SUJOY MUKHOPADHYAY, CHAIR
Geology Graduate Program

RE: Geology Graduate Program Degree Requirements

Enclosed is a copy of the Geology degree requirements as approved by Graduate Council via electronic ballot on July 21, 2020. These degree requirements are now the official requirements for the Geology Graduate Program and will be posted on the Office of Graduate Studies program webpage:

https://grad.ucdavis.edu/programs/ggel

Thank you for your efforts on behalf of graduate education.

Sincerely,

Carlee Arnett, Chair
Graduate Council

CC: Jasmine Bonite, Project/Policy Analyst, Graduate Studies
Mandy Rousseau, Graduate Program Coordinator
Felicia Murdoch, Policy Analyst
MASTER'S PROGRAM

1) Admissions Requirements

Applicants for admission must meet the University of California minimum GPA requirement for admission: a bachelor's degree with 3.0 overall grade-point average. Other requirements for admission include:

- Hold a Bachelor’s degree. An undergraduate major in geology is typical for geology graduate students, but is not required; physics, biology, chemistry or other relevant majors may also be acceptable.
- Official transcripts from previous institutions attended
- English proficiency examination for international applicants who have not studied at an English speaking University: TOEFL or other University approved examination. International applicants must meet the Office of Graduate Studies minimum TOEFL score requirement (or equivalent for other University-approved examination).
- Three letters of recommendation.
- Statement of Research Interests, Statement of Purpose, and Personal History Statement.
- A Confirmed Faculty Advisor: Prior to admission, a Geology Graduate Program member in good standing must confirm that he/she is willing to act as the student’s faculty mentor.
- Students are also encouraged to submit a curriculum vita or resume with their application documents.

a) Prerequisites: Given the broadly interdisciplinary nature of geology, no particular coursework or other prerequisites are specified for admission.

b) Deficiencies. Perceived course work deficiencies are evaluated on an individual basis in discussions with the Graduate Advisors in the Introductory Meeting at the beginning of the student’s initial enrollment in the program. These deficiencies should be made up by the end of the first academic year following initial enrollment by earning a letter grade of “B” or better.

2) Degree Plan: Plan I (thesis)

Graduate students in the Graduate Program in Geology pursuing the Master of Science degree will follow Master’s Plan I. This plan requires 30 units of graduate and upper division courses (the 100 and 200 series only) and, in addition, a thesis or a project in lieu of a thesis. At least 12 of the 30 units must be graduate work in the major field. Plan I is described under 500 in the Davis Division Academic Senate Regulations on the Web at the URL: http://www.mrak.ucdavis.edu/senate/ddregulations_0405_revisions.pdf
3) Course Requirements - Core and Electives (30 units)

a) Core Courses: Because of the inherently interdisciplinary nature of geology, there are no specific core courses required for all students in the M.S. degree program in the Graduate Program in Geology.

b) Elective Courses (30 units)
M.S. students must undertake a program of a minimum of 5 courses (for at least 12 units). The classes should be selected to provide breadth of knowledge appropriate for a M.S., and to provide the depth of knowledge appropriate in a student’s specialization(s). Classes must be selected in consultation with the Advisory Committee, and can include classes in geology or other fields deemed appropriate by the Committee. Classes may be upper-division or graduate level. Students are encouraged to include GEL 281, GEL 175 and/or GEL 160 among these courses.

As a part of the above course requirements, the student’s workload must include one (3 unit) graduate - 200 level course each from three of the six discipline areas in the Department (breadth courses):

1. paleontology; 260, 261, 262
2. sedimentology/paleoenvironments; 205, 206, 226, 228 (if a topic in marine sedimentology)
3. structure/tectonics; 214, 216, 218, 219, 220, 295, 296
4. petrology/geochemistry; 227, 246, 247, 250, 251, 253, 254, 255, 285
5. environmental geology/geomorphology/resources; 235
6. geophysics; 217, 219, 236, 238, 240, 241, 242

The remainder of the 30 units (non-breadth) must be made up of additional graduate and upper division courses, including at least 12 units of research (GEL 299) credit.

c) Summary of University requirements:

1. The student must complete at least three academic quarters in residence at the University of California, Davis (“in residence” is defined as at least 12 units of upper division and/or graduate courses [required and 299 courses] per quarter).

2. Students must maintain at least a 3.0 grade point average (only courses in 100 and 200 series and with a grade of A, B, C, or S count toward the GPA and the course requirements).

3. Students must complete 30 units of course work at the graduate and upper division levels. Of these, at least 12 must be graduate courses in the major subject. Geology 290, 298 and 299 are counted toward this requirement.
4) Special requirements

A. Any student working toward a degree in Geology, must have a Faculty Advisor who is a member of the Geology Graduate Program.

B. Students must enroll in Geology 290, our weekly departmental seminar, each quarter.

C. A graduating student must complete the Department’s final checklist, with all of the required signatures, before receiving his/her degree. The checklist shows that the student has turned in all materials (e.g. keys, thesis, etc.).

D. A thesis collection of samples, software, and/or maps to be deposited in the Department may be required by the Thesis Committee.

E. Changing the degree objective from M.S. degree to Ph.D. degree:
Graduate students admitted to the M.S. degree who wish to complete a Ph.D. degree upon finishing the M.S. should complete a Petition for Change of Graduate Degree Objective, following the steps, in order, outlined in the GGP Handbook. The Petition must be filed with the Geology Graduate Assistant and Chair of the GGP by January 15 of the academic year prior to the anticipated start of their Ph.D. program, typically the second year in the M.S. program at UCD. This ensures that M.S. students who wish to continue into the Ph.D. program are considered for admission along with new applicants to the program during the regular application cycle. Admission to the Ph.D program is competitive; earning a M.S. in the GGP does not guarantee admission to the Ph.D. program.

Before registering as a Ph.D. student, the M.S. degree must be completed; the Petition for Change of Graduate Degree Objective will not be signed by the Chair of the GGP and submitted to the Registrar until the M.S. thesis title page has been signed by all members of the Thesis Committee, signifying that all M.S. degree requirements have been met. Registration as a Ph.D. student can be deferred until later if necessary, but no extension of financial support is guaranteed. More details on the timeline and process for changing degree objectives can be found in the GGP Handbook.

F. Students must enroll for a minimum of 12 units per quarter. Under exceptional circumstances only, students may be admitted to the Graduate Program as part-time students. The conditions under which a student may be admitted and participate in the Graduate Program in part-time status will be determined by the student and Faculty Advisor, in consultation with the Graduate Advisors.

5) Committees:

a) Admission Committee

Once the completed application, all supporting material, and the application fee have been received, the application will be submitted to the Admissions Committee. The Admissions Committee consists of a minimum of two Geology Graduate Program members. Based on a review
of the entire application, in consultation with the remaining Graduate Program membership, a recommendation is made to accept or decline an applicant’s request for admission. That recommendation is forwarded to the Dean of Graduate Studies for final approval of admission. Notification of admissions decisions will be sent by Graduate Studies. Applications are accepted up to January 15 for the class entering in Fall of the same year.

b) **Course Guidance or Advising Committee**

Students are expected to make satisfactory progress toward their degree goals. To facilitate their progress, several meetings are required each year as indicated in the Advising Structure and Mentoring section. The Course Guidance and Advising Committee consists of two Geology Graduate Advisors, and administers the Introductory Meeting, Continuing Student meeting and Mid-Year Meeting. The student must obtain a form from the Graduate Program Assistant prior to each of these meetings that must be signed and dated by the participants.

c) **Prospectus Committee**

The prospectus committee is composed of one Graduate Advisor, the Thesis (Faculty) Advisor, and one “expert” in the field of research, selected by the student from among the Geology Graduate Program membership. The committee reads and comments on the prospectus, required of all Geology Graduate Program students, and meets with the student at the Prospectus Meeting.

d) **Thesis Committee/Annual Advisory Committee**

The student, in consultation with his/her Faculty Advisor, nominates two additional Geology Graduate Program members to serve on the Thesis and Annual Advisory Committee. These nominations are submitted to the Office of Graduate Studies for formal appointment in accordance with Graduate Council policy (DDB 80, Graduate Council B.1.). The Faculty Advisor normally serves as Chair of the committee.

The three members of the Thesis Committee read, approve, and sign the final version of the thesis. This committee also administers the Annual Advisory Committee Meeting (see details in Section 6. below). The student must ask each member to serve on the committee. Once the members have agreed to serve, the Graduate Advisor formally nominates them. The student downloads and completes the candidacy form located at: [http://gradstudies.ucdavis.edu/forms/](http://gradstudies.ucdavis.edu/forms/). The Dean of Graduate Studies reviews the application for candidacy and formally appoints the committee. Persons qualified to serve on these committees are:

1. All voting members of the Academic Senate of the University of California.

2. On special written request by the Graduate Advisor, and with the approval of the Dean of Graduate Studies, researchers and lecturers with doctoral degrees engaged in continuing research activity.

3. Persons from outside the University of California may serve on a
committee if they have special expertise and qualifications beneficial to the student and/or to the Department. In this case, the student submits for Graduate Advisor approval a brief statement indicating the appointee’s affiliation and title, what degree he/she holds, and that the appointee has special expertise that cannot be duplicated within the University of California. To add an external committee member requires a complete CV plus the form (External Committee Membership Application, http://gradstudies.ucdavis.edu/forms) and a letter from the proposed appointee indicating a willingness to serve.

6) Advising Structure and Mentoring

The Faculty Advisor (also known as Thesis Advisor, Major Professor) provides the primary supervision and guidance of the student in the Graduate Program. This person serves as the Chair of the Thesis Committee, and administers the Student Financial Support Meeting each year. The Faculty Advisor is expected to meet regularly with the student throughout the year.

The Graduate Advisors are a resource for information on academic requirements, policies and procedures, and registration information. The Geology Graduate Program has three Graduate Advisors. They handle almost all graduate affairs on behalf of the Department, and sign the numerous forms that a student must submit during his/her graduate career.

The Graduate Program Assistant for the Graduate Program in Geology handles administrative issues.

Advising Meetings

1. Introductory Meeting: first-year students only. Prior to their first quarter at UCD, each new student will meet with two Geology Graduate Advisors to discuss their particular program of study, possible course deficiencies, other administrative issues, and their courses for the first year.

2. Mid-year Meeting: first-year students only. In February, each first-year student will meet briefly with Graduate Program Chair Delegate to check on progress made thus far.

3. Continuing Student Meeting: continuing students only. In January, each Continuing Student (not First-year students) will meet with two Graduate Advisors to discuss mostly administrative issues and academic goals, to ensure that the student’s progress in the program is satisfactory. The Advisors will evaluate the student’s progress on the basis of the deadlines described below in #10 (Time line and sequence), on the basis of a short written evaluation by the Faculty Advisor prior to the meeting, and on the basis of discussions at the meeting. Failure to make satisfactory progress may affect the student’s financial support in the following year, as well as his/her standing in the Graduate Program.
All evaluations of Marginal and Unsatisfactory Progress must be forwarded to the Office of Graduate Studies.

4. **Annual Advisory Committee Meeting:** all students. The Advisory Committee consists of three members of the faculty, including the Faculty Advisor. Normally, the Advisory Committee is the same as the Master’s Thesis Committee. In Spring Quarter, each graduate student will meet with the Faculty Advisor and the two other Advisory Committee members to discuss research issues primarily, in order to encourage students to communicate with all members of their Advisory Committee simultaneously, at regular intervals in their graduate program. Awarding of departmental Durrell Funds is contingent upon the completion of this meeting annually.

5. **Student Financial Support Meeting:** All students are required to meet with their Faculty Advisors in Spring Quarter to discuss student financial support for the following academic year, and submit to the Graduate Program Assistant a signed statement of support expectations. A brief follow-up meeting will occur in September before classes begin, to provide an updated support statement.

The **Mentoring Guidelines** followed in the Geology Graduate Program are the same as those found in the UCD graduate student handbook: [http://gradstudies.ucdavis.edu/students/handbook/](http://gradstudies.ucdavis.edu/students/handbook/)

Both the student and the Faculty Advisor will be expected to be aware of and to abide by the requirements outlined in the Department of Geology’s “Geology Graduate Program Graduate Student Handbook and Graduate Degree Requirements” provided to both student and advisor at the beginning of each academic year.

Failure to meet specified program deadlines, as determined at the Continuing Student Meetings with the Graduate Advisors in January, will result in the student being placed on departmental probation for funding, potentially jeopardizing future financial support. The student will receive a warning that is also forwarded to the advisor and to the Office of Graduate Studies. If not addressed, this could lead to a designation of unsatisfactory progress, resulting in a letter from the Dean of Graduate Studies placed in the student’s file.

The responsibility for completing these tasks lies with the graduate student, in consultation with his/her Faculty Advisor. It is the responsibility of the Graduate Advisors to assess whether specified program deadlines have been met.

Students are advised to talk to his/her Faculty Advisor regularly. It is the responsibility of the Faculty Advisor to advise; it is the student’s responsibility to seek advice when needed. Clear communication is essential to success in graduate school.
7) **Advancement to Candidacy**

Every student must file an official application for Candidacy for the Degree of Master of Geology after completing one-half of their course requirements and at least one quarter before completing all degree requirements. Students are expected to advance to candidacy by no later than the 5th quarter. The Candidacy for the Degree of Master form can be found online at: [http://www.gradstudies.ucdavis.edu/forms/](http://www.gradstudies.ucdavis.edu/forms/). A completed form includes a list of courses the student will take to complete degree requirements. If changes must be made to the student’s course plan after s/he has advanced to candidacy, the Graduate Advisor must recommend these changes to Graduate Studies. Students must have their Graduate Advisor and thesis committee Chair sign the candidacy form and they must pay the candidacy fee before it can be submitted to Graduate Studies. If the candidacy is approved, the Office of Graduate Studies will send a copy to: the Thesis Committee Chair, the graduate staff person, and the student. If the Office of Graduate Studies determines that a student is not eligible for advancement, the department and the student will be told the reasons for the application’s deferral. Some reasons for deferring an application include: grade point average below 3.0, outstanding “I” grades in required courses, or insufficient units.

8) **Thesis Requirements (Plan I)**

a) **Prospectus.**

By the 6th week of the third quarter in residence, the student must submit a prospectus for his/her thesis research. The prospectus text will not exceed 10 double-spaced pages (figures and references can exceed the 10-page limit) and must include the following elements:

i. Summary/Abstract
ii. Statement of problem to be investigated.
iii. Background; why the problem is important.
iv. Methods used to investigate the problem.
v. Discussion; relevance of possible results to the solution of the problem.
vi. References.

**Prospectus Meeting.** After completion of the prospectus and before the end of the third quarter, the student will meet with a committee composed of one Graduate Advisor, the Thesis Advisor, and one “expert” in the field of research. Together, they will discuss the prospectus, the proposed research, its suitability for a M.S. thesis, and the ability of the student to complete the proposed research. M.S. thesis research should be more limited in scope than Ph.D. research, with a reasonable expectation of completion in two years. This meeting can have the following outcomes:

i. The student is encouraged to proceed with his/her M.S. thesis research.
ii. The student may be asked to take additional courses.
iii. The student may be asked to modify the proposal or proposed research. The revised proposal will be submitted by the student and reevaluated by the committee.
iv. The student may be recommended to the Dean of Graduate Studies
for disqualification from the program. The recommendation may be appealed to the Graduate Advisors for further consideration; a final appeal may be made to the Dean of Graduate Studies.

Once approved, a copy of the prospectus with cover sheet signed by the Graduate Advisor participating in the Prospectus Meeting should be submitted to Graduate Program Assistant.

b) **The Thesis**

The Master’s thesis must be written on a topic approved by the Graduate Advisor. The final thesis is submitted to a committee of three members (the Thesis Committee) recommended by the Graduate Advisor and officially appointed by the Dean of Graduate Studies through the application for candidacy. The thesis must be approved by each member of the committee, and each member must sign the title page certifying that the student has completed his/her thesis.

The thesis may be written in one of two formats: (1) thesis format, with chapters, and appendices to archive data; or (2) manuscript format, intended for submission for publication in a professional journal in the students’ field of research. One manuscript is sufficient to fulfill the M.S. thesis requirement in the Graduate Program in Geology. The manuscript does not have to be published, or submitted for publication prior to the granting of the degree. It must, however, be in a form approved for submission by the Thesis Committee. The student should discuss the format of the thesis with the Advisory Committee members prior to submittal of drafts for review and evaluation, and all should agree on a schedule of draft submittals and revisions.

**Public Seminar:** The student must present a public departmental seminar on the results of his/her work before a final draft can be accepted. The student must submit a complete draft to the Thesis Committee, and the Committee must certify that the thesis is ready for presentation, prior to scheduling this seminar. The seminar must be presented during the academic year, if possible; summer seminars are acceptable if the Thesis Committee can be assembled.

The thesis must be filed with the Office of Graduate Studies in proper format. For instructions and filing dates see: [http://gradstudies.ucdavis.edu](http://gradstudies.ucdavis.edu)

A permanently bound hard-copy of the thesis, or an archival electronic copy, must be presented to the department. Reproducible copies of all plates must also be included.

9) **Normative Time to Degree**

The Normative Time to Degree for the Geology M.S. program is six quarters (two years).
10) **Typical Time Line and Sequence of Events**

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<td>Breadth 1</td>
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<td>Non-breadth 1</td>
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<tr>
<td>Choose topic</td>
<td>Background research</td>
<td>Write Prospectus</td>
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<td>Gather data</td>
<td>Prospectus mtg.</td>
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<td><strong>Winter</strong></td>
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<td>Analyze data</td>
<td>Finish data gathering</td>
<td>Finish writing</td>
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<td>Start to write</td>
<td>Write; drafts to cmt.</td>
<td>Submit thesis</td>
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<td>Form thesis comm.</td>
<td>Submit Candidacy Form</td>
<td>Final presentation (public seminar)</td>
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11) **Sources of funding**

In the Geology Graduate Program, M.S. students are guaranteed support for two years, in the form of TA, GSR, or fellowship. M.S. students approved to change their degree objective to the Ph.D. after finishing a M.S. at UCD are guaranteed an additional three years of support, in form of TA, GSR or fellowship, for a total of five years of support.

Students needing additional support beyond their guaranteed allotment will be considered as “alternates” for support, and will be awarded support in the form of TA or GSR if and as it is available, beyond that committed to those students still within their guaranteed allotment of support. Alternate support in the form of TAs per student are limited to one quarter for M.S. students, beyond the two years guaranteed by our admissions offer. Although these limits will be reviewed and adjusted depending on programmatic needs and prior GSR/fellowship support granted to the student, they will be considered as the default policy.

12) **PELP, In Absentia, and Filing Fee status.**

Information about PELP (Planned Educational Leave), In Absentia (reduced fees when researching out of state), and Filing Fee status can be found in the Graduate Student Handbook:


Students who have completed all degree requirements, with the exception of the thesis and public Departmental Seminar may choose to go on “Filing-Fee Status.” Students must be at the writing stage before entering Filing Fee Status. Students who are on Filing Fee Status are not eligible for the privileges and the use of facilities regularly accorded to enrolled students (e.g., desk space in the Department, library, Department laboratories, Student Health Center, etc.). A one-time fee is paid when the student applies for Filing-Fee status. It is Department policy that all students who are on Filing-Fee Status must meet the following requirements:

A. At the beginning of each quarter in Filing-Fee Status each student must submit tangible and acceptable written evidence that he/she has made
progress on his/her thesis or dissertation during the preceding quarter. Evidence will be evaluated by the Faculty Advisor and one of the Graduate Advisors.

**B.** M.S. students must complete his/her graduate degree within 12 months of the beginning of their Filing-Fee Status, including summer.

Failure to meet Filing-Fee Policy requirements will result in a recommendation for disqualification from the program. If, following disqualification, the student wishes to complete his/her graduate degree, he/she must apply and be accepted for readmission.
1) Admissions Requirements

Applicants for admission must meet the University of California minimum GPA requirement for admission a bachelor's degree with 3.0 overall grade-point average. Other requirements for admission include:

- Hold a Bachelor’s or Master’s degree. An undergraduate major in geology is typical for geology graduate students, but is not required; physics, biology, chemistry or other relevant majors may also be acceptable.
- Official transcripts from previous institutions attended
- English proficiency examination for international applicants who have not studied at an English speaking University: TOEFL or other University approved examination. International applicants must meet the Office of Graduate Studies minimum TOEFL score requirement (or equivalent for other University-approved examination).
- Three letters of recommendation.
- Statement of Research Interests, Statement of Purpose, and Personal History Statement.
- A Confirmed Faculty Advisor: Prior to admission, a Geology Graduate Program member in good standing must confirm that he/she is willing to act as the student’s faculty mentor.
- Students are also encouraged to submit a curriculum vita or resume with their application documents.

a) Prerequisites: Given the broadly interdisciplinary nature of geology, no particular coursework or other prerequisites are specified for admission.

b) Deficiencies. Perceived coursework deficiencies are evaluated on an individual basis in discussions with the Graduate Advisors in the Introductory Meeting at the beginning of the student’s initial enrollment in the program. These deficiencies should be made up by the end of the first academic year following initial enrollment by earning a letter grade of “B” or better.

2) Dissertation Plan

Graduate students in the Graduate Program in Geology pursuing the Ph.D. degree will follow Plan C, which specifies a three-member dissertation committee, a required final oral examination, and no exit seminar.

3) Course Requirements

a) Core Courses: Because of the inherently interdisciplinary nature of geology, there are no specific core courses required for all students in the Ph.D. degree program in the Graduate Program in Geology.
b) **Elective Courses: (72 units)**  
Ph.D. students must undertake a program that includes a minimum of 8 technical courses (for at least 22 units) prior to taking their Qualifying Examination. The classes should be selected to provide breadth of knowledge appropriate for a Ph.D., and to provide the depth of knowledge appropriate in a student’s specialization(s). Classes must be selected in consultation with the Advisory Committee, and can include classes in geology or other fields deemed appropriate by the Committee. Classes may be upper-division or graduate level. Students are encouraged to include GEL 281, GEL 175 and/or GEL 160 among these courses.

As a part of the above course requirements, the student’s workload must include one (3 unit) graduate - 200 level course each from three of the six discipline areas in the Department (breadth). These three classes must each include an oral presentation by the student. The requirement for oral presentation may be satisfied in the following courses (check with the instructor to confirm):

1. paleontology; 260, 261, 262
2. sedimentology/paleoenvironments; 205, 206, 226, 228 (if a topic in marine sedimentology)
3. structure/tectonics; 214, 216, 218, 219, 220, 295, 296
4. petrology/geochemistry; 227, 246, 247, 250, 251, 253, 254, 255, 285
5. environmental geology/geomorphology/resources; 235
6. geophysics; 217, 219, 236, 238, 240, 241, 242

Students with a prior M.S. degree:
1) A student with prior M.S. degree from an outside program may include up to 2 courses from their M.S. work to fulfill the requirements for 2 of the 5 non-breadth courses.
2) A student with a prior MS degree from the Geology Graduate Program at UC Davis may include 5 courses from their M.S. work to fulfill the requirements for 2 of the 5 non-breadth courses and the 3 breadth courses.

The remainder of the 72 units must be made up of additional graduate and upper division courses (non-breadth), including at least 12 units of research (GEL 299) credit.

c) **Summary of University requirements:**
1. The student must be registered and complete at least six academic quarters in residence at the University of California, Davis (“in residence” is defined as at least 12 units of upper division and/or graduate courses [required and 299 courses] per quarter).

2. Students must maintain at least a 3.0 grade point average (only courses in 100 and 200 series and with a grade of A, B, C, or S count toward the GPA and the course requirements).
3. Students must complete 72 units of course work at the graduate and upper division levels. Of these, at least 12 must be graduate courses in the major subject. Geology 290, 298 and 299 are counted toward this requirement.

4) Special Requirements

A. Any student in a degree program in the Department of Geology, working toward a degree in Geology, must have a Faculty Advisor who is a member of the Geology Graduate Program.

B. Students must enroll in Geology 290, our weekly departmental seminar, each quarter prior to passing the qualifying exam; continued enrollment in 290 is recommended after passing the qualifying exam.

C. Each Ph.D. student must serve at least one quarter as a Teaching Assistant in an undergraduate geology course offered by the Department. To qualify for a Teaching Assistantship, the student must take or have taken GEL 390, the T.A. orientation course offered by the Department in alternate years. The TA orientation offered by the Teaching Resources Center at the beginning of Fall Quarter is also required.

D. A graduating student must complete the Department’s final checklist, with all of the required signatures, before receiving his/her degree. The checklist shows that the student has turned in all materials (e.g. keys, thesis, etc.).

E. A thesis collection of samples, software, and/or maps to be deposited in the Department may be required by the Dissertation Committee.

F. Changing degree goals from Ph.D. degree to M.S. degree: Students who change their degree objective from the Ph.D. to M.S. must abide by the departmental support commitment for M.S. students (namely, two years of guaranteed support), from their date of admission as Ph.D. students. Master’s degree candidates must complete their degree requirements within four calendar years of entering the Graduate Program in Geology, and must meet all the requirements of the M.S. degree.

G. Students must enroll for a minimum of 12 units per quarter. Under exceptional circumstances only, students may be admitted to the Graduate Program as part-time students. The conditions under which a student may be admitted and participate in the Graduate Program in part-time status will be determined by the student and Faculty Advisor, in consultation with the Graduate Advisors.
5) Committees:

a) Admissions Committee

Once the completed application, all supporting material, and the application fee have been received, the application will be submitted to the Admissions Committee. The Admissions Committee consists of a minimum of two Geology Graduate Program members. Based on a review of the entire application, in consultation with the remaining Graduate Program membership, a recommendation is made to accept or decline an applicant’s request for admission. That recommendation is forwarded to the Dean of Graduate Studies for final approval of admission. Notification of admissions decisions will be sent by Graduate Studies. Applications are accepted up to January 2nd (priority admission) and May 1st (general admission) for the class entering in Fall of the same year.

b) Course Guidance or Advising Committee

Students are expected to make satisfactory progress toward their degree goals. To facilitate their progress, several meetings are required each year as indicated in the Advising Structure and Mentoring section. The Course Guidance and Advising Committee consists of two Geology Graduate Advisors, and administers the Introductory Meeting, Continuing Student meeting and Mid-Year Meeting. The student must obtain a form from the Graduate Program Assistant prior to each of these meetings that must be signed and dated by the participants.

c) Prospectus Committee

The prospectus committee is composed of one Graduate Advisor, the Faculty Advisor, and one “expert” in the field of research, selected by the student from among the Geology Graduate Program membership. The committee reads and comments on the prospectus, required of all Geology Graduate Program students, and meets with the student at the Prospectus Meeting.

d) Qualifying Examination Committee

The Qualifying Examination Committee is composed of at least five members, including the Dissertation Advisor. Also included are at least one member from outside the Geology Graduate Program (from the UCD faculty or from outside UCD), and (usually) the other members of the Dissertation Committee. The Dissertation Advisor cannot serve as chair of the Qualifying Examination Committee. The student completes the Application for the Qualifying Examination which must be signed by the Graduate Advisor. The Dean of Graduate Studies reviews the Application for Qualifying Examination and appoints the committee in accordance with Graduate Council policy (DDB 80. Graduate Council B.1.). The student should submit the Application for Qualifying Examination to Graduate Studies at least 6 weeks prior to this examination.

e) Doctoral Dissertation Committee/Annual Advisory Committee

The three members of the Dissertation Committee read, approve, and sign the final version of the dissertation. This committee also administers the
Annual Advisory Committee Meeting (see Section 6. Below). The Faculty Advisor is normally the chair of this committee. The student must ask each member to serve on the committee. Once the members have agreed to serve, the Graduate Advisor formally nominates them. The student downloads and completes the candidacy form located at: http://gradstudies.ucdavis.edu/forms/. The Dean of Graduate Studies reviews the application for candidacy and formally appoints the committee. Persons qualified to serve on these committees are:

1. All voting members of the Academic Senate of the University of California.

2. On special written request by the Graduate Advisor, and with the approval of the Dean of Graduate Studies, researchers and lecturers with doctoral degrees engaged in continuing research activity.

3. Persons from outside the University of California may serve on a committee if they have special expertise and qualifications beneficial to the student and/or to the Department. In this case, the student submits for Graduate Advisor approval a brief statement indicating the appointee’s affiliation and title, what degree he/she holds, and that the appointee has special expertise that cannot be duplicated within the University of California. To add an external committee member requires a complete CV plus the form (External Committee Membership Application, http://gradstudies.ucdavis.edu/forms) and a letter from the proposed appointee indicating a willingness to serve.

Additional details on UCD degree requirements and guidelines can be found at the following Graduate Studies website: http://gradstudies.ucdavis.edu/publications

6) Advising Structure and Mentoring

The Faculty Advisor (also known as Dissertation Advisor, Major Professor) provides the primary supervision and guidance of the student in the Graduate Program. This person serves as the Chair of the Dissertation Committee, and administers the Student Financial Support Meeting each year. The Faculty Advisor is expected to meet regularly with the student throughout the year.

The Graduate Advisors are a resource for information on academic requirements, policies and procedures, and registration information. The Geology Graduate Program has three Graduate Advisors. They handle almost all graduate affairs on behalf of the Department, and sign the numerous forms that a student must submit during his/her graduate career.

The Graduate Program Assistant for the Graduate Program in Geology handles administrative issues.
Advising Meetings

1. **Introductory Meeting**: first-year students only. Prior to their first quarter at UCD, each new student will meet with two Geology Graduate Advisors to discuss their particular program of study, possible course deficiencies, other administrative issues, and their courses for the first year.

2. **Mid-year Meeting**: first-year students only. In February, each first-year student will meet briefly with Graduate Program Chair Delegate to check on progress made thus far.

3. **Continuing Student Meeting**: continuing students only. In January, each Continuing Student (not First-year students) will meet with two Graduate Advisors to discuss mostly administrative issues and academic goals, to ensure that the student’s progress in the program is satisfactory. The Advisors will evaluate the student’s progress on the basis of the deadlines described below in #10 (Time line and sequence), on the basis of a short written evaluation by the Faculty Advisor prior to the meeting, and on the basis of discussions at the meeting. Failure to make satisfactory progress may affect the student’s financial support in the following year, as well as their standing in the Graduate Program. All evaluations of Marginal and Unsatisfactory Progress must be forwarded to the Office of Graduate Studies.

4. **Annual Advisory Committee Meeting**: The Advisory Committee consists of three members of the Geology Graduate Program, including the Faculty Advisor. Normally, the Advisory Committee is the same as the Doctoral Dissertation Committee. For Ph.D. students, the Advisory Committee members are also normally members of the Qualifying Examination Committee. This committee is responsible for approving the dissertation proposal of the Ph.D. students. In Spring Quarter, each graduate student will meet with the Faculty Advisor and the two other Advisory Committee members to discuss research issues primarily, in order to encourage students to communicate with all members of their Advisory Committee simultaneously, at regular intervals in their graduate program. Awarding of departmental Durrell Funds is contingent upon the completion of this meeting annually.

5. **Student Financial Support Meeting**: All students are required to meet with their Faculty Advisors in Spring Quarter to discuss student financial support for the following academic year, and submit to the Graduate Program Assistant a signed statement of support expectations. A brief follow-up meeting will occur in September before classes begin, to provide an updated support statement.

The Mentoring Guidelines followed in the Geology Graduate Program are the same as those found in the UCD graduate student handbook: [http://gradstudies.ucdavis.edu/publications](http://gradstudies.ucdavis.edu/publications)

Both the student and the Faculty Advisor will be expected to be aware of and to abide by the requirements outlined in the Department of Geology’s “Geology Graduate Program Graduate Student Handbook and Graduate
Failure to meet specified program deadlines, as determined at the Continuing Student Meetings with the Graduate Advisors in January, will result in the student being placed on departmental probation for funding, potentially jeopardizing future financial support. The student will receive a warning that is also forwarded to the advisor and to the UCD Office of Graduate Studies. If not addressed, this could lead to a designation of unsatisfactory progress, resulting in a letter from the Dean of Graduate Studies placed in the student’s file.

The responsibility for completing these tasks lies with the graduate student, in consultation with his/her Faculty Advisor. It is the responsibility of the Graduate Advisors to assess whether specified program deadlines have been met.

Students are advised to talk to his/her Faculty Advisor regularly. It is the responsibility of the Faculty Advisor to advise; it is the student’s responsibility to seek advice when needed. Clear communication is essential to success in graduate school.

7) **Advancement to Candidacy, Prospectus, Proposal and Qualifying Examination**

Upon satisfaction of all departmental requirements, and having maintained a 3.0 average, the student may apply for the Qualifying Examination. The application should be filled out by the student and signed by the Graduate Advisor. It should be submitted to the Office of Graduate Studies at least six weeks prior to the examination date to allow all committee members to be notified. The application can be downloaded at: [http://gradstudies.ucdavis.edu/forms](http://gradstudies.ucdavis.edu/forms)

**A. Prospectus.**

By the 6th week of the third quarter in residence, the student must submit a prospectus for his/her dissertation research. The prospectus will not exceed 10 typed double-spaced pages (figures and references can exceed the 10-page limit) and must include the following elements:

i. Summary/Abstract.
ii. Statement of problem to be investigated.
iii. Background, why the problem is important.
iv. Methods of investigating the problem.
v. Discussion; relevance of possible results to the solution of the problem.
vi. References.

**Prospectus Meeting.** After completion of the prospectus, before the end of the first year in the program, the student will meet with a committee composed of one Graduate Advisor, the Dissertation Advisor, and one “expert” in the field of research. Together, they will
discuss the prospectus, the proposed research, and the ability of the student to complete the proposed research. This meeting can have the following outcomes:

i. The student may be encouraged to expand the prospectus into a formal Ph.D. dissertation proposal.

ii. The student may be required to modify and resubmit the prospectus for reevaluation by the committee.

iii. The student may be required to proceed toward a M.S. degree prior to continuing in the Ph.D. program. His/her suitability for the Ph.D. program will be reconsidered upon the successful completion of the M.S. degree. Suitability will be determined based on coursework grades and demonstration of the ability to identify a significant research question, propose a compelling plan of research to try to answer the question, obtaining and interpreting results, and communicating the research in writing.

iv. The student may be recommended to the Dean of Graduate Studies for disqualification from the Graduate Program. The recommendation may be appealed to the Graduate Advisors for further consideration; a final appeal of disqualification may be made to the Dean of Graduate Studies.

Once approved, a copy of the prospectus, cover sheet signed by the Graduate Advisor participating in the Prospectus meeting, and proposal should be submitted to Graduate Program Assistant.

B. Proposal.

A student entering the PhD program with a B.S. degree or M.S. degree from an outside program will submit a proposal for Ph.D. research before the start of the 6th quarter in residence. A student entering the PhD program after completing a M.S. in the Geology Graduate Program at UC Davis will submit a proposal for Ph.D. research before the start of the 4th quarter in residence. Note, extensions will only be considered if the topic of research for the PhD is significantly different from that of the completed M.S. degree: such requests will be reviewed by the Graduate Program Chair, in consultation with the Advisory Committee.

The proposal text will be a formal National Science Foundation-style proposal:

www.nsf.gov/pubs/policydocs/pappguide/nsf13001/gpg_index.jsp, will not be longer than 15 single-spaced pages and must be approved by each member of the Advisory Committee. The student should submit the proposal for review by the committee well in advance (4-8 weeks) of the Oral Qualifying Examination. Approval of the proposal must be received 30 days prior to the scheduled exam date. The proposals must have the following elements:
i. Summary.

ii. Introduction, statement of the problem, why it is important, and previous work on the problem.

iii. Proposed methods, how methods will allow the student to investigate the problem.

iv. Research plan, including a timetable.

v. Discussion, relevance of possible results to the solution of the problem.

vi. Extensive references.

Approval of the proposal by the Advisory Committee indicates that they agree that the scientific questions posed by the student are appropriate at the Ph.D. level, that the research strategy is well founded, and that there is reasonable expectation that the Ph.D. research can be brought to a successful conclusion. Approval of the proposal indicates that it is defensible in the student’s Qualifying Examination.

C. Qualifying Exam.

Students entering the PhD program with a B.S. degree or M.S. degree from an outside program must take the Qualifying Examination by the end of the 6th quarter in residence. A student entering the PhD program after completing a M.S. in the Geology Graduate Program at UC Davis must take the Qualifying Examination by the end of the 4th quarter in residence. Note, extensions beyond the 4th quarter will only be considered if the topic of research for the PhD is significantly different from that of the completed M.S. degree: such requests will be reviewed by the Graduate Program Chair, in consultation with the Advisory Committee.

The student must take his/her Qualifying Examination before a committee appointed to administer that examination. Normally, this is an oral exam, and will consist of a short presentation (less than 15 minutes) of the proposed research by the student, followed by a question-and-answer period. The Oral Qualifying Examination is intended to demonstrate the student's critical thinking ability, powers of imagination and synthesis, and broad knowledge of the field of study. The student, in consultation with his/her Examination Committee, normally chooses at least three topics upon which he/she will be formally questioned. The student is strongly encouraged to discuss the topics with each of the committee members well before the exam.

The student should submit the research proposal (described above) for review by the committee well in advance (4-8 weeks) of the Oral Qualifying Examination. Approval of the proposal must be received 30 days prior to the scheduled exam date. The student should
remember that the Qualifying Examination will include a defense of the proposed research, including the problem, the methodology, and the background. The examination typically takes about three hours.

The university specifies three criteria by which the student is judged:
1. Relevant portions of the student’s previous academic record.
2. Performance on specific parts of the examination.
3. Overall evaluation of the student’s performance and potential for scholarly research as indicated during the examination.

The Qualifying Examination can have one of three outcomes:

a. Pass;

b. No pass with the option to retake all or part of the examination within a specified time period, or to satisfy specific requirements;

c. Fail.

The exam may be attempted only twice; on the second attempt only an outcome of Pass or Fail is allowed. Should a student receive a Fail on the first or second attempt, that student will be recommended to the Dean of Graduate Studies for disqualification from the program.

Upon successful completion of the Qualifying Examination, the student is eligible to apply for Advancement to Candidacy for the Ph.D. degree. The student must file the appropriate paperwork with the Office of Graduate Studies, sign the candidacy form, and pay the candidacy fee in order to be officially promoted to Ph.D. Candidacy. Refer to the Graduate Council website for additional details regarding the Doctoral Qualifying Examination at http://gradestudies.ucdavis.edu/gradcouncil/Doctoral%20Qualifying_Examination.

It is a university rule that Ph.D. students must advance to candidacy before the end of their 9th quarter of residency to maintain eligibility for an academic appointment. This includes registered quarters only, not quarters on PELP or quarters not enrolled as a student.

8) Dissertation requirements:

The completion of the Ph.D. includes two main components: 1) a written dissertation and 2) a defense/final examination consisting of a public departmental seminar followed by a closed examination restricted to members of the Dissertation Committee. The minimum time constraints for each component, described below, will be strictly adhered to by the Dissertation Committee. Ph.D. students must complete all degree requirements within four calendar years (12 quarters), regardless of their enrollment status (including quarters on Filing Fee, PELP, and no enrollment), following their passing the oral Qualifying Examination.

**Dissertation:** The dissertation may be written in one of two formats: (1) dissertation format, with chapters, and appendices to archive data; or (2)
manuscript format, intended for submission for publication in a professional journal in the students’ field of research. Three manuscripts are sufficient to fulfill the Ph.D. dissertation requirement in the Department of Geology. The manuscripts do not have to be published, or submitted for publication, prior to the granting of the degree. They must, however, be in a form approved for submission by the Dissertation Committee. The student should discuss the format of the dissertation with the Advisory Committee members prior to submittal of drafts for review and evaluation, and all should agree on a schedule of draft submittals and revisions.

At the beginning of the anticipated final year of the Ph.D. the candidate must schedule an Annual Advisory Committee Meeting to evaluate the current status of the dissertation research and to determine if a one-year time line is realistic for completion of all Ph.D. requirements.

Prior to scheduling the public departmental seminar and dissertation defense date, the Ph.D. candidate must confer with the Dissertation Committee to determine the expected completion date. In most cases, this will require submitting a complete draft of the written dissertation to the Dissertation Committee. A complete draft of the dissertation is typically one that has gone through at least one round of review/revision between the dissertation advisor and Ph.D. candidate.

A minimum of two weeks before the dissertation defense/final examination and public departmental seminar, a complete and defendable dissertation must be submitted to the Dissertation Committee for review. At this time the public departmental seminar and dissertation defense/final examination date is scheduled. A defendable dissertation is one that has gone through (probably) multiple rounds of review and revision between the dissertation advisor and Ph.D. candidate.

The dissertation must be filed with the Office of Graduate Studies in the proper format. For instructions and filing dates see the website: http://gradstudies.ucdavis.edu. The student must deliver a permanently bound hard-copy to the Department of Geology, complete with reproducible copies of all plates. An archival electronic copy deposited in the Department is also acceptable. A dissertation collection of samples and/or maps to be deposited in the Department may be required by the Dissertation Committee.

**Dissertation Defense/Final Examination:**
All students completing a dissertation for the Ph.D. degree must present a public departmental seminar on the results of their work before the final dissertation can be accepted.

The dissertation defense follows the public departmental seminar and is an oral examination, restricted to members of the Dissertation Committee, on any aspects of the research. Students admitted prior to approval by the Graduate Council of this version of the degree requirements can opt to abide by the defense requirement should they choose, but are not required to do so.
The possible outcomes of the dissertation defense are:

1. Dissertation defense is certified as is. All members of the committee sign the dissertation.

2. Dissertation requires minor revisions. All members of the committee sign the dissertation except the committee chair. The student completes the revisions and then obtains the signature of the committee chair when revisions are accepted.

3. Dissertation requires major revisions. The student is given one year to complete the revisions and is required to schedule a new dissertation defense date. No degree will be granted if the dissertation is not accepted at the second defense.

9) **Normative Time to Degree**
The Normative Time to Degree for the Geology Ph.D. program is twelve to fifteen quarters (four to five years).

10) **Typical Time Line and Sequence of Events**
**Year 1:** Complete three breadth courses and three other courses. TA at least once. Formulate research topic and begin research. Write prospectus and hold prospectus meeting.

**Year 2:** All course requirements are generally completed by the end of the fifth or sixth quarter. Continue collecting and analyzing data. Write proposal and constitute oral qualifying examination committee in 5th quarter. Qualifying examination is completed no later than the end of the sixth quarter. File advancement to candidacy form.

**Year 3:** Finish collecting and analyzing data. Start writing dissertation.

**Year 4:** Write dissertation and submit drafts to committee members. Prepare and schedule public departmental seminar and defense. Submit signed dissertation to Graduate Studies.

11) **Sources of funding**
In the Geology Graduate Program, Ph.D. students are guaranteed support for four years, in form of TA, GSR, or fellowship. M.S. students changing their degree objective to the Ph.D. after finishing M.S. at UCD are guaranteed an additional three years of support, in form of TA, GSR or fellowship, for a total of five years of support.

Students needing additional support beyond their guaranteed allotment will be considered as “alternates” for support, and will be awarded support in form of TA or GSR if and as it is available, beyond that committed to those students still within their guaranteed allotment of support. Alternate support in the form of TAs per student are limited to two quarters for Ph.D. students, beyond the four years guaranteed by our admissions offer. Although these limits will be reviewed and adjusted depending on programmatic needs and prior GSR/fellowship support granted to the student, they will be considered
as the default policy.

University rules state that students can receive a maximum of 15 quarters of TA support and 15 quarters of GSR support in total, both before and after candidacy. The student is still required to complete the degree within normative time (4-5 years for Ph.D. students).

12) **PELP, In Absentia, and Filing Fee status.**

Information about PELP (Planned Educational Leave), In Absentia (reduced fees when researching out of state) and Filing Fee status can be found in the Graduate Student Handbook: [http://www.gradstudies.ucdavis.edu/publications](http://www.gradstudies.ucdavis.edu/publications)

Students who have completed all degree requirements, with the exception of the dissertation and Public Departmental Seminar may choose to go on “Filing-Fee Status.” Students must be at the final writing stage before entering Filing Fee Status. Students who are on Filing Fee Status are not eligible for the privileges and the use of facilities regularly accorded to enrolled students (e.g., desk space in the Department, library, Department laboratories, Student Health Center, etc.). A one-time fee is paid when the student applies for Filing-Fee status. It is Department policy that all students who are on Filing-Fee Status must meet the following requirements:

A. At the beginning of each quarter in Filing-Fee Status each student must submit tangible and acceptable written evidence that he/she has made progress on his/her thesis or dissertation during the preceding quarter. Evidence will be evaluated by the Faculty Advisor and one of the Graduate Advisors.

B. Ph.D. students must complete his/her graduate degree within 18 months of the beginning of their Filing-Fee Status, including summer.

Failure to meet Filing-Fee Policy requirements will result in a recommendation to the Dean of Graduate Studies for disqualification from the program. If, following disqualification, the student wishes to complete his/her graduate degree, he/she must apply and be accepted for readmission to the Department and to UC Davis.