residence.

SEMESTER II:
1. Submit extended abstracts of two dissertation proposals (and checklist) to the Graduate Committee, prior to the last six weeks of second semester (April 1 or November 1).
2. Email Department Chair to request selection of an external examiner.

SEMESTER III:
1. Set date for Oral Component of Ph.D. Examination.
2. Submit Dissertation Proposals prior to last six weeks of third semester (usually November 1). Place copies of each proposal in Main Office at this time, accompanied by Proposal Cover Sheet. Remind committee members to answer questions on cover sheet within 1 week of submission.
3. Complete Oral Component of Ph.D. Examination prior to last four weeks of third semester.
5. Submit “Appointment of Dissertation Committee” form

PH.D. STUDENTS INITIALLY STARTING AS M.S. STUDENTS:
1. Complete M.S. exam with entire committee recommending expansion of M.S. project into Ph.D. project.
2. Petition Graduate Committee to advance to Ph.D. program; petition includes letters of support from each M.S. committee member.
3. Submit second Ph.D. abstract to Ph.D. Committee and Graduate Committee by first week of the third semester.
4. Once second abstract is approved by Ph.D. Committee and Graduate Committee, follow guidelines for traditional Ph.D. students starting with third semester.

UPON COMPLETION OF DISSERTATION:
2. By September 22, February 16, or June 15, respectively - student must inform the department in writing of intention to complete all degree requirements for graduation.
3. Two weeks before dissertation defense date - arrange with department scheduling of the exam and place complete final copy of dissertation in main office for faculty review.
4. Final dissertation must be submitted for approval of the Dean of Graduate Studies by November 15, April 15, or July 15, respectively, for Fall, Spring, or Summer completion.
DEPARTMENT OF
EARTH & PLANETARY SCIENCES

POLICY FOR GRADUATE THESIS AND
DISSERTATION COLLECTIONS

POLICY FOR GRADUATE THESIS AND
DISSERTATION COLLECTIONS

34
POLICY FOR GRADUATE THESIS AND DISSERTATION COLLECTIONS

As a necessary step in the completion of degree requirements, graduate students whose theses/dissertations involve the acquisition and study of fossils, rocks, or minerals must arrange for the curation and conservation of appropriate specimens as follows:

I. The student will consult with his/her advisor and the Chair of the Collections Committee to determine which specimens are to be conserved in the departmental collection. In general, type and illustrated fossils and analyzed and illustrated rocks and minerals will be conserved, but the final determination of what specimens will be conserved is the responsibility of the curator.

II. After the determination of which specimens are to be conserved has been completed, the student will consult with the curator with regard to the curation of specimens. On the advice of the curator, the student will curate the specimens by undertaking the physical preparation (cleaning, consolidating, etc.) of the specimens deemed necessary by the curator to insure their integrity when maintained in the collection.

III. After the specimens have been prepared, the student will complete the curation process by labeling the specimens and cataloguing them into the departmental collection. It is mandatory that proper provenance accompany each specimen and that the specimens are properly identified as a thesis/dissertation collection. The departmental catalogue numbers should be used to identify the specimens in the thesis/dissertation.

IV. Upon completion of the labeling and cataloguing of specimens by the student, the curator will make the final decision as to whether or not the student has insured the appropriate curation and conservation of his/her thesis/dissertation collection.
The Department of Earth and Planetary Sciences has several forms of financial aid available for graduate students. Teaching and research assistantships are the most important in terms of the number of students supported. Other types of aid include the Kelley-Silver or Black EEE Fellowship, University Tuition-Waiver Fellowships (generally one or two per year), a number of smaller scholarships derived from many funds and gifts to the Department, and several scholarships available through the office of Graduate Studies. These are discussed below.

Students admitted with funding are generally guaranteed four consecutive semesters of TA/RA/fellowship for the MS degree and six consecutive semesters for the PhD degree. Students applying for January admission are not eligible for guaranteed TA funding, and may be admitted with only partial RA support - see below. In some cases, graduate students with outside employment (e.g., at Los Alamos, the USGS, etc.) may be admitted without aid.

A PhD student who lacks an MS degree and whose abstracts are not formally approved in the second semester (see section on PhD requirements) will automatically be transferred to the MS program. The total funding commitment in such cases will be reduced from four years to two years.

I. Teaching Assistantships (TA-ships) - For a detailed summary of the University’s policies on TA-ships, see the current Graduate Bulletin. The following information pertains to the Department’s policies on TA-ships.

A. TA-ships are awarded by the Department of Earth and Planetary Sciences on a full-time (20 hours per week) or half time (10 hours per week) basis. Generally the duties of a full-time TA will include 6 to 8 hours per week of in-class time (teaching geology laboratories), with the remainder devoted to preparation, grading, proctoring, and other duties. The TA is expected to attend the lectures for the course for which he or she is instructing the laboratories, if the course is 300-level or above. A full-time TA-ship carries a tuition-waiver good for up to 12 hours of course work; a half-time TA-ship carries a tuition waiver for six hours. The stipend is paid at the end of each month, five times per semester.

B. Many TA-ships are awarded for two (M.S.) or three (Ph.D.) year periods, assuming satisfactory academic progress. MS students cannot “bank” any guaranteed TA support beyond their fourth semester in residence. PhD students who have been guaranteed six semesters of TA support may distribute this support over their first 8 semesters in residence; no TA support can be “banked” beyond the 8th semester. Students with guaranteed TA support must still complete an application for a TA-ship for each semester in which they wish to hold a TA position.

C. TA-ships are not awarded to students who have cumulative GPA’s of less than 3.0 (B average) or who are on probation.

D. Any student may apply for a one-semester TA-ship, regardless of the nature of his/her funding commitment. Additional (i.e., non-guaranteed) TA-ships are awarded as they become available.

1. About one month before the end of a semester the Graduate Committee solicits applications for TA-ships for the following semester, via a memo distributed to all graduate students. Students who are interested in being considered for a TA-ship should submit the appropriate application to the Chair of the Graduate Committee.

2. The Graduate Committee, with the faculty's concurrence, allocates the available TA-ships to students on a full-time or half time basis, and notifies the recipients before the semester ends. The Department Administrator notifies TA-ship recipient to complete their contract.

3. Criteria for selection of TA's include academic performance, teaching ability (from student evaluations of TA's and faculty evaluations), and to a lesser extent, financial need. Students awarded TA-ships are expected to be making satisfactory progress in completing requirements for their degrees. Students who are not initially allocated a TA-ship for a particular semester are placed on an alternate list, and may be awarded a TA-ship if an opening occurs after the initial allocation has been made.
F. Prior to the start of each semester a MANDATORY meeting for ALL teaching assistants will be held to coordinate TA duties. See page 7.

G. The University of New Mexico has established an official policy on Sexual Harassment for UNM Students, faculty and staff. The policy is stated as an appendix to this document.

II. Research Assistantships

Research assistantships are available through contracts and grants to specific faculty members. The offer of a RA-ship comes from an individual faculty member and is usually made to graduate students who have defined their research interest in an area in which the faculty member is working. Qualifications and stipends for RA's are similar to those for teaching assistants.

Many of the provisions that apply to TA-ships also apply to RA-ships, such as 20 hours of work per week for a full-time RA. RA-ships cannot be awarded to students who are on probation.

III. January Admissions

Under normal circumstances, the Department of Earth and Planetary Sciences does not grant guaranteed financial aid (TA or RA support) to students admitted to the graduate program for the Spring term. Students may, however, be admitted to the program mid-year with RA support, as long as this support can be guaranteed for at least one year. In special cases (i.e. Departmental needs), students may be admitted with TA support for the Spring semester, providing that RA support is available to them for at least one additional semester. In subsequent semesters, if RA support is terminated, those students desiring Department TA support would be considered with other in-house applicants.

IV. Kelley-Silver Fellowship and Black-EEE Fellowship

A Kelley-Silver Fellowship or a Black-EEE Fellowship may be awarded to an outstanding incoming graduate student for a period of one year (for Master's student) or two years (Ph.D. student). Further information may be found on the Department of Earth and Planetary Sciences website.

V. Scholarships

Several departmental scholarships, with stipends ranging from about $100 to >$1,000 are available to graduate students. Application announcements are posted and distributed to graduate students during the Spring semester. Students should apply in writing to the chair of the Graduate Committee documenting their academic progress and accomplishments, financial need, and service to the department. See Appendix II. Notification of awards is made at the beginning of the Summer.

The following scholarships are available to graduate students through the Department of Earth and Planetary Sciences:

1. **Rodney C. Rhodes Memorial Scholarship**: Recipients must be junior or senior geology majors at UNM or graduate students pursuing a master's or doctorate degree in geology, with emphasis on Igneous Petrology, or Volcanology.

2. **Association of Earth and Planetary Sciences Graduate Student Scholarship**: Recipients must be graduate students in geology and have proven academic ability.

3. **Jean-Luc Miossec Memorial Scholarship**: Awarded to one student each year in the field of Quaternary Studies.

4. **Richard P. Vann Memorial Scholarship**: Awarded to one student each year whose thesis/dissertation emphasizes the paleontology of New Mexico.

5. **Wengerd Traveling Fellowship**: Awarded to one student each year for support of travel related to thesis/dissertation studies.

6. **Alexander and Geraldine Wanek Fellowship**: Awarded to students whose thesis/dissertation emphasizes geological resources.

7. **Earth and Planetary Sciences Alumni Fellowship Fund**: Scholarship awarded in various amounts to several students each year, based mainly on academic merit.
8. **Chair's Discretionary Scholarship Fund**: Supports travel to professional meetings for the purpose of giving talks, and use of Departmental analytical facilities for thesis/dissertation research. Application may be made at any time to the Chair.

9. **Vincent C. Kelley Memorial Scholarship**: Awarded to a graduate student, preferably Ph.D. student, based on academic excellence.

10. **Gratton Simmons Endowment**: Awarded to graduate student demonstrating a strong interest in natural resources development and/or research. Based on academic achievement, and financial need.

11. **Gorham Fellowship**: Scholarships available for graduate students demonstrating an interest in geoscience training, including field, quantitative, and laboratory analytical skills.

**VI. Student Research Allocations Committee**

The UNM Student Research Allocations Committee (SRAC) was established to allocate funds from the UNM office of Research for graduate student research projects and for travel expenses to conferences/workshops directly related to the student's degree program. Initially funded by an NSF grant, SRAC now receives its funds primarily from the Graduate Student Association (GSA) and for specific allocations from the State Legislature, when they feel that Education might actually be a good thing to provide funds for. Requests are submitted three times annually. Request forms and information may be obtained at the GSA Office, New Mexico Union.

**VII. Office of Graduate Studies**

Each year, at various times the office of Graduate Studies offers numerous fellowships, scholarships, and awards for direct support of research. These include Challenge Assistantships ($8,000 cash), Graduate Achievement Awards ($1,500 each), and Research, Project and Travel (RPT) Grants, made available through a direct contribution from the State Legislature to support graduate research at UNM. Notification for competition for these awards is usually provided through the Graduate Committee via memos to all graduate students. For some awards, the Department submits specific graduate students for consideration to the office of Graduate Studies, following the recommendation of the Graduate Committee.

**VIII.** Support for thesis/dissertation work is also available on a competitive basis from numerous agencies or organizations outside the University. Information is outlined on the following pages.
<table>
<thead>
<tr>
<th>AGENCY</th>
<th>DEADLINE</th>
<th>FUNDING</th>
<th>SPENDING REQUIREMENTS</th>
<th>INFORMATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>NM Research Grant</td>
<td>21-Sep-13</td>
<td>3k</td>
<td>Research reimbursement</td>
<td>New Mexico Research Grants provide up to 3000 USD of funding per academic year to exceptional graduate student research projects [<a href="http://gpsa.unm.edu/page/about-new-mexico-research-grant-nmrg-application">http://gpsa.unm.edu/page/about-new-mexico-research-grant-nmrg-application</a>]</td>
</tr>
<tr>
<td>Office of Graduate Studies</td>
<td>21-Sep-13</td>
<td>1k</td>
<td>Research reimbursement</td>
<td>Research Project and Travel Grants are offered to outstanding graduate student research projects at the University of New Mexico [<a href="http://ogs.unm.edu/funding/student-grant/research-project-travel.html">http://ogs.unm.edu/funding/student-grant/research-project-travel.html</a>]</td>
</tr>
<tr>
<td>SRAC-GPSA</td>
<td>21-Sep-13</td>
<td>0.5k</td>
<td>None</td>
<td><a href="http://gpsa.unm.edu/page/about-application-1">http://gpsa.unm.edu/page/about-application-1</a> Open to all UNM grad students</td>
</tr>
<tr>
<td>CUAHSI</td>
<td>15-Oct-13</td>
<td>5k</td>
<td>Research reimbursement</td>
<td><a href="http://www.cuahsi.org/pathfinder.html">http://www.cuahsi.org/pathfinder.html</a> Hydrogeology research grant</td>
</tr>
<tr>
<td>Explorers Club</td>
<td>1-Nov-13</td>
<td>1.5k</td>
<td>Research reimbursement</td>
<td>The Explorers Club offers funding to graduate students to support research activities [<a href="http://www.explorers.org/index.php/expeditions/funding/expedition_grants">http://www.explorers.org/index.php/expeditions/funding/expedition_grants</a>] *note, requires acceptance into Club first</td>
</tr>
<tr>
<td>NSF graduate student fellowships</td>
<td>13-Nov-13</td>
<td>30k/y, 3y</td>
<td>Research reimbursement</td>
<td><a href="http://www.nsfgrfp.org/">http://www.nsfgrfp.org/</a></td>
</tr>
<tr>
<td>International Association of Geochemistry</td>
<td>1-Dec-13</td>
<td>3k</td>
<td>Research reimbursement</td>
<td>The IAGC offers Ph.D. Student Research Grants to cover laboratory analyses for select research projects each year.</td>
</tr>
<tr>
<td>Larson Aquatic Research Support</td>
<td>15-Jan-14</td>
<td>7k</td>
<td>Research reimbursement</td>
<td><a href="http://www.awwa.org/Membership/Content.cfm?ItemNumber=3501">http://www.awwa.org/Membership/Content.cfm?ItemNumber=3501</a></td>
</tr>
<tr>
<td>NASA Earth and Space Science Fellowships</td>
<td>1-Feb-14</td>
<td>30k/y, 3y</td>
<td>Research reimbursement</td>
<td><a href="https://nspires.nasa.gov/external/solicitations/summary.do?method=init&amp;solldid=1DC0EDEE-32A0-0EAE-ED78-B1F6B624B473&amp;path=past">https://nspires.nasa.gov/external/solicitations/summary.do?method=init&amp;solldid=1DC0EDEE-32A0-0EAE-ED78-B1F6B624B473&amp;path=past</a></td>
</tr>
<tr>
<td>IA Great Lakes Research</td>
<td>1-Mar-14</td>
<td>2k</td>
<td>Research reimbursement</td>
<td><a href="http://iaigr.org/scholarships/iaigrapp">http://iaigr.org/scholarships/iaigrapp</a> Large lakes research</td>
</tr>
<tr>
<td>The Geological Society of America</td>
<td>1-Feb-14</td>
<td>~1.8k</td>
<td>None</td>
<td>The GSA provides stipends to support graduate student research projects in the Earth sciences [<a href="http://www.geosociety.org/grants/gradgrants.htm">http://www.geosociety.org/grants/gradgrants.htm</a>]</td>
</tr>
<tr>
<td>Society of Exploration Geophysicists</td>
<td>1-Mar-14</td>
<td>.5-3k</td>
<td>Research reimbursement</td>
<td><a href="http://www.seg.org/">http://www.seg.org/</a> Geophysics research</td>
</tr>
<tr>
<td>National Water Research Institute</td>
<td>25-Apr-14</td>
<td>5k</td>
<td>Research reimbursement</td>
<td><a href="http://www.nwri-usa.org/fellowship.htm">http://www.nwri-usa.org/fellowship.htm</a></td>
</tr>
<tr>
<td>National Geographic Society</td>
<td>Under age 25</td>
<td>5k</td>
<td>Research reimbursement</td>
<td><a href="http://www.nationalgeographic.com/explorers-grants-programs/young-explorers/">http://www.nationalgeographic.com/explorers-grants-programs/young-explorers/</a></td>
</tr>
<tr>
<td>Student Conference Award Program (S-CAP)</td>
<td>Rolling</td>
<td>0.6k</td>
<td>Research reimbursement</td>
<td><a href="http://www.career.unm.edu/students/s-cap.php">http://www.career.unm.edu/students/s-cap.php</a> For travel cost reimbursement</td>
</tr>
<tr>
<td>Evolving Earth</td>
<td>1-Mar</td>
<td>3k</td>
<td>Research reimbursement</td>
<td><a href="http://www.evolvingearth.org/evolving">http://www.evolvingearth.org/evolving</a> earthgrants/grantsmain.htm</td>
</tr>
<tr>
<td>New Mexico Geological Society</td>
<td>Variable, usually mid-February</td>
<td>$500</td>
<td></td>
<td><a href="http://nmgs.nmt.edu/scholarships/home.html">http://nmgs.nmt.edu/scholarships/home.html</a></td>
</tr>
<tr>
<td>AGENCY</td>
<td>DEADLINE</td>
<td>FUNDING</td>
<td>SPENDING REQUIREMENTS</td>
<td>INFORMATION</td>
</tr>
<tr>
<td>-----------------------------------------------------------------------</td>
<td>------------------------</td>
<td>-------------</td>
<td>-----------------------</td>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td>Society of Economic Paleontologists and Mineralogists, Rocky Mountain Section (Donald L. Smith, Research grant)</td>
<td>Variable</td>
<td>$2,000 (3 given per year)</td>
<td></td>
<td><a href="http://rmssepm.org/scholarships.shtml">http://rmssepm.org/scholarships.shtml</a></td>
</tr>
</tbody>
</table>

OTHER PLACES TO FIND INFORMATION ABOUT FUNDING SOURCES
Graduate Advisor for the Department of Earth and Planetary Sciences
GS website - [http://www.unm.edu/~finaid/](http://www.unm.edu/~finaid/)
Bulletin Board on First Floor - Several funding sources which may or may not be available every year
DEPARTMENT OF EARTH AND PLANETARY SCIENCES EQUIPMENT AND FACILITIES

A summary of the Department's analytical laboratories and other equipment and facilities is available on the Department's website. All of these facilities are available to graduate students, but arrangements must be made with the responsible faculty member or technical support staff before use commences. This is especially true for all analytical instrumentation. All of the Department's facilities require funds for their operation and maintenance. The Department makes every effort to provide the facilities to faculty and students regardless of ability to support their use; however, every effort must be made to raise external funding to support the use of Departmental facilities and equipment. Each facility has a fee structure (based on hourly use, mileage, etc.) that is used to provide a uniform method of billing grants, contracts, and individual users for the service provided. The charges are not intended to prevent use of the equipment or facilities. In the absence of funding, a student should see the Department Chairperson regarding use of the facilities. A fee schedule for services and facilities may be obtained in the main office.

COMPUTER AND PERIPHERAL EQUIPMENT

All computer related issues need an email (fmutchnik@unm.edu) so that she can create and I.T. Ticket through the A&S ticketing system. 277-3546, Rm 141 Northrop Hall.

The Earth & Planetary Sciences Department has 2 Student labs within the Department. The 209 Lab has 10 Windows 10 machines, 3 Apple iMacs, 1 Windows-Scanner, and 2 Windows-Plotter machines. All computers have CS suite installed and ArcGIS 10.4 and Global Mapper, 6 machines have Aquarius GWB, 4 machines have Hefty. All Machines are capable of printing to the Color, B&W, except the 3iMacs.

209 Lab: Machine #11 is scanner only. If someone needs to scan and this machine is being used then they will be asked to move to another computer.

209 Lab: Machines #15/#16 are plotter ONLY; Windows 10/Microsoft/Adobe Pro/IE only on this machine (directions are posted to print to plotter, fmutchnik@unm.edu for assistance). Do NOT turn Plotters On/Off.

209 Lab/Any Classrooms please Do NOT save anything to the hard drives on any of these machines as they will periodically be wiped, updated, and/or replaced without notice. All plotter/printer/computer related questions/concerns please see Faith for assistance.

209 Lab: Printers are available through net id login. Both the color (Name=209-Color Printer) and the black/white (Name=209 BW Printer) printers are behind a print server wall for EPS use only. (Only these 2 printers’ names will work). If you are not enrolled in a current class you will not be able to use the printers. If you are enrolled and can’t see the Printers please email fmutchnik@unm.edu. And she can get you add it could take up to 24-48 hours depending on IT availability to assist. If the printers aren’t working please notify Faith ASAP in person or by phone or by email fmutchnik@unm.edu and printers will immediately be fixed.

209 Lab: The windows machines use the UNM Net ID to login while the Macs also use UNM Net ID, but are not connected to the Printers. The 209 Lab is open during normal business hours; 7:30-4:30 M-F for use by Students, Faculty, and Staff year round.

209 Lab: Plotters are available during normal business hours. Please see Faith Mutchnik (or can email for assistance to fmutchnik@unm.edu and attach PDF, size, and PI for payment purposes and Faith will print and have ready for pickup) for assistance.

The 115 Lab has 20 3430 and 41M that are dual boot Mac OS X and Windows 7. The Windows side uses the UNM Net ID to login while the Mac side uses a designated Student account. The Windows side has CS6, Acrobat Professional and ArcGIS 10.6(this will be updated by Louis Scuderi request) installed for use by all. The majority of the time during the Semester 115 will be used for classes. Use of the 115 lab will need to be coordinated around the Semester class schedule.
Students, Faculty and Staff wishing access to EPS resources will need to apply for access filing out the Department Account form. This will give you access to the EPS L: for storage of files pertaining to UNM; EPS M: (Common Drive) where data is shared with the Department or specific research groups. There is also a small install repository for some of the more of the more frequently requested Departmental software. The forms will need to be filled out and returned to the Department Network Administrator. If you will be working within one of the many research groups you need to have the Researcher or Advisor of that group fill out and sign the Departmental Account form with the appropriate information (give form to Faith to create at IT ticket to get you added to the proper drive).

All offices within the Department have wall ports and can be used with an ethernet cable. The default in the offices is that only 2 ports are on regardless of how many plates may be available. If you need a port turned on or looked at contact the Department Administrator. There are also wireless networks available for use with Computers, Tablets and Phones. Both wireless networks (Lobo-Guest and Lobo-Wifi) require authentication and installation of UNM Safe Connect program. To authenticate in Lobo-Guest you will accept the terms and conditions, while Lobo-Wi-Fi will require the use of your UNM NetID and Password.

FIELD VEHICLES

The department maintains a pool of six four-wheel drive field vehicles and two utility trailer. Request forms for vehicle use may be obtained from the administrator in the main office. Vehicles are assigned based on a priority system in which instruction, funded faculty research and funded student research have the top priority. Vehicle requests will be confirmed in writing. Failure to obey state laws or to provide proper care to the vehicles will result in the loss of use of departmental vehicles.

The standard fee for vehicle use is $0.95/mile. For students using "personal" funds to pay for vehicle use, the fee is $0.45/mile. Graduate students are encouraged to apply for scholarships (external and internal) to pay for the cost of vehicle use in their fieldwork. In the event that funds are not available, special application may be made to the Chairman for limited use of vehicles that are available.

Failure to obey state laws or to provide proper care to the vehicles will result in the loss of use of departmental vehicles.

LICENSING:

Many students entering the graduate program will either be required to drive a UNM owned vehicle or want to use one for his/her own research work. UNM has implemented a new requirement for students/employees to drive any UNM vehicle. In order to legally operate a departmental vehicle an individual must possess:

1. A valid New Mexico driver’s license obtained from any of the state’s motor vehicle department’s locations. The fee is approximately $18.00 for a four-year license.
2. A UNM Driving Permit; students must then apply for and complete the on-line Safety and Risk Services (SRS) Defensive Driving Course https://srs.unm.edu/training/self-training.php#driving. The course is free as a UNM employee/student and allows the University to cover you under their insurance policy. A copy of your license and completed certification must be brought to the EPS main office to be placed in your graduate file.

PRELIMINARY/CHECK-OUT PROCEDURES

To request vehicle/s, complete request form, indicating driver, destination, purpose of trip, date(s) of departure and return, type of vehicle required, number of seats needed, preferred vehicle number(s), and billing information (e.g., - course number, grant account number, etc.). Instructional, public service, or departmental requests require prior Chairperson approval, administrator will pencil in name on vehicle calendar log;

POLICY

This procedure applies to Instructors, PI’s, Graduate Students, Employees requesting use of a Departmental Vehicle in the Department of Earth and Planetary Sciences.

1. Ultimate responsibility for the safe operation of the vehicle and mature conduct of its driver and passengers;
2. Vehicle keys, log sheets and Booster Cables may be obtained from the Administrator in the main office. A UNM Fleet (fuel) Card will be issued that may be used only for gas, oil, or emergency repairs. The driver is personally responsible for proper use of the Card.
3. Ensure vehicle is “picked –up and “returned” vehicles in acceptable condition and at the appropriate times. Vehicle box which contains 2 sets of keys, vehicle log sheet and fuel card. All credit card receipts should be promptly returned to the main office after vehicles use. Returned vehicles must be clean and have a full tank of gas. Ensure all field trip participants have personal insurance. Instructors should announce this to their classes several weeks prior to the field trip.

DRIVER
1. Must be properly licensed and trained;
2. Periodically inspect the vehicle for safety and/or mechanical problems;
3. Responsible for the safe loading of personnel and equipment into the vehicle; all drivers and passengers are required to use seat belts;
4. Ensure the responsible and mature conduct of all passengers in the vehicle;
5. Operate the vehicle in a safe and efficient manner;
6. Cellular phone use is strongly discouraged while driving;
7. Responsible for the vehicle’s physical security at all times;
8. Accurately complete mileage log sheets, and returns the log sheet to the administrator;
9. Report vehicle maintenance and safety deficiencies to the administrator;
10. Must be thoroughly familiar with the emergency procedures outlined;
11. Ensure all field trip participants have personal insurance

The following procedures should be followed in the event of an accident involving a University vehicle:

- If you are on campus, notify Campus Police at 277-2241 immediately.
- If you are off campus, notify the local police.
- If the vehicle needs to be towed, call the Automotive Center at 505-277-3670. If after hours, call Campus Police.
- Notify your supervisor/manager of any and all accidents.
- Arrange to receive a copy of the accident report filled out by the police authorities.
- Fill out an Automobile/Equipment Accident Report and turn it in to the Department. For additional information and a copy of the Automobile/Equipment Accident Report Form refer to http://shea.unm.edu/important-forms.php

MISCELLANEOUS EQUIPMENT
Other field related equipment available for student use includes Brunton compasses, GPS receivers, and misc. field camping gear. (See front office).

COPY MACHINE
The central part of the main office (room 141) has a copy machine that is available to Graduate Students. Copies are 10 cents each, and billings are made monthly, or for small copy projects, payment should be at time of completion. The following procedures are maintained to preserve the sanity of the office staff who are also dependent on this copier and who are responsible for tracking down unpaid bills:

A. Enter the appropriate information on the tally sheet.
B. Please pay when you are finished making your copies if you are only making a few.
C. The machine is self-serve. The office staff will assist when necessary.
D. Occasionally the office staff or faculty members will commandeer the machine for departmental use.
E. Following are guidelines for usage of the Department copy machine:

1. Teaching Assistants may charge copying for their classes to the department.
2. Research Assistants may charge copying uses for their work on the appropriate grant - it must be logged into the book under the grant name and index.
3. Copies of presentation and handout material for class may be charged to the department. Copying for research purposes is personal.
4. If extensive copying is required (project longer than 15 minutes), please use the copier in the evenings or weekends.
5. Students are encouraged to use the library or other copy centers for long personal projects.
6. Please remember to log in the number of copies you have made unless you pay at the time
you make copies.
7. Copies of Master's thesis proposals for the faculty may be charged to the department.
8. Materials copied for Ph.D. qualifiers and copies of dissertation proposals for the faculty may be charged to the department.
9. Copies and binding of final Master's thesis and Ph.D. dissertations are the expense of the student.

STUDENT LOUNGE

The student lounge (Don Power Seminar Room) is located on the first floor (Room 147). A refrigerator, microwave, and limited kitchen facilities are available for student use. It is a non-smoking area and should be kept clean by the students who utilize it.

MAILING POLICIES

All graduate students are provided mailboxes in room 141 and these should be checked on a regular basis. There is a mail drop in the main office arranged in the following order:

<table>
<thead>
<tr>
<th>CAMPUS MAIL</th>
<th>FLATS</th>
<th>PERSONAL STAMPED</th>
<th>DEPARTMENT LETTER</th>
</tr>
</thead>
<tbody>
<tr>
<td>ON CAMPUS MAIL ONLY</td>
<td>ANYTHING LARGER THAN A LETTER</td>
<td>LETTERS, STAMPED</td>
<td>LETTER SIZE UNSTAMPED</td>
</tr>
</tbody>
</table>

University stationery is restricted to official business only. Postage stamps are required for all personal mail. Mail is picked up Monday-Friday at about 12:30 p.m. Postage stamps are not available in the main office.
GRADUATE ADVISEMENT FORM
DUE TO GRADUATE COMMITTEE BY THE 1ST FRIDAY OF THE 1ST SEMESTER IN RESIDENCE

Name: ____________________________ Program: ____________________________ Date: ________________________

Field of concentration within E&PS Department: ____________________________ Likely advisor: ____________________________

PREVIOUSLY COMPLETED GEOSCIENCE COURSES:

<table>
<thead>
<tr>
<th>Basic</th>
<th>Advanced</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ Historical Geology</td>
<td>☐ Seismology</td>
</tr>
<tr>
<td>☐ Earth Materials</td>
<td>☐ Geodynamics/Tectonophysics</td>
</tr>
<tr>
<td>☐ Mineralogy</td>
<td>☐ Exploration Geophysics</td>
</tr>
<tr>
<td>☐ Igneous &amp; Metamorphic Petrology</td>
<td>☐ Paleomagnetism or Rock Magnetism</td>
</tr>
<tr>
<td>☐ Volcanology</td>
<td>☐ Physical/Surface Hydrology</td>
</tr>
<tr>
<td>☐ Sedimentology &amp; Stratigraphy</td>
<td>☐ Groundwater Hydrology</td>
</tr>
<tr>
<td>☐ Carbonate Sedimentology</td>
<td>☐ Hydrogeology</td>
</tr>
<tr>
<td>☐ Basin Analysis</td>
<td>☐ Environmental Geology</td>
</tr>
<tr>
<td>☐ Paleontology, Invertebrate and/or Vertebrate</td>
<td>☐ Geomorphology/Surficial Processes</td>
</tr>
<tr>
<td>☐ Structural Geology</td>
<td>☐ Soils</td>
</tr>
<tr>
<td>☐ Plate Tectonics or Global Tectonics</td>
<td>☐ Quaternary Geology</td>
</tr>
<tr>
<td>☐ Field Methods</td>
<td>☐ Paleoecology</td>
</tr>
<tr>
<td>☐ Summer Field Camp</td>
<td>☐ Meteorology</td>
</tr>
<tr>
<td>☐ Planetary Geology</td>
<td>☐ Climatology or Climate Dynamics</td>
</tr>
<tr>
<td>☐ General Geochemistry</td>
<td>☐ Atmospheric Circulation</td>
</tr>
<tr>
<td>☐ Aqueous Geochemistry</td>
<td>☐ Geophysical Fluid Dynamics</td>
</tr>
<tr>
<td>☐ Radiogenic Isotope Geochemistry</td>
<td>☐ GIS Techniques/Applications</td>
</tr>
<tr>
<td>☐ Stable Isotope Geochemistry</td>
<td>Other classes: ____________________________</td>
</tr>
<tr>
<td>☐ Geochemical Thermodynamics</td>
<td></td>
</tr>
<tr>
<td>☐ General Geophysics</td>
<td></td>
</tr>
</tbody>
</table>

REQUIRED MATH AND ALLIED SCIENCE COURSES (any of these classes that have not been completed will be identified as formal deficiencies and must be taken as soon as possible):

☐ Calculus I ☐ Calculus II ☐ Chemistry I ☐ Chemistry II

☐ Physics I ☐ Physics II

ADDITIONAL MATH AND ALLIED SCIENCE COURSES:

☐ Calculus III ☐ Differential eqns ☐ Partial diff. eqns. ☐ Linear algebra

Statistics/data analysis classes (list): ____________________________

Other chemistry classes (list): ____________________________

Other physics classes (list): ____________________________

Biology classes (list): ____________________________

Engineering classes (list): ____________________________

Computer programming skills in:

☐ MatLab ☐ C++ ☐ Fortran ☐ Other:

FORMAL DEFICIENCIES (required math and allied science classes that have not yet been completed):

Course name and number: ____________________________ Semester course will be taken: ____________________________

Course name and number: ____________________________ Semester course will be taken: ____________________________

Course name and number: ____________________________ Semester course will be taken: ____________________________

Course name and number: ____________________________ Semester course will be taken: ____________________________

ADDITIONAL REQUIRED COURSES IDENTIFIED IN CONSULTATION WITH THE ADVISOR (subject to later modification on Program of Study Form):

COMMENTS:

__________________________
STUDENT SIGNATURE

__________________________
DATE

__________________________
ADVISOR SIGNATURE

__________________________
DATE

__________________________
GRADUATE COMMITTEE APPROVAL

__________________________
DATE
# Department of Earth and Planetary Sciences

**Graduate Student Proposed Program of Study Form**

<table>
<thead>
<tr>
<th>Name:</th>
<th>Degree Sought:</th>
<th>Anticipated Completion Date:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date Entering Program:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Semester of Comprehensive Examination (tentative):</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thesis / Dissertation Topic:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Tentative Thesis / Dissertation Committee**

Student Approval: Date:  
Committee Approval: Date:  
Graduate Committee Approval: Date:  

<table>
<thead>
<tr>
<th>Proposed Program of Study</th>
<th>Course</th>
<th>Credits</th>
<th>Semester in Residence</th>
<th>Instructor</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Revisions**

Student Approval: Date:  
Committee Approval: Date:  
Graduate Committee Approval: Date:  

**Note:** All graduate students entering the program are required to complete this form. Please, if possible, list all courses chronologically. For both MS and Phd students, the form should be completed no later than the time of the MANDATORY advisory meeting, within the last four weeks of the first semester of residence. Subsequent revisions to the Program of Study require approval of the principal advisor and the Graduate Committee.
APPENDIX III

ANNUAL SPRING PROGRESS REPORT 
AND 
SCHOLARSHIP APPLICATION
Goals:
1) Help graduate students develop professional CVs for job and graduate school applications
2) Provide updated data to EPS graduate committee for scholarship awards which would be awarded in the Spring of each year for summer support, research support, and completion scholarships.
3) Provide data to the EPS Graduate committee Chairman for EPS graduate program assessments for that academic year.

Due date: April 1 (or first UNM business day thereafter)

What is due: Instructions:
1) Add to the CV WORD DOCUMENT TEMPLATE annually to build an ~ 2 page Curriculum Vitae.
2) Fill in the attached STUDENT PROGRESS FORM each year (by April 1) and get your committee to sign it.

Definitions:
A CV is a fairly detailed overview of your academic accomplishments.
A Resume is a summary of your experiences and skills as they relate to a particular job application.
Curriculum Vitae
YOUR Last Name, First Name, initials
(date)

**Personal data**
Name:
Email:
Mailing address and contact information:
Cell #:

**Areas of Academic Interest and Future Goals**

**Educational background** (institutions attended, years at each, any degrees awarded):
Prior Institutions and years attended:
Current Institution and years attended:
GPA:
Undergraduate major and institution:
Undergraduate minor and institution:
Expected graduation date and degree:

**Employment Experience** (list jobs related to your studies):

**Grants, Awards and Honors:** list grants (submitted or awarded, including $ amounts and dates), awards, honors received, and memberships in professional societies.

**Research**
Title of research project(s):
Research Advisor:
Full reference (GSA/AGU format) for any abstracts or publications completed:

**Relevant technical skills** (list technical, computer, analytical skills, and professional training short courses related to your studies):

**Service** (list service to the department or community related to your studies):
EPS STUDENT PROGRESS FORM (due annually April 1 or first UNM business day thereafter)

Name:__________________________________________________________

Date:__________________________________________________________

Date entered UNM Graduate program:_______________________________

Expected graduation date and degree:_______________________________

Current Cumulative Graduate GPA: _______

Research
1. What are the major goals of your research project? (2-3 sentences)

2. What was accomplished under these goals over the last year?
   a. major activities

   b. significant results (2-3 sentences)

3. Products
   a. Manuscripts from the last year (list full reference in AGU/GSA format; include any papers submitted or in review)

   b. Abstracts/Conference Presentations from the last year (list full reference in AGU/GSA format)

4. Changes/problems
   a. Changes in approach from last year, and reasons for change

   b. Problems or delays from last year, and actions or plans to resolve them
Academics
1. List classes taken in previous semester and grades awarded:

2. Date of last meeting with academic committee (or date of scheduled meeting):

3. Graduate exam results (or date of scheduled exam):

Support
1. Current and projected sources of financial support, including summer support:

2. Previous scholarships or awards (year and $ amounts):

3. Grants applied for and/or awarded and dates and amounts:

Scholarships:
Do you wish to be considered for a graduate scholarship this year?

☐ YES  ☐ NO

Signature of student_________________________________________________________

Advisor (Print and Sign)

_________________________________  ________________
PRINT     SIGN

Committee Members (Print and Sign)

_________________________________  ________________
PRINT     SIGN

_________________________________  ________________
PRINT     SIGN

_________________________________  ________________
PRINT     SIGN

_________________________________  ________________
PRINT     SIGN
**MS Proposal Cover Sheet**

*To be filled in by student and turned in with the proposal at least two weeks prior to scheduled exam*

Name:

Title of proposal:

Advisor of proposal:

Additional committee members:

---

*To be filled in by student's committee no later than one week prior to the scheduled exam – each committee member should indicate yes or no in appropriate boxes.*

<table>
<thead>
<tr>
<th>Initials of each examination committee member (≥4 people):</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Is a <strong>scientific hypothesis</strong>, question, or problem clearly identified in the proposal?</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Is the <strong>significance</strong> of the problem clearly stated in the proposal?</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Are the <strong>methods</strong> clearly identified and appropriate in the proposal?</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Are <strong>potential outcomes</strong> identified in the proposal?</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
</table>

| In your opinion, is the proposal ready to be defended? |   |   |   |

**Note:** Any “no” answer regarding the readiness of the proposal to be defended will trigger an automatic committee meeting during the previously scheduled examination time. At this meeting, the concerns will be discussed and the student will receive guidance regarding changes that must be made to the written document. The exam will also be rescheduled for a time within the last four weeks of the semester. If for any reason the exam cannot be scheduled during this time frame, a petition to postpone the exam will be required.

---

**THIS FORM MAY BE LOCATED ON THE EARTH & PLANETARY SCIENCES WEBSITE INTRANET AT**

http://epswww1.unm.edu/intranet/home.htm#B
PhD Abstract Checklist
To be turned in to graduate committee chair along with abstracts in 2\textsuperscript{nd} semester

\textit{To be filled in by student}

Name:
Title of 1\textsuperscript{st} abstract:
Advisor of 1\textsuperscript{st} abstract:
Title of 2\textsuperscript{nd} abstract:
Advisor of 2\textsuperscript{nd} abstract:
Additional committee members:

\textit{To be filled in by student’s committee no later than one week after receiving the abstracts – each committee member should indicate yes or no in appropriate boxes}

<table>
<thead>
<tr>
<th>Initials of each committee member (\geq 4 people):</th>
</tr>
</thead>
<tbody>
<tr>
<td>In your opinion, is Abstract 1 ready to be submitted?</td>
</tr>
<tr>
<td>In your opinion, is Abstract 2 ready to be submitted?</td>
</tr>
<tr>
<td>Are the two abstracts sufficiently different as to expose the student to different advisors, methods, and field of study?</td>
</tr>
</tbody>
</table>

\textbf{Note}: Any “no” answers will automatically trigger a committee meeting, to be scheduled as soon as possible, to resolve any outstanding issues with the abstract(s). The student will then receive an automatic extension until the last day of classes to turn in revised abstracts.

\textbf{THIS FORM MAY BE LOCATED ON THE EARTH & PLANETARY SCIENCES WEBSITE INTRANET AT} http://epswww1.unm.edu/intranet/home.htm#B
**PhD Proposal Cover Sheet**

To be filled in by student and turned in with the proposals at least two weeks prior to scheduled exam

Name:

Title of 1st proposal:

Advisor of 1st proposal:

Title of 2nd proposal:

Advisor of 2nd proposal:

Additional committee members:

<table>
<thead>
<tr>
<th>Initials of each examination committee member (≥5 people):</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is a <strong>scientific hypothesis</strong>, question, or problem clearly identified in Proposal 1?</td>
</tr>
<tr>
<td>Is the <strong>significance</strong> of the problem clearly stated in Proposal 1?</td>
</tr>
<tr>
<td>Are the <strong>methods</strong> clearly identified and appropriate in Proposal 1?</td>
</tr>
<tr>
<td>Are <strong>potential outcomes</strong> identified in Proposal 1?</td>
</tr>
<tr>
<td>In your opinion, is Proposal 1 ready to be defended?</td>
</tr>
<tr>
<td>Is a <strong>scientific hypothesis</strong>, question, or problem clearly identified in Proposal 2?</td>
</tr>
<tr>
<td>Is the <strong>significance</strong> of the problem clearly stated in Proposal 2?</td>
</tr>
<tr>
<td>Are the <strong>methods</strong> clearly identified and appropriate in Proposal 2?</td>
</tr>
<tr>
<td>Are <strong>potential outcomes</strong> identified in Proposal 2?</td>
</tr>
<tr>
<td>In your opinion, is Proposal 2 ready to be defended?</td>
</tr>
</tbody>
</table>

**Note:** Any "no" answer regarding the readiness of the proposal(s) to be defended will trigger an automatic committee meeting during the previously scheduled examination time. At this meeting, the concerns will be discussed and the student will receive guidance regarding changes that must be made to the written document(s). The exam will also be rescheduled for a time within the last four weeks of the semester. If for any reason the exam cannot be scheduled during this time frame, a petition to postpone the exam will be required.

**THIS FORM MAY BE LOCATED ON THE EARTH & PLANETARY SCIENCES WEBSITE INTRANET AT**

http://epswww1.unm.edu/intranet/home.htm#B
APPENDIX VII

GRADUATE STUDENT PETITION FORM
GRADUATE STUDENT PETITION REQUEST FORM

NAME: ___________________________  BANNER ID: ___________________________

I. PURPOSE OF PETITION

II. JUSTIFICATION

__________________________  ___________________________
STUDENT SIGNATURE / DATE   FACULTY ADVISOR SIGNATURE / DATE

III. YOUR PETITION HAS BEEN:

☐ APPROVED
☐ CONDITIONALLY APPROVED
☐ CONDITIONALLY DISAPPROVED
☐ DISAPPROVED

COMMENTS:

__________________________  ___________________________
CHAIR, GRADUATE COMMITTEE   DATE
REIMBURSEMENTS

Non-travel Reimbursement Request (Goods)
(Forms located at EPS room 141)

1. Fill in form in its entirety.
2. Attach all “original” receipts.
3. If business meal reimbursement; write names of attending. Maximum 3 students + Speaker.
4. Return form with original receipts to Department Accountant, within 10 days.
5. Faith enters into Banner to create DPZ for reimbursement.
6. DPZ will be put into your box for signature; sign and return.

Reimbursement Request for Travel Expenses
(Forms located in EPS 141)

1. Fill in form in its entirety. Date, Name, Banner ID, Departure/time, Return/time, Per Diem Yes/No, Other Charges Yes/No-Date, Explanation, Amount. Mileage (if claiming mileage must explain why drove rather than fly and also show proof of cost of flight to ensure it was the lesser of the two. Index to charge, Purpose of the trip, Supervisors Name/Title, any other information that you think is important related to travel.
2. Attach all “original” receipts.
3. Return form with original receipts to Department Accountant, EPS Department within 10 days.
Earth & Planetary Sciences
Reimbursement Request for Travel Expenses

All fields must be filled out. Incomplete forms will be returned.
PLEASE FILL IN ALL LINES.
FY 2021

Today's Date: __________________________/2020

Your Name: __________________________

Your Banner ID: _______________________

Date of departure: __________________________/2020

Date of return: __________________________/2020

Destination (City/State) ____________________________

Do you want to be reimbursed only a flat rate per day? ($85 in New Mexico, $115 everywhere else)
YES  NO
If YES, skip to  Other Charges.  If NO, go to per diem.

Do you want to be reimbursed for meals? YES / NO / Up to $___________ per day

<table>
<thead>
<tr>
<th>Ofc. Use</th>
<th>B/$</th>
<th>L/$</th>
<th>D/$</th>
<th>TTL/$</th>
</tr>
</thead>
<tbody>
<tr>
<td># Days</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TTL/Reimb</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>$</td>
</tr>
</tbody>
</table>

Lodging Expenses
Hotel charges $_______________ per night, for ________ nights
Hotel charges $_______________ per night, for ________ nights

Other Charges

PLEASE DO NOT LEAVE THE DATES BLANK.

<table>
<thead>
<tr>
<th>DATE</th>
<th>EXPLANATION</th>
<th>AMOUNT</th>
</tr>
</thead>
<tbody>
<tr>
<td>/2020</td>
<td></td>
<td>$</td>
</tr>
<tr>
<td>/2020</td>
<td></td>
<td>$</td>
</tr>
<tr>
<td>/2020</td>
<td></td>
<td>$</td>
</tr>
<tr>
<td>/2020</td>
<td></td>
<td>$</td>
</tr>
<tr>
<td>/2020</td>
<td></td>
<td>$</td>
</tr>
<tr>
<td>/2020</td>
<td></td>
<td>$</td>
</tr>
<tr>
<td>/2020</td>
<td></td>
<td>$</td>
</tr>
</tbody>
</table>
Use of personal vehicle
Beginning mileage  Ending mileage  Total miles

 Accounts to charge
Index____________________ for $____________________

Index____________________ for $____________________

ATTACH CONFERENCE AGENDA
What was the purpose of this trip? How does it relate to the scope of the project?

Your supervisor’s or chair’s or advisor’s name ______________________________

That person’s title ______________________________

Please attach all relevant receipts
Any additional information Central Accounting needs to know to reimburse you. If you traveled with a group, list the other members of the group.

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________
GOODS REIMBURSEMENT REQUEST

ALL FIELDS MUST BE FILLED OUT. INCOMPLETE FORMS WILL BE RETURNED.

Today's Date: FY21

Your Name:

Your Banner ID:

Index or Indices to charge:

Index __________ for $ __________

Index __________ for $ __________

What did you purchase?

For what purpose? How does it relate to scope of project?

Your supervisor's, chair's, or advisor's name:

That person's title:

Please attach all relevant receipts

Any additional information Central Accounting will need to know to reimburse you:

If this is a business meal, please write in names of persons attending:

<table>
<thead>
<tr>
<th>DATE</th>
<th>AMOUNT</th>
<th>ITEMS PURCHASED</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>