

**Graduate Student Handbook  
Department of Geological Sciences  
California State University, Fullerton**

**NOTE 1:** Always check the Graduate Studies website for the most up-to-date information regarding the MS requirements, policies, and deadlines

<http://www.fullerton.edu/graduate/> & UPS 410.106

**NOTE 2:** See the Graduate Student Handbook produced annually by the Office of Graduate Studies (<http://www.fullerton.edu/graduate/currentstudents/howtogradcheck.php>)

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11/1/16

## DEPARTMENT INFORMATION

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MH-112

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<http://www.fullerton.edu/graduate/>

## ROADMAP TO THE MS DEGREE

The chart below shows the sequence of events that should ordinarily be followed by all MS students. All students should also consult the checklist for graduate students in the University Catalog (reproduced on the following page). Note that part time graduate students should follow the same sequence, but may take longer than 4 semesters to complete all requirements.

Prior to 1 <sup>st</sup>	<i>Meet or chat via phone with the Graduate Advisor OR Thesis Advisor for initial advisement.</i> During this advisement, the overall requirements for the MS degree will be reviewed, and your first semester class schedule will be determined. You should also contact faculty members whose research interests overlap with your interests.
1 <sup>st</sup>	<i>Meet with various faculty members to discuss potential thesis projects.</i> By the end of the first semester, you should select a Faculty Advisor who will guide you through the remainder of the program. Often, you will enter the program with a known thesis advisor determined during the application process.
1 <sup>st</sup> or 2 <sup>nd</sup>	<i>Submit study plan prior to completing more than 13 units of graduate level coursework</i> (including any transferred units or units take prior to admission). Note that the study plan must be completed within a 5-year period following admission, or completion of the first class shown on your study plan if you enter the program with some units completed.
1 <sup>st</sup> or 2 <sup>nd</sup>	A <i>Thesis Committee</i> should be formally established prior to writing a thesis proposal and at the time the study plan is submitted.
2 <sup>nd</sup>	<i>Write Thesis Proposal</i> – must be filed before registering for more than 1 unit of GEOL 598.
Summer and 3 <sup>rd</sup>	<i>Conduct research</i> and collect and analyze data.
3 <sup>rd</sup>	<i>Apply for graduation.</i> Check with the Office of Graduate Studies for deadline, fees, and application form.
3 <sup>rd</sup> and 4 <sup>th</sup>	<i>Write thesis.</i> Follow the departmental and University guidelines for theses. Complete all coursework as indicated on the study plan.
4 <sup>th</sup>	<i>Prepare for Thesis Defense.</i> Submit an acceptable draft thesis to your thesis committee members at least 4 weeks before your defense and 8 weeks before the last day of classes.
4 <sup>th</sup>	<i>Schedule your Thesis Defense.</i> A Thesis Defense Scheduling Form must be filed at least one week before the date of the defense.
4 <sup>th</sup>	<i>Complete Thesis Defense.</i> Committee approves thesis by signing cover page and Thesis Defense Recommendation.
4 <sup>th</sup>	<i>Submit final copies of thesis</i> – see current class schedule for deadline dates. Copies of the thesis must be submitted to the library, Department of Geological Sciences, and your Faculty Advisor. The University’s Thesis Manual (available from the Grad Studies Office) provides further guidelines.

# Graduate Student Checklist



CALIFORNIA STATE UNIVERSITY, FULLERTON

## GRADUATE STUDENT CHECKLIST

☐ = Action initiated by student (as indicated below)    ◆ = Action initiated by the University

### 1. GRADUATE STANDING: CLASSIFIED

- ☐ Complete any course prerequisites and/or remove deficiencies
- ☐ Apply for classified standing in the academic department offering the particular program prior to completion of thirteen units of study plan course work
- ☐ Consult department graduate program adviser for advisement, including development of official study plan
- ☐ Provide appropriate academic unit with any other supporting statements or materials, as shown in program descriptions in the catalog
- ☐ Take tests if required by program, and order test scores sent to Cal State Fullerton, designating appropriate academic unit on the test registration form
- ◆ Recommendation for classified standing made by graduate program adviser by sending the signed study plan to the Graduate Studies Office
- ◆ Notification of classified standing granted is sent from Graduate Studies along with a copy of the approved study plan
- ☐ If not received within a reasonable length of time, contact the department graduate program adviser or Graduate Studies.

### 2. COMPLETION OF REQUIREMENTS

- ☐ Apply for graduation prior to the beginning of the final semester. Specific deadlines are listed in the class schedule and posted on the Graduate Studies website. You must apply for your graduation check on-line via your New Titan Online Student Center. A graduation and diploma fee is required. You are not required to pay the graduation fee at the time of application for graduation. However, you will be required to pay the graduation fee to Student Financial Services (UH-180) within 5 days of applying for the graduation check.
- ☐ Maintain continuous enrollment. **Your study plan is valid only as long as you maintain continuous enrollment in regular semesters, otherwise, it is necessary to reapply to the University and meet any additional requirements approved in the interim. If you do not need to enroll in any other course work, you MUST register for Graduate Studies 700 which carries no credit and does not require attendance.**
- ☐ Consult the department graduate program adviser to confirm final requirements for the degree
- ☐ Complete written and/or oral examination, if required. Complete thesis, project or dissertation if applicable
- ☐ Obtain committee approval for thesis, project, dissertation or results of comprehensive exam(s)
- ☐ If applicable, submit thesis or dissertation to university Thesis/Dissertation Reader by deadlines posted in the class schedule and on the Graduate Studies website
- ☐ Set up Proquest account for thesis or dissertation using instructions on the Graduate Studies website
- ◆ Thesis/Dissertation Reader will submit approved final thesis/dissertation to Proquest
- ◆ Final, approved study plan, with recommendation, sent by the department graduate program adviser to the Graduate Studies Office
- ◆ A copy of the Grad Check Review Form is sent to the student showing the adviser's recommendation.
- ◆ Preliminary audit completed by Graduate Studies Office staff. The student's study plan is checked for pending grades, and completion of any other requirements.
- ☐ Deposit approved copy of thesis, dissertation or project in academic department (if required)
- ☐ Complete all general and specific requirements, other than final course examinations, by the last day of classes, in order to assure granting of the degree by the end of the semester
- ◆ Final verification of completion of requirements sent by the Graduate Studies Office staff to the registrar
- ◆ Notification of award of degree received from registrar approximately ten weeks after the end of the semester

### 3. COMMENCEMENT

- ☐ Make appropriate arrangements for cap, gown and hood rental in the campus bookstore
- ◆ Commencement information sent by the College Dean's Office

Revision: 2/19/16

Graduate Studies Office, McCarthy Hall 112  
657-278-2618

## Thesis Completion Time Limit

All requirements for the master's degree, including all course work on the student's study plan, normally should be completed within five years. This time limit begins with the semester of the earliest course used on the student's study plan and consists of a total of ten (10) consecutive semesters. When individual circumstances warrant, this time limit may be extended for up to two years (four additional consecutive semesters).

A student may request an extension of the five-year time limit by filing a petition with the Graduate Studies Office. The petition must contain a full explanation of the circumstances that prevented completion of the degree requirements within the normal five-year limit and must be approved (signed) by the graduate program adviser, the chair of the appropriate graduate committee and the director of Graduate Studies. Approvals for extension must be obtained prior to the expiration of the five-year limit. [The Time Limit Extension Petition](#)

### Outdated Courses

Outdated course work (course work older than the student's approved time limit; i.e., five or seven years) should be repeated. However, a maximum of nine (9) units of course work may be exempt from repetition if course content can be validated. Validation is allowed at the discretion of the graduate program adviser, the academic unit offering the subject course, and the associate vice president. Copies of the "Petition for Validating Outdated Course Work" may be obtained from the Graduate Studies Office or [Online](#).

Validation must be accomplished by passing a written comprehensive test of the materials covered by the course being validated or by some equivalent method with prior approval of both the graduate program adviser and the associate vice president, Academic Programs. Courses completed more than ten years prior to completion of requirements for the degree are not eligible for validation. Any outdated course work that cannot be validated either because of a denial of the petition or because it is in excess of the nine units allowed for validation, must be repeated or updated through enrollment in additional Study Plan course work. If course work is repeated or additional course work is required to update, those units and grades will be added to the Study Plan.

Outdated transfer course work cannot be validated.

# The Study Plan

The study plan is a formal document that must be completed in order to become a classified graduate student. According to University rules, this document must be submitted prior to completing more than 13 units of graduate course work. Ordinarily the study plan should be completed during your second semester of study. However, if you enter the graduate program with graduate credit carried forward from coursework taken prior to admission, then you may need to complete your study plan during your first semester in the program. Additionally, prior to filing a study plan, any course or GPA deficiencies must be satisfied.

The first step toward completing your study plan is to select a Faculty Advisor. This faculty member will guide you through the process of developing your study plan, formulating a thesis topic and proposal, undertaking all thesis-related research, and writing your thesis. If you do not already know who your Faculty Advisor will be when you enter the program, during your first semester, you will need to talk with various faculty members whose research specialties overlap with your interests.

In consultation with your faculty advisor, fill out the study plan form EXCEPT for the top portion. The top of the form will be completed by the Graduate Advisor in consultation with the student and the student file. When complete, have your Faculty Advisor sign and date the form, and submit it to the Department's Graduate Advisor for verification. Once verified by the Department Graduate Advisor, the Graduate Advisor will hand deliver the study plan to the Graduate Studies Office.

Important Note: GEOL598 (graduate thesis) is considered an “Exit Option” course for graduate students. In other words, you can only take the exact number of GEOL598 units listed on your study plan – no more, no less. ALSO, your study plan must equal exactly 30 units – no more, no less.

The graduate committee will review study plans twice a year, once during each semester. **Deadlines for submittal of the study plan are November 1st for Fall semester and April 1st for Spring semester.** Any study plans received after these dates will be held for review at the end of the following semester. Exceptions to these deadlines may be made under exceptional circumstances (I forgot is not one of them!) and must be requested by your Faculty Advisor and approved by the Graduate Committee.

The graduate committee will review the study plan for compliance with our degree requirements and for the appropriateness of the listed course work. If errors are found, or if the graduate committee has suggestions for changes, the study plan will be returned to the student for editing prior to final submittal. Once the graduate committee has signed the final study plan, the graduate advisor will submit it to the office of graduate studies, and you will become a classified graduate student.

# General Study Plan Regulations

**Taken verbatim from:**

**<http://www.fullerton.edu/graduate/currentstudents/policies/studyplan.php>**

**A Study Plan must be filed with the Graduate Studies Office before thirteen units of Study Plan coursework have been completed.**

General requirements for all master's degree study plans include the following:

1. A minimum of 30 approved semester units. Some programs require more.
2. At least 21 semester units must be taken in residence. For programs requiring 42 or more units, at least half the units must be taken in residence. Transfer credits and Cal State Fullerton extension credits are not residence units.
3. Only 400- or 500-level courses may be used on graduate Study Plans. A graduate student enrolled in a 400-level course will be required to complete additional assignments as determined by the instructor. University policy does not allow 300-level courses on graduate study plans.
4. Normally 70 percent of all study plan courses will be at the 500-level. However, with prior approval, upon the recommendation of the Graduate Education Committee, programs may permit students to include up to 50 percent of course work at the 400-level.
5. No more than nine units of post baccalaureate work taken at Cal State Fullerton prior to admission to an approved graduate program.
6. No more than six semester units for a thesis, if a thesis is required.
7. Maximum of six units of independent study.
8. No courses taken to satisfy prerequisite requirements.
9. None of the following: correspondence courses, credit by examination, or similar.
10. No courses with nontraditional grades (e.g., CR, S, P).
11. Each course on the study plan must be completed with a grade of "C" (2.0) or better.
12. A minimum grade-point average of 3.0 ("B") in all courses attempted to satisfy requirements for the degree.
13. Completion of all study plan courses within five years or seven years with approved extension. The time limit starts with the earliest course on the study plan.
14. All courses taken after the baccalaureate (or post baccalaureate credit granted).
15. No courses credited toward another degree.
16. A final evaluation, which may be a thesis, a project, a comprehensive examination, or any combination of these.

The approved study plan is valid as long as the student maintains continuous enrollment in regular semesters at the university; otherwise it is necessary to reapply and meet any changed or additional requirements approved in the interim.



# Course Requirements

## Masters of Science in Geology Curriculum

The following goals and learning outcomes have been established for students pursuing a Master's degree in geological sciences:

### *Advanced knowledge of Earth Science skills, concepts, and processes*

- Compile, analyze, assess, and interpret published research relevant to graduate-level research in the Earth sciences
- Create and implement an experimental design to solve a research problem in the Earth sciences and interpret data collected through these experiments

### *Conduct original scientific research*

- Design a research plan to solve fundamental scientific problems in the Earth sciences and formulate this plan in a clearly expressed written research proposal
- Prepare written and oral presentations that clearly express the results of their research plan, including a clear statement of hypothesis and research methods, summary and interpretation of data, and critical evaluation of the hypothesis

An MS curriculum must contain a minimum of 30 units and be approved by the Graduate Advisor. At least 21 units must be at the graduate level; a maximum of 9 units may be 400 level. A minimum grade-point average for courses satisfying the study plan is 3.0. The study plan must consist of:

### **Required core Courses (6 units)**

- GEOL 500 Advanced Concepts in Geology (3)
- GEOL 501 Research Methods in Geology (1)
- GEOL 590 Graduate Seminar (1,1) – must be taken twice for 1 unit each time

### **Focus Courses (18-21 units)**

Adviser-approved 400- or 500-level geology courses. Up to a maximum of 6 units may be approved 400- or 500-level courses taken in related-field departments. A maximum of 3 units of Geol 599 (Independent Study) and a maximum of 3 units of 593 (directed study) may be taken. Course selection will be dependent on student's academic objectives, and selected in consultation with the student's thesis advisor.

### **Thesis (3- 6 units – includes oral defense)**

GEOL 598 Thesis (3-6)

## **Department Continuous Enrollment Requirement**

A graduate degree student is required to maintain continuous enrollment in every fall and spring semester from the beginning of the program of study until award of the degree. This policy is designed to eliminate the need for readmission to the university, provide opportunity for continuous use of facilities, including the library, and assure the development of an integrated program, which is adequately supervised and effectively completed within the time limitations allowed by regulations.

Unless granted an approved leave of absence, a graduate student who fails to register each semester has discontinued enrollment in the graduate degree program. In order to resume study, the student needs to reapply for admission to the university and to the degree program and meet any changed or additional requirements approved in the interim.

Students who may have completed all course work, but who may not have satisfactorily completed a comprehensive examination or other requirement, are expected to maintain continuous enrollment until award of the degree.

A graduate student who finds it impossible to attend during a certain semester and is not eligible for a leave of absence must register in Graduate Studies 700. Registration in this course is restricted to conditionally classified or classified graduate students. It carries no unit credit and does not require class attendance. Registration in this course in each semester when no other course work is taken will be necessary until award of the degree.

Similarly, Credential Studies 701 is available for students with a credential-only objective who find it impossible to enroll in course work and are not eligible for a leave of absence.

# Graduate Enrollment Policies

## Residence Requirement

A student is considered to be in residence when registered during regular semesters at this University. At least 21 semester units or half the units required by the master's program, whichever is larger, must be taken in residence at this University. The Ed.D. program requires a minimum 48 units for residency. Approved units earned in summer sessions may be used to meet regular semester unit requirements on a course by course basis. Extension credit may not be used to fulfill the minimum residence requirement.

## Continuous Enrollment

A graduate degree student is required to maintain continuous enrollment in every fall and spring semester, if a master's or D.N.P student, or every fall, spring and summer, if an Ed.D. student from the beginning of the program of study until award of the degree. This policy is designed to eliminate the need for readmission to the University, provide opportunity for continuous use of facilities, including the library, and assure the development of an integrated program, which is adequately supervised and effectively completed within the time limitations allowed by regulations.

Unless granted an approved leave of absence, a graduate student who fails to register each semester has discontinued enrollment in the graduate degree program. In order to resume study, the student needs to reapply for admission to the University and to the degree program and meet any changed or additional requirements approved in the interim.

Students who may have completed all coursework, but who may not have satisfactorily completed a comprehensive examination or other requirement, are expected to maintain continuous enrollment until award of the degree.

A master's student who finds it impossible to attend during a certain semester and is not eligible for a leave of absence must register in Graduate Studies 700. A master's student near the end of the degree program may be eligible to enroll in Graduate Studies 700 (called GRAD 700 or GS 700) via University Extended Education. Registration in this course is restricted to conditionally classified or classified graduate students. It carries no unit credit. Registration in this course in each semester when no other coursework is taken will be necessary until award of the degree.

Similarly, Credential Studies 701 is available for students with a credential-only objective who find it impossible to enroll in coursework and are not eligible for a leave of absence.

## Leave of Absence

Graduate degree or credential students may request a leave of absence for up to one year, though a leave of absence is not normally granted for more than one semester. Conditionally classified or classified graduate students qualify for a leave if they are in good academic standing and have completed at least six units (if a master's student) or eight units (if a doctoral student) of work toward the degree in residence at Cal State Fullerton. Students with a credential-only objective qualify if they have completed at least one semester of coursework in good academic standing. Forms to request a

leave of absence are available at the Graduate Studies Office and on the Graduate Studies Office website. Students are encouraged to submit requests for leave of absence prior to the start of the semester for which they are requesting a leave.

Any one of the following circumstances may be grounds for requesting a leave of absence:

1. illness or disability (permanent or temporary) or similar personal exigencies including pregnancy which make it impossible or inadvisable for a student to register for classes.
2. activities that enhance a student's professional career objectives.
3. active duty in the armed forces of the United States;
4. severe financial hardship; or
5. other reasons at the discretion of the associate vice president, Academic Programs.

After review by the Graduate Studies Office, the academic unit (where applicable), and the Registrar's Office, a response is mailed to the student.

A first-time leave of absence of one semester only will normally be granted upon request for students who qualify and will not require an application for readmission to the University. Registration for the semester following the leave will be available to the student.

Students requesting a subsequent leave or a leave longer than one semester are required to provide appropriate substantial documentation (e.g., doctor's recommendation, verification of employment). Such requests must also be endorsed by the graduate program adviser.

A leave granted to a degree objective student preserves the election of curriculum rights regarding catalog requirements. However, leaves of absence do not change the time limit for completion of the degree. For credential students, a leave granted by the University does not exempt them from new requirements imposed by the State regardless of the catalog year and also does not extend time limitations imposed by the State for completing specific teaching credential requirements.

## **Study Load**

To qualify for full-time enrollment certification by the University, graduate students must carry a study load of 12 units of coursework a semester, or nine units of which six are in 500-level courses. A normal full-time load in summer session is one and one-third units per week of instruction.

Federal regulations for non-immigrant "F-1" and "J-1" visa students allow some degree programs to define full-time status by fewer than 12 units per semester. These departmental unit requirements do not change the official definition (stated above) that is used to certify full-time enrollment for financial aid eligibility or loan deferment.

The maximum study load for students working toward a master's degree is 12 units per semester; in exceptional cases, however, a student may take more with the approval of the graduate program adviser. Forms to request excess units are available in the Graduate Studies Office or on the Graduate Studies Office website.

## **University Extended Education**

In addition to its state-supported academic programs, the University offers self-supported courses and programs through University Extended Education. This includes intersession, self-support degree programs, special session credit courses, summer session and Open University enrollment. The applicability of credit earned in courses taken through Extended Education may be subject to approval by the graduate program adviser and the director of graduate programs; therefore, consultation with the program's graduate adviser before taking courses is strongly recommended.

Any student desiring a master's degree must be admitted to the University and maintain continuous enrollment every fall and spring semester until award of the degree. Enrollment through University Extension does not maintain continuous enrollment for students in state-funded degree programs.

#### *Intersession/Special Sessions/Summer Session*

Courses taken during special sessions, summer session or intersession may be applied to a degree program, provided the courses are approved in advance by the departmental program adviser.

Enrollment in courses taken during intersession or summer session does not constitute admission to the University or enrollment as a continuing student.

#### *Extension Credit*

No more than nine units of extension credit may be applied to a graduate degree. Extension credit is granted for courses with an "X" prefix in the Extended Education Class Schedule.

#### *Open University Enrollment*

Open University provides an opportunity for people not currently admitted to Cal State Fullerton to enroll in undergraduate and graduate-level classes during all academic terms, on a space available basis. Open University is managed by University Extended Education. Enrollment through Open University does not constitute admission to CSUF. Courses taken through Open University Enrollment do not meet graduate residence requirements (units that must be taken in admitted status.) In addition, verification of English skill is also required for any individual, regardless of citizenship, who has not attended, for at least three years, a school at the secondary level or beyond in which English was the principal language of instruction. Such students are required to score at or above the minimums on the Test of English as a Foreign Language TOEFL): 500 (PBT) or 6.1 (iBT) or 5.5 (IELTS). Verification of test scores must be presented when registering.

### **Enrollment in 500-Level Courses by Seniors**

Undergraduate students may enroll in graduate level courses (500-level) if they:

1. have reached senior status (i.e., completed a minimum of 90 semester units);
2. have the academic preparation and prerequisites required for entry into the course; and
3. gain the consent of the instructor.

Students wishing to use 500-level coursework taken during their undergraduate degree toward a master's degree should read the following section on Postgraduate Credit.

## Postgraduate Credit

A master's student may petition for a maximum of nine units of postgraduate credit for coursework (either 400 or 500 level) taken during the undergraduate degree at California State University, Fullerton, if:

1. the coursework was not used to meet any of the University's requirements for the baccalaureate degree (including major, minor or concentration);
2. the coursework was taken during the twelve months immediately prior to the student's graduation; and
3. each course was completed with a grade of "B" (3.0) or better.

Petition forms are available at the Admissions and Records Service Center. If approved, appropriate notations will be entered on the student's transcript.

The use of postgraduate coursework on a student's graduate Study Plan is governed by the general regulations for all graduate degrees and must be approved by the graduate program adviser, the appropriate graduate committee, and the associate vice president, Academic Programs (or designee).

## Transfer Credit Policy

Graduate students may request to apply a limited amount of transfer coursework towards unit requirements for a graduate degree. The use of transfer coursework on a student's Study Plan is subject to the following provisions.

1. Each course being transferred must:
  - a. have been taken at an accredited college or university;
  - b. be acceptable for credit toward a graduate degree at the institution where the coursework was taken; in the case of transfer work for the Ed.D. and D.N.P., the course must be acceptable for doctoral credit at the institution where it was taken;
  - c. have been completed with a grade of "B" (3.0) or better;
  - d. not have been used in meeting the requirements for another earned degree (either graduate or undergraduate); and
  - e. have been completed within the student's five-year time period which is required for completion of the requirements for the graduate degree at CSUF.
2. For the master's degree, an absolute minimum of 21 semester units or half the units required by the program, whichever is larger, must be taken in residence at this University. A minimum of 42 units must be taken in residence for the Ed.D. program. A minimum of 24 units must be taken in residence for the D.N.P. Residence units are granted for courses taken at the University during regular sessions of fall and spring and any special session;
3. use of transfer work on a student's Study Plan is subject to all other policies concerning Study Plan coursework;
4. in all cases, the use of transfer coursework on a student's Study Plan is subject to the acceptance and approval of the academic unit's graduate program adviser and the associate vice president, Academic Programs (or designee). Coursework taken at another institution after admission to CSUF as a graduate student is rarely accepted for credit toward a graduate degree and can only be accepted if the student has received prior approval of both the graduate program adviser and the associate vice president, Academic Programs (or designee);

5. all approved transfer units and grade points will be entered on the CSUF transcript at classification or graduation; and
6. a unit of coursework taken at a college or university on the quarter system will be considered as equivalent to two-thirds of a unit when such coursework is considered acceptable as transfer work.

# Maintenance of Good Standing

**To continue to be in good standing a graduate student must:**

Requirements to be in compliance with the “Graduate Academic Standards” listed in the University Catalog are listed below:

## **GRADE POINT AVERAGE REQUIREMENTS**

A grade-point average (grade points divided by units attempted) of at least **3.0** is required for graduation with a master's degree. This grade-point average applies to:

- All 400- and 500-level units attempted subsequent to admission to a degree program and
- All units required on the student's graduate Study Plan including transfer courses. Each course on the Study Plan must be completed with a grade of "C" (2.0) or better.

A degree student may request a change in the Study Plan in order to raise the Study Plan grade-point average by:

- Adding no more than six units of approved course work, or
- Repeating no more than six units of course work in which a "C" (2.0) or lower was earned, or
- A combination of 1. and 2. not to exceed six units.

Requests to add courses to the Study Plan, repeat courses, or add courses to raise the overall grade-point average, must be approved by the graduate program adviser and the Associate Vice President, Academic Programs (or designee) prior to registration.

When a course is added or repeated, the original course remains on the Study Plan and on the student's transcript and both grades are used in calculating the student's grade-point average. A grade-point average of at least 2.5 is required for continuing status as a credential, certificate or undeclared postbaccalaureate student.

## **REPEATED COURSES**

If a grade less than "C" (2.0) is received in a Study Plan course, the course must be repeated and passed with a grade of "C" (2.0) or better. A course may be repeated only once. If a course is repeated, both grades are included when computing the student's Study Plan and cumulative Cal State Fullerton grade-point average. Repetition of a course carries no additional unit credit toward the degree; however, the additional units are included in the cumulative units shown on the Cal State Fullerton transcript.

In extenuating circumstances, the student may petition the associate vice president, Academic Programs (or designee) to add another course to the approved program with the unit value equivalent to that of the course in which the unsatisfactory grade was received.

Successful repetition of a course originally passed carries no additional unit credit toward a degree.

## **PROBATION AND DISQUALIFICATION**



## PROBATION

A graduate student enrolled in a graduate degree program will be placed on academic probation if either the cumulative or the Study Plan grade-point average falls below 3.0. A graduate student may also be placed on probation for reasons other than cumulative and/or Study Plan grade-point average. This is known as **administrative-academic probation**. The reasons for this may include repeated withdrawal, failure to progress toward an educational objective, non-compliance with an academic requirement, failure to demonstrate a level of professional competence or fitness commensurate with the standards of the student's discipline, or inappropriate behavior as defined in the Student Bill of Rights and Responsibilities, and in the Academic Dishonesty sections of this catalog (see "University Regulations").

Master's degree students will be allowed two semesters on academic probation before being subject to disqualification. Ed.D students may not have a grade point average below 3.0 in two successive terms. The Ed.D student will be placed on probation the first term in which their grade point average drops below 3.0; a grade point average below 3.0 in the next term is grounds for disqualification from the Ed.D program. Students will remain on administrative-academic probation contingent upon conditions required for their continuing in the program. The Graduate Studies Office maintains a list of students on probation and subject to disqualification.

Click on the link to watch a tutorial [What To Do When On Probation](#).

## DISQUALIFICATION

The associate vice president, Academic Programs (or designee), in consultation with the student's graduate program adviser, will disqualify a graduate student who is on probation if the student does not, or cannot, raise the Study Plan and cumulative grade-point average to 3.0 by the completion of the second regular semester following the semester in which the grade-point average fell below the minimum 3.0 standard. If a student's grade-point average becomes so low that it cannot be raised to 3.0 within the prescribed limits of course work, the student will be disqualified from the master's degree program.

Students placed on probation for reasons other than grade-point average will be disqualified if:

- The conditions for removal of administrative-academic probation are not met within the period specified.
- The student becomes subject to academic probation while on administrative-academic probation.
- The student is removed from administrative-academic probation and subsequently becomes subject to administrative-academic probation for the same or similar reasons as originally placed on probation.

Disqualification removes a student from graduate standing and prevents further enrollment in university courses (except through University Extended Education). A student who has been disqualified from a master's degree program may not apply for readmission to that program. However, a student who has been disqualified from one degree program may apply for readmission to a different degree program. A readmitted student must file a new Study Plan that meets current requirements and policies. Any disqualified student who wishes to use previous course work must have it approved by the associate vice president, Academic Programs (or designee). Appeals related

to graduate degree probation or disqualification should first be directed to the departmental graduate program adviser. Please contact the Graduate Studies Office for further information and procedures.

### **PROBATION AND DISQUALIFICATION FOR CREDENTIAL, UNCLASSIFIED OR UNDECLARED POSTBACCALAUREATE STUDENTS**

A postbaccalaureate student (credential, unclassified or undeclared status) will be subject to academic probation if after completing 12 or more units, the cumulative grade point average falls below a 2.5 average. A postbaccalaureate student (i.e., credential or certificate objective) on probation will be subject to disqualification if the cumulative grade-point average is not raised to 2.5 the semester after being placed on probation.

### **SPECIFIC TO THE DEPARTMENT OF GEOLOGICAL SCIENCES**

Be in compliance with the Department of Geological Sciences' standards for the Master's Program (these may be more restrictive than University policies). Requirements include:

Meeting the conditions for admission to the Master's Program.

Achieving classified status (by submitting a study plan to the Graduate Studies Office) within two semesters of entering the graduate program.

Meeting the graduate writing requirement (by taking GEOL 500) within two semesters of entering the graduate program.

Having a productive working relationship with a Thesis Adviser, including progress on the thesis research satisfactory to the Thesis Adviser and the Thesis Committee.

Good standing requirements for students with Teaching Assistantship (see next page for details).

Students enrolling in GS-700 maintain Good Standing by satisfactorily completing the work plan outlined in the Department of Geological Sciences GS-700 Approval Form. This form must be completed *every semester* that a student enrolls in GS-700.

Failure to meet any of these criteria for good standing will result in being placed on academic probation and potentially in disqualification from the program. Any student on academic probation will have to meet with the Graduate Program Adviser before being allowed to register for classes the following semester.

# Teaching Assistant Evaluation - Department of Geological Sciences

Teaching assistantships (TA) at CSUF Geological Sciences are renewable annually. These renewals are based on two main areas: performance as a TA and progress toward the completion of the Master of Science degree (MS). Demand for TA positions is high and thus are not generally extended beyond the two year initial commitment. Thus, the criteria below dominantly apply to the first year of TA appointment. However, these criteria are also used for students applying for a partial TA at any point in their academic career here at CSUF as well.

## MS Progress and Teaching Sufficiency

To be considered as making satisfactory progress toward the completion of the MS and for the Department to evaluate teaching sufficiency, TAs must submit evidence of having met the requirements below to the Department Chairperson, by the dates indicated. The reason for the two deadlines is that February 15<sup>th</sup> is the application deadline for new graduate students, so determination of the number of continuing TAs is critical at that time. The second date, May 1, begins the last month of the semester. By this date, Student Observation of Quality results (SOQs) are available and the completion of 1<sup>st</sup> year tasks toward completion of the MS degree should be well in hand.

### **February 15**

1. Completed GEOL 500 and 593 (GEOL 593 is taken with the General Education Coordinator).
2. Have an approved Study Plan on file with the Graduate Division (or before 13 units of Study Plan course work has been completed).
3. Completed a Proposal Committee form
4. Retain eligibility as a graduate student at CSUF.

### **May 1**

1. Show evidence of satisfactory progress in GEOL 500.
2. Completed a Thesis Approval form
3. Submit SOQs from previous semester(s); numerical scores and written comments
4. Submit all Peer Reviews
5. Narrative (optional: 500 word maximum); the purpose of the narrative is to provide a self-assessment of teaching performance. A narrative is especially important if teaching or educational performance does not meet the criteria.

Graduate students applying on April 15<sup>th</sup> during their 2<sup>nd</sup> semester for consideration of a TA position for the following fall semester are required to submit the February 15<sup>th</sup> information on April 15<sup>th</sup>. These students must then submit the May 1<sup>st</sup> materials to remain in consideration for a TA position. Those applying for consideration on April 15<sup>th</sup> who have completed more than 2 semesters, must submit the May 1 materials.

Graduate students applying on November 15<sup>th</sup> during their first semester for consideration of a TA position for the following spring semester are required to submit the following by January 15<sup>th</sup>:

1. Completed GEOL 500.
2. Enroll in 593 (GEOL 593 is taken with the General Education Coordinator)
3. Have an approved Study Plan on file with the Graduate Division.
4. Completed a Proposal Committee form

5. Retain eligibility as a graduate student at CSUF.

### ***Evaluation Criteria***

The materials listed above will be evaluated separately by the Department Personnel Committee and the Department Chairperson. Each will provide an assessment letter evaluating if the TA is:

- A. Making sufficient progress toward the MS and is a Sufficient teacher or
- B. Is not making sufficient progress toward the MS and is an Insufficient teacher.

A TA is making sufficient progress toward the MS and is a Sufficient teacher if, by the end of the second semester, they have completed the following:

MS Degree

1. Completion of GEOL 500 and 593 (GEOL 593 is taken with General Education Coordinator)
2. Completion of Study Plan and submission of that plan to Graduate Division
3. Completion of the Thesis Approval form
4. Academically eligible at CSUF
5. Mean SOQ score  $\geq 2.64$  (10-year mean for Geological Sciences minus 1 standard deviation)
6. Overall Peer Reviews are Sufficient.
  - If an Insufficient Peer Review is earned in the 1<sup>st</sup> semester, evidence of improvement must be demonstrated. Such evidence may be:
    - Completion of teaching-centered courses at the Faculty Development Center
    - Additional GEOL 593 with General Education Coordinator
    - Observation and summary of another instructors teaching methods

# GS-700 Enrollment Policy

## DEPARTMENT OF GEOLOGICAL SCIENCES

<http://www.fullerton.edu/graduate/currentstudents/graduateforms.php>

Graduate students must maintain continuous enrollment during their tenure in the Master's program at CSU Fullerton. This requirement means that once a student is admitted to the Geology Department's graduate program, he/she cannot drop out for a semester without officially obtaining a leave of absence from the University. Students enroll through regular university registration procedures and pay listed graduate student fees while completing courses required for the study plan and while working on and completing their thesis.

### GS-700

A student may elect to enroll in GS-700 through regular registration or through Extended Education when he/she is in the very final stages of producing his/her written thesis. This procedure allows the student to maintain continuous enrollment while completing the final phases of our graduate program. If enrollment in GS-700 is through regular university registration procedures, the student will pay full fees and receive all student benefits. If enrollment, however, is through Extended Education, the student will pay a reduced fee and receive no university benefits other than library privileges. The principal advantage of enrolling in GS-700 is financial because enrollment costs are less than those required for regular university registration. This Extended Education route is the most common form of GS-700 enrollment by Geology graduate students.

### Considerations for Enrolling in GS-700

Enrollment in GS-700, however, is not automatic and requires both departmental and university approval. Moreover, enrollment in GS-700 through Extended Education assumes that the student is no longer a user of departmental and university resources, including supplies, equipment, and services. THIS MEANS THAT GRADUATE STUDENTS ENROLLED IN GS-700 THROUGH EXTENDED EDUCATION ARE NOT ELIGIBLE TO RECEIVE DEPARTMENTAL SUPPORT FOR SUPPLIES, MATERIALS, AND SERVICES.

### Conditions for GS-700 Enrollment

Students are expected to understand fully the conditions required for GS-700 enrollment before submitting the form for departmental approval. For students enrolling in GS-700 through Extended Education, the student should consult the enrollment request form to determine if he/she is eligible. To be eligible for GS-700 (through either regular university registration procedures or Extended Education), the following conditions must be met to obtain departmental approval.

1) **Study Plan.** Students must have received credit for all coursework required for the study plan. This means that letter grades must have been received for all courses except GEOL 598 and 599, for which RP grades may have been assigned. Incomplete grades given for courses listed on the study plan should be completed *before* enrolling in GS-700.

2) **Laboratory and Field Work.** All thesis laboratory or field work must be completed (i.e., the student is not collecting data in the lab or field in support of his/her thesis research).

3) **Use of Facilities.** Access to departmental or university services and facilities (e.g., computers, laboratory equipment, field gear) is not required other than the use of library (including electronic) resources.

4) **Adviser Assistance.** Assistance from the student's thesis adviser and committee members has been reduced to levels required to produce the final version of the written thesis.

### **Enrollment Approval Procedures**

Enrollment in GS-700 through Extended Education *must be renewed each semester*. No formal approval is required for enrollment in GS-700 through regular university procedures (i.e., with full fee payment). To obtain approval for enrollment in GS-700 through Extended Education, the student must do the following:

1) **Obtain Necessary Paperwork.** There are two required forms, a Department of Geological Sciences GS-700 Approval Form available online or from the Geology Main Office, and a GS-700 Enrollment Request Form available at the Graduate Studies Office (MH-112) or online at <http://www.fullerton.edu/graduate/currentstudents/graduateforms.php>

2) **Adviser Approval.** Develop a work plan in consultation with his/her Thesis Advisor and the Graduate Advisor as outlined in the Department of Geological Sciences GS-700 Approval Form. The thesis adviser indicates approval of GS-700 enrollment through Extended Education by initialing the Department Approval form. The Graduate Advisor must sign both forms.

3) **Verification of Enrollment Conditions.** Have the Graduate Program Adviser review the student's record, check the appropriate boxes, and sign on the designated line to verify eligibility. *The student should not check the boxes.*

4) **Submission of Completed Form.** The *Student* must return the completed GS-700 Enrollment Request Form to the Graduate Studies Office (MH-112) to receive the registration card.

# Your Thesis

## Faculty Advisor and Thesis Committee

During your first semester in our graduate program, you should select your Faculty Advisor (many students have already selected an advisor at the time they are admitted). Once you have a Faculty Advisor and have decided on a general thesis topic, you will need to establish a thesis committee with at least three members.

Your Thesis Committee must consist of at least three members (including your advisor) who should be chosen in consultation with your advisor. Both your faculty advisor and one additional committee member must be from the Department of Geological Sciences. A third member of the committee may be from another related department at CSUF. If you desire, a qualified person who is not a CSUF faculty member may serve as a Visiting Examiner on your Thesis Committee. This person will count as a fourth committee member.

The committee should ideally be viewed as an additional resource during the conduct of your research. Committee members are often chosen to provide expertise that complements yourself and your advisor. Committee members should be kept apprised of the status of your research, through either informal one-on-one discussions or formal meetings of your entire thesis committee. Your Thesis Committee will serve as the examiners during your Thesis Defense. Ultimately, they are the ones who determine whether your research is worthy of a Masters Degree, so it is in your best interest to keep them informed on your degree progress.

You must establish your committee prior to completing your thesis proposal. The committee is responsible for approving your proposal by completing a Thesis Committee Form. **This form must be completed prior to registering for GEOL 598.** Once you have completed the form and obtained signatures from each committee member including your Faculty Advisor, submit this form to the Geological Sciences department office. **Any subsequent changes to your committee must be made by filing a new Thesis Committee Form, and checking the “Change to Existing Committee” box.**

# Thesis Proposal

A well-conceived and designed proposal is a critical prerequisite to a successful research project. The proposal should describe in a clear fashion the nature of the problem to be addressed and how the scientific method will be used to answer the research questions. A good proposal is a sort of roadmap that describes how you are going to complete your project. A good proposal should also convince the reader that this research is important, and worthy of support (both financially and morally). Assume the reader of the proposal will be professional geoscientists who may not have expertise in your research area.

Each proposal will be different, but all proposals should contain the following information (even if organized differently than below).

## Title Page

The first page of the proposal should be a cover page that contains the title of your project, your name, the name of your advisor or advisors, and the date.

## Abstract

This should be a 250 word maximum statement of your project, including all the important content from the proposal. Someone should be able to grasp in a general way the nature of your proposal from this abstract. Write this LAST, after you have completed your proposal.

## Introduction

Some proposals may have separate "Introduction" and "Previous Work" sections, whereas others may combine the two into a longer introductory section. How you organize yours will depend mostly on the nature of your project. In this section you should clearly state the scientific question being considered in your research and the hypotheses you will be testing. You should also discuss the possible outcomes of your research and how they might support/refute your hypotheses. Depending on the type of research you are doing, you might include something about the geographic area you will be working, and the significance of your research to the broader geoscience community.

## Previous Work/Background

This section may include a more expanded discussion of the nature of the problem, and it should contain a review of any previous work that is specifically relevant to your project. Unresolved questions that may be answered by your work should be highlighted here. Again, in some cases this information may be included in a longer introduction. This section is important because it will demonstrate that you have done the background literature reading necessary to begin your research. If your research will be done in a particular geographic area, you may want to include a subsection on "geologic setting" or "tectonic setting" or something similar.



### Proposal (Work Plan and Methodology)

This section is the real "nuts-and-bolts" part of your proposal. Here you describe as clearly as you can exactly what you plan to do, and how this work will help to answer the research questions. Try to be as specific about your plan as possible. (e.g., How much field work and when? How many thin sections? What kinds of analyses? How many analyses? How many streams to sample?, etc.). Also include a specific list and description of the deliverables (e.g. data sets, maps, etc.) that your research will generate.

### Proposed Budget

The budget should be on a separate page. Include here estimates of the costs of all components of your project (field work, thin sections, maps, analyses, mileage, expendable supplies, film, lodging, etc.). Your advisor may help you with this section. You should also indicate the proposed source(s) of funds (if any).

### Time Line

In this section, indicate, using a calendar format, or table the detailed timeline for completion of your project. Do not include any times in the past (the proposal should be done before any parts of the project!)! This timeline will show the reader that you have thought through the actual "doing" of this project, and you have estimated that you will be able to complete this project in a timely manner.

### References

You must list all references cited in your proposal. Your proposal should cite all the sources from the literature that are relevant to your project. This list should include publications from peer-reviewed scientific journals. A short reference list is a sign of a poorly researched project. Use the format of the GSA Bulletin when you cite and list references (available at <http://www.geosociety.org/pubs/0208bulguid.pdf>), or use another similar guide that your advisor may suggest.

### Figures

Figures are an essential component of all proposals. All figures should be of the highest quality possible, and must include a caption. Simply Xeroxing a figure from some other publication usually is not appropriate. Figures adapted from other sources must include a reference to that source. Smaller figures may be placed floating within the text, but large figures should be placed on their own page within or at the end of the text.

### Format

The final proposal must be typed, double-spaced, and paginated. Use a 1" margin everywhere. Use a 10-12 point font. Section headings, as outlined above, must be present. Some guidelines concerning length: as long as it needs to be, but no longer! Five pages is probably too short, more than 15 pages probably is too long.

# Thesis Guidelines

The Masters Thesis constitutes the "final report" of your thesis research. It should be a professionally written and illustrated, fully referenced description of your research.

Your thesis should include:

A clear description of the scientific question being considered, including any relevant background material.

Complete descriptions of the hypotheses being tested by your research.

A complete discussion of any relevant background material such that the non-specialist geoscientist can understand your work.

A complete description of the data you collected during the course of your research, including a description of the methods you used to collect them.

A complete analysis of the data and how it supports or refutes your hypotheses.  
A description of the relevance of your new data and/or new interpretations to the broader geoscience community.

A complete list of references cited, typed in the appropriate form for your specialty.

In collaboration with your Faculty Advisor and Thesis Committee, you need to decide on the format your thesis will take. You may choose a "traditional" format that includes a multi-chapter document that is typically 40 to 100 pages long. Many students now prefer to prepare their thesis as a publication-ready document that follows the format of an appropriate peer-reviewed scientific journal. This choice makes it simple to submit your thesis for publication. In either case, ***your thesis must conform to the published University Guidelines as laid out in the Thesis Manual at the link below.***

**For general guidelines for the MS Thesis, visit**  
**<http://www.fullerton.edu/graduate/currentstudents/thesis.php>**

## MS Thesis Timeline

Time During Last Semester	Milestone
Week 1 (or before)	Obtain a University Thesis Manual from the Office of Graduate Studies (MH-112)
Weeks 1 - 6	Finish writing thesis. Have your faculty advisor read and edit initial drafts and figures.
Week 7 (8 weeks before last day of classes)	Submit an acceptable draft of the thesis (one that your faculty advisor has read and approved) to your thesis committee.
Week 8 - 9	Thesis committee reads thesis and returns it to you for final editing by end of week 9. While your committee reads your thesis, you should prepare the thesis defense talk including appropriate illustrations.
Week 10	Schedule the thesis defense (at least two weeks before the scheduled defense date).
Week 11	Stage your Thesis Defense
Weeks 11 - 12	Final editing of thesis (incorporating any changes suggested during your defense) and preparation of the final draft that is in the proper format outlined in the <u>University Thesis Manual</u> .
Week 12 or 13	Submit thesis to the Office of Graduate Studies for reading by the University Thesis Reader. See important dates at <b><a href="http://www.fullerton.edu/graduate/currentstudents/dates.php">http://www.fullerton.edu/graduate/currentstudents/dates.php</a></b>
Week 16	Deposit final copy of thesis in the University Bookstore. This deadline is usually during final examinations week. See important dates at <b><a href="http://www.fullerton.edu/graduate/currentstudents/dates.php">http://www.fullerton.edu/graduate/currentstudents/dates.php</a></b>

## The M.S. Thesis Defense

The thesis defense is the culmination of your MS program. It consists of a public presentation of the results of your Masters Thesis and is a celebration of all your hard work. The following guidelines must be followed:

The thesis defense should be scheduled only after consultation with your Faculty Advisor and your thesis committee has approved an acceptable draft of the MS thesis.

Ordinarily, an acceptable draft of your thesis (one that has been undergone an initial review by your Faculty Advisor) should be submitted to your Thesis Committee at least 6 weeks prior to the last day of classes of the semester in which you plan to graduate. The committee should read the thesis and return it to you within 2 weeks. Note that if the thesis committee requires substantial changes and/or additions to the thesis, 6 weeks may not be enough time.

All thesis defenses must be scheduled during a regular semester (including finals week). The Graduate Committee must approve exceptions (e.g. summer session defenses) in writing.

The date and time of the thesis defense is determined in consultation with the thesis committee. All efforts should be made to schedule the defense at a time that is convenient for the thesis committee, faculty and students of the department.

No less than 2 weeks before the date of the thesis defense, a Thesis Defense Scheduling Form must be completed and submitted to the Department. The abstract of the thesis must be attached to this form. The Department Secretary will be responsible for distributing and posting flyers advertising the date and time of the defense.

The thesis defense should begin with a 30-50 minute, professionally illustrated, rehearsed presentation of the thesis, and followed by a 10-15 minute question/answer period. This portion of the defense is open to the public.

Following the presentation and public question/answer period, everyone will leave the room except for the student and the thesis committee. Members of the thesis committee will then have the opportunity to ask questions in private. They may also choose to make suggestions for additions/changes to the thesis prior to completing the final draft. The length of this private question and answer period will be determined by the Thesis Committee.

Immediately following the defense, the thesis committee will vote on the outcome of the defense and discuss any final revisions that must be made to the thesis.

The thesis committee will report the outcome of the defense on the Department Thesis Approval Form. In addition, your Faculty advisor should complete the official university Thesis Approval Form available from the Graduate Studies Office.

Should the committee determine that the student has not passed the defense, a new defense may be scheduled no sooner than 6 months from the date of the first defense. A second failure is final.

## Binding Your Thesis

The final bound copy of the thesis should be presented to the library before the last day of finals during the semester in which the defense occurred. Note that binding may require a significant amount of time (up to 5 months). **It is up to you to plan ahead so that you will have enough time to meet all of the University deadlines!**

Bound hard copies and electronic (pdf format) copies of your thesis should also be presented to the Department and Thesis Advisor. Guidelines for preparing the MS Thesis in addition to the department guidelines discussed here can be found in the Thesis Manual available from the Office of Graduate Studies. Note: the department copy can be produced on normal/standard paper.

The Center for Oral and Public History in Pollack Library South, Room 363 provides very reasonable fees for thesis binding. Information and prices for their service can be found online at <http://coph.fullerton.edu/bindingcosts.asp> or by telephone at (657) 278-3580.

The Department will provide students up to \$100 to help defray the costs of thesis binding, subject to budgetary constraints. This comes with the expectation that hardbound copies will be provided to both the Department and University. To receive this support, you will need to provide the Department Administrative Coordinator with a copy of the **binding order** and your **receipt**. More information is available in the Geology Main Office.

# Funding Your Thesis

<http://www.fullerton.edu/graduate/funding/>

The Department of Geological Sciences typically employs several graduate teaching assistants to teach lower division geology laboratories. Research assistantships funded by faculty research grants may also be available. We have a very limited number of non-resident tuition waivers for graduate students from out-of-state. For additional information about financial aid, contact the Office of Financial Aid (University Hall – Room 146) at (714) 278-3125.

## Teaching Assistants

Incoming students who are interested in a Teaching Assistantship (TA) should indicate this desire when applying for admission to the Department. The Department only considers TA applications during the application cycle for Fall admission (see the Department Grad Application). Students who apply for aid in this manner will receive their TA offer at the same time as their admission decision.

Although TAs are usually assigned to incoming students, the Department recognizes that existing students (in particular non-traditional students) may wish to teach a limited number of classes in the later stages of their thesis work. For instance, many students near the end of their thesis work develop an interest in teaching at the High School or Community College level. A Teaching Assistantship will often help these students explore this interest.

Any currently-enrolled student interested in an opportunity to teach a class should discuss this with his/her Thesis Advisor. The student, in consultation with his/her Thesis Advisor, should then fill out the departmental form “*Departmental Application for T.A. Support for Continuing Master's Degree Students in Geological Sciences*” found on the Department of Geological Sciences website. If approved, the Chair will include you in the class scheduling for the following semester.

## Research Grants:

***Note: deadlines and total money awarded may vary and change over time – please double check all associations prior to determining where to apply)...the details below were last up-dated Fall 2013. To obtain the most recent numbers and deadlines, please do the necessary investigation.***

You should consider submitting grant proposals during your first year as a graduate student at CSUF. Research grants not only can serve as a source of funds for you to conduct your research, but they can also help you focus and sharpen your research goals.

Potential sources of research funds include, but are not limited to:

### ASI Student Research Grants (CSUF)

ASI Research Grants is monitored by the ASI/TSU Office of Program Support. Nominal grants are available to CSUF graduate and undergraduate students, from all fields of study, involved in research. This process begins during the fall semester and the recipients of the grant are notified by the first of the spring semester. For more information on receiving a research grant, visit the ASI/TSU Office of

Program Support, in TSU Room 269 or call 657.278.7736. Note: ASI research grants typically require you to attend a mandatory orientation meeting on campus.

**Association of Engineering Geologists**

Up to \$1500, typically due February 1<sup>st</sup> of each year.

<http://www.aegweb.org/i4a/pages/index.cfm?pageid=3410>

**American Association of Petroleum Geologists**

Up to \$2000, typically due January 31<sup>st</sup> of each year.

<http://foundation.aapg.org/gia/index.cfm>

**Association of Women Geologists (AWG)**

Deadlines and amounts vary.

<http://www.awg.org/eas/scholarships.html>

**Geological Society of America**

Up to \$3500, typically due February 1<sup>st</sup> of each year.

<http://www.geosociety.org/grants/gradgrants.htm>

**Northern California Geological Society**

Up to \$750, typically due January 31<sup>st</sup> of each year.

<http://www.ncgeolsoc.org/>

**Society of Economic Geologists (SEG)**

Amounts vary, typically due February 1<sup>st</sup>.

<http://www.segweb.org/StudentGrants.htm>

**SEPM (Society for Sedimentary Geology)**

Deadlines and amounts vary.

<http://sepm.org/awards/grantshome.htm>

**Sigma Xi**

Up to \$1000, due March 15<sup>th</sup> and October 15<sup>th</sup>, annually.

<http://www.sigmaksi.org/programs/giar/index.shtml>

**Southern California Academy of Sciences**

Up to \$2000, typically due February 15<sup>th</sup> of each year.

<http://scas.jsd.claremont.edu/>

**Women in Science (Sigma Delta Epsilon):**

Up to \$4000, due January 15<sup>th</sup> annually, must be a woman.

<http://www.gwis.org/grants/default.htm>

**Women in Science (Loreal):**

Up to \$20,000, typically due October 31<sup>st</sup> annually, must be a woman.

<http://www.lorealusa.com/en/us/>

## **Travel Grants**

Travel grants are used to help offset the cost of travel to meetings. The amount granted is typically greater if you are presenting a poster or giving a talk at the meeting.

**NSM Interclub Council (ICC), CSUF**

Amounts and deadlines vary. Check deadlines with the Geology Club.

**Fleckles Travel Grant (CSUF)**

\$300 within CA, \$500 in US, \$800 outside US; Deadlines vary.

**Geological Society of America (GSA)**

Amounts and deadlines vary.

<http://www.geosociety.org/sectdiv/cord/travelGrants.htm>

**SEPM (Society for Sedimentary Geology)**

Deadlines and amounts vary.

<http://sepm.org/awards/grantshome.htm>



## Appendix 1 - Glossary of Terms

Faculty Advisor: A faculty member of the Department of Geological Sciences who is chosen by the student. The Faculty Advisor supervises the development of the student's study plan, research, and writing and editing of the MS Thesis. The Faculty Advisor also acts as the chair of the student's Thesis Committee.

Thesis Committee: A committee of at least three full-time Faculty members at CSUF, two of which (including the Faculty Advisor) must be from the Department of Geological Sciences. A fourth member of the committee may be a CSUF faculty member, a faculty member from a related department in CSUF, a faculty member from another university, or a professional geologist working in government or industry.

Graduate Advisor: The Geological Sciences faculty member who is chair of the Graduate Committee.

Graduate Committee: A committee of the Department of Geological Sciences that supervises the graduate program in geology (see Thesis Committee).

Deficiencies: Upon admission to our program, the Graduate Committee may determine that a student must complete certain coursework that would ordinarily be required prior to admission. A student may also be admitted with a deficient GPA (either in geology, related fields, or overall). Additional course work (or repeated course work) must be taken in order to raise the GPA to the published minimums. Any deficiencies must be completed prior to submitting a study plan (and before completing more than 13 units of graduate course work).

Classified Standing: An admitted graduate student who has submitted a study plan that has been approved by the Office of Graduate Studies.

Study Plan: An official document that outlines the coursework that will be taken to fulfill the requirements for the MS degree. A study plan must be submitted to the Office of Graduate Studies and approved prior to the student becoming classified (see classified standing).

## Appendix 2 - Graduate Course Descriptions

Note: A maximum of 3 units of Geol 599 (Independent Study) and a maximum of 3 units of 593 (directed study) may be taken.

**404 Optical Mineralogy and Petrography (3):** Prerequisites: Geological Sciences 303B. Principles of optical mineralogy. Use of petrographic microscope to analyze minerals and textures of igneous, metamorphic, and sedimentary rocks. (1 hour lecture, 6 hours laboratory, field trip)

**406 Geochemistry (3):** Pre or corequisites: Geological Sciences 303B, Chemistry 120B or 125, Mathematics 130 or 150A. Basic chemical and thermodynamic principles applied to the origin and alteration of igneous, sedimentary and metamorphic rocks and economic mineral deposits.

**408 Volconology (5):** Prerequisites: GEOL 303B; MATH 130 or MATH 150A. Volcanic eruptions and their deposits, hazards and impact on society. Classroom activities and field trips (required) will explore modern and ancient volcanic environments. (1 hour lecture discussion, 3 hours laboratory, field trips).

**410 Physical Science Concepts (4):** Prerequisites: completion of one course each from G.E. Categories B.4. and B.1. Physical and chemical interactions among major Earth systems (e.g., geosphere, atmosphere and hydrosphere) considered within the context of Earth's position in its solar system and in space. Appropriate for elementary teachers. Not available for degree credit in B.S. or M.S. in Geology; available for credit in M.A.T.S. in the Science Education program. (2 hours lecture, 2 hours activity)

**420 Earth Science for Science Teachers (4):** Prerequisites: [GEOL 101](#), [GEOL 101L](#) and junior or senior standing, or science teaching credential. Major concepts of the earth sciences with primary emphasis on physical and planetary geology and secondary emphasis on meteorology and oceanography. (3 hours of lecture, 3 hours of laboratory, field trips)

**436 Hydrogeology (4):** Prerequisites: [GEOL 101L](#) and [GEOL 335](#) or equivalent; [MATH 130](#) or [MATH 150A](#). Occurrence, movement and utilization of groundwater resources; geological, geophysical and hydrological methods for groundwater exploration and development. Well hydraulics and ground-water contamination. (2 hours lecture, 3 hours laboratory, field trips)

**440 Paleoclimatology (3):** Prerequisite: [GEOL 335](#). Methods and archives used to understand past climate; examining atmospheric circulation, oceanic circulation and the Earth's energy budget in the context of past climate change. (3 hours lecture, field trips)

**455 Earthquake Seismology (3):** Prerequisites: Geological Sciences 101; Physics 225, 225L or 211, 211L, Mathematics 130 or 150A. Seismic waves, their recording and measurement. Estimation of earthquake source strength, location and mechanism. Introduction to seismic risk and strong motion studies. (3 hours lecture, field trips)

**456 Geophysics (3):** Prerequisites: Mathematics 150B or 337 or 338; Physics 225, 225L or 211, 211L; Physics 226, 226L or 212, 212L recommended. Seismic refraction, gravity, magnetic and

electrical techniques and fundamentals as applied to determination of subsurface structure, groundwater and location of mineral resources. (2 hours lecture, 3 hours laboratory, field trips)

**470 Environmental Geology & Planning (4):** Prerequisites: Geological Sciences 101L or 420. Geologic processes, hazards, mineral and energy resources and their interaction with planning and environmental regulations. (3 hours lecture, 3 hours lab, field trips)

**475 Quaternary Tectonics (4):** Prerequisites: [GEOL 360](#), [GEOL 380](#). Processes and products of relatively young Quaternary tectonics. Evaluation of surface tectonic features, their ages, deformation styles and structural regimes. Assessment of past and contemporary deformation rates. (2 hours lecture, 6 hours lab, field trips)

**481A Geology Field Camp I (4):** Prerequisites: Geological Sciences 303B, 321, 360, and 380. Advanced geologic mapping in a variety of geologic settings. Field report, map and cross-sections required. Instructional fee required. (45 hours per week for four weeks during intersession or summer)

**481B Geology Field Camp II (3):** Prerequisites: Geological Sciences 380 and consent of instructor. Advanced geologic field work in a variety of geologic settings. Field report, map and cross-sections required. Instructional fee required. (45 hours a week for three weeks during summer)

**481C Hydrology and Engineering Geology Field Camp (4):** Prerequisites: Geological Sciences 376, 380 and 436. Geologic mapping and hydrologic mapping and techniques applied to integrated hydro-geologic model for selected areas. Field report(s), map(s), cross-sections required. Instructional fee required. (45 hours per week for three weeks during summer)

**493 Directed Studies (1-4):** Prerequisites: junior and senior standing and consent of instructor. Directed studies in specialized areas of the geological sciences, such as petroleum geology, sedimentology, optical and instrumentation techniques. Library research and written reports required. May be repeated once with a different topic. Not available for M.S. Geology graduate credit.

**495 Geological Sciences Internship (3):** Prerequisite: junior or senior standing in geological sciences. Geological sciences work experience, salaried or volunteer, with industry, government or private agencies. Student intern will be supervised by faculty adviser and employer. (1 hour of seminar per week plus a total of 120-150 hours of work experience)

**496L Geological Sciences Tutorial (2):** Prerequisite: 20 units in geological sciences. Supervised experience in geological sciences teaching through tutoring or assisting in laboratory or field classes.

**498 Undergraduate Thesis (1-3):** Prerequisite: submission of a thesis proposal, signed by thesis advisor. Developed as an extension of an advanced course, conducted independently by the student under faculty supervision, culminating in a paper of professional quality. Two units maximum credit permitted.

**499L Independent Study (1-3):** Independent study of a topic selected in consultation with and completed under the supervision of the instructor.

**500 Advanced Concepts in Geology (4):** Current advances in geological concepts emphasizing southern California geology. develop tools to construct a thesis proposal: research planning; developing thesis topics; bibliographic methods; research design (laboratory and field); research proposal preparation. may include seminars, group projects and field trips. (2 hours lecture, 2 hours activity, field trips).

**506T Advanced Topics in Geochemistry (3):** Prerequisite: Geological Sciences 406 or consent of instructor. Special topics on modern techniques and recent advances in geochemistry such as geochronology and environmental isotope geochemistry. May be repeated once for credit with a different topic. (3 hours lecture; field trips)

**510T Advanced Topics in Geology (3):** Prerequisite: consent of instructor. Modern techniques and recent advances in geology such as basin analysis, igneous petrology, tectonics, and paleoclimatology. May be repeated for credit with a different topic. (3 hours lecture; field trips)

**535T Advanced Topics in Hydrogeology (3):** Prerequisite: graduate standing or consent of instructor. Modern techniques and recent advances in hydrogeology such as groundwater modeling, well hydraulics and aquifer analysis, contaminant hydrogeology, hydrogeochemistry, and environmental sampling and protocols. May be repeated for credit with a different topic. (3 hours lecture; field trips)

**555T Advanced Topics in Geophysics (3):** Prerequisite: consent of instructor. Study of selected topics in geophysics. Evaluation of whole-Earth geodynamics; geophysical evidence of large-scale Earth properties; links between earthquakes and plate tectonics. (3 hours lecture/discussion, field trips.) May be repeated for credit once with different topic.

**575T Advanced Topics in Engineering Geology (3):** Prerequisite: consent of instructor. Modern techniques and recent advances in engineering geology such as quaternary geology, landslide analysis, and paleoseismology. May be repeated for credit with a different topic. (3 hours lecture; field trips)

**590 Geoscience Seminar (1):** Attendance at departmental and other seminars. Discussion and/or written assignments based on seminar topics required. Must be repeated at least once.

**593 Directed Graduate Studies in the Geosciences (1-3):** Prerequisites: Postbaccalaureate standing and consent of instructor. Directed studies of specialized geoscience topics not covered by existing courses and tailored to individual student interest. Literature research, recitations and written reports required. May be repeated for a total of 3 units.

**598 Thesis (3):** Prerequisites: approval of adviser and completion of M.S. thesis proposal that is approved by the Department Graduate Committee. Design, analysis, and presentation of a research problem culminating in a thesis for the master's degree. May be repeated once.

**599 Independent Graduate Research (1-3):** Prerequisites: approval of adviser and Department Graduate Committee. Independent research on an approved topic. May be repeated for up to 3 units maximum.

## Appendix 3 – Forms

All forms can be found at:

[http://geology.fullerton.edu/index.php?option=com\\_content&view=article&id=155:masters-degree&catid=25&Itemid=173&showall=&limitstart=11](http://geology.fullerton.edu/index.php?option=com_content&view=article&id=155:masters-degree&catid=25&Itemid=173&showall=&limitstart=11)

**Department of Geological Sciences**  
**Evaluation of Teaching Associates, Graduate Assistants, and Instructional Student Assistants**

**SEMESTER**

**Name of Assistant** \_\_\_\_\_

**Class Visitor** \_\_\_\_\_

**COURSE** \_\_\_\_\_

**Type of Assistant:**

Teaching Associate (TA) \_\_\_\_\_

Instructional Student Assistant (ISA) \_\_\_\_\_

Graduate Assistant (GA) \_\_\_\_\_

	Above Satisfactory	Satisfactory	Needs Improvement	Unsatisfactory	Not applicable
Understanding of course objectives					
Willingness to help students					
Clarity of explanation					
Knowledge of subject					
Was prepared for class and/or field activities					
Enthusiasm					
Dependability (only if you visit more than once)					
Initiative					
Maintenance of good working conditions in lab					
Professionalism					
Met the expectations of the position					

Class visitor recommends reappointment next semester/year?      Yes \_\_\_\_\_      No \_\_\_\_\_

Thesis Advisor affirms satisfactory progress towards the MS and recommend reappointment next semester/year?      Yes \_\_\_\_\_      No \_\_\_\_\_

Grad Committee recommends reappointment next semester/year?      Yes \_\_\_\_\_      No \_\_\_\_\_

Suggestions for new assignment:

Additional comments:

**Department Chair Decision: Rehire** \_\_\_\_\_

**Do Not Rehire** \_\_\_\_\_

**Reason (if not rehire):**

## Appendix 4 - Faculty Information

### Akciz, Sinan

Assistant Professor

- [sakciz@fullerton.edu](mailto:sakciz@fullerton.edu)
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- **Research Interest:** Structural geology, Paleoseismology

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### Armstrong, Phillip

Professor and Chair

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- **Research Interest:** Structure/Tectonics

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### Bonuso, Nicole

Associate Professor and Undergraduate Advisor

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- **Research Interest:** Invertebrate Paleontology

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## Bursztyn, Natalie

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## Carlin, Joe

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## Kirby, Matthew

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## Knott, Jeffrey

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## [Loyd, Sean](#)

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## Memeti, Valbone

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## Woods, Adam

Professor

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- **Research Interest:** Sedimentology and Stratigraphy

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