# UC Davis

## Graduate Group in Geography

### Student Guide

**2022-2023**

**Chair:**  
Diana Davis  
4210 SSH  
(530) 752-0802  
geovet@ucdavis.edu

**Vice-Chair / Lead Graduate Advisor:**  
Mark Cooper  
1335 Hart Hall  
(530) 304-7224  
mhcooper@ucdavis.edu

### Graduate Advisors:

<table>
<thead>
<tr>
<th>Graduate Advisor</th>
<th>Office</th>
<th>Phone</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mary Cadenasso</td>
<td>1314 Plant Sciences</td>
<td>(530) 754-6151</td>
<td><a href="mailto:mlcadenasso@ucdavis.edu">mlcadenasso@ucdavis.edu</a></td>
</tr>
<tr>
<td>Mark Cooper</td>
<td>1335 Hart Hall</td>
<td>(530) 304-7224</td>
<td><a href="mailto:mhcooper@ucdavis.edu">mhcooper@ucdavis.edu</a></td>
</tr>
<tr>
<td>Lynette Hart</td>
<td>3207 VM3B</td>
<td>(530) 752-2181</td>
<td><a href="mailto:lahart@ucdavis.edu">lahart@ucdavis.edu</a></td>
</tr>
<tr>
<td>Ryan Galt</td>
<td>2429 Hart Hall</td>
<td>(530) 754-8776</td>
<td><a href="mailto:regalt@ucdavis.edu">regalt@ucdavis.edu</a></td>
</tr>
<tr>
<td>Erwan Monier</td>
<td>247 Hoagland Hall</td>
<td>(530) 754-1837</td>
<td><a href="mailto:emonier@ucdavis.edu">emonier@ucdavis.edu</a></td>
</tr>
</tbody>
</table>

**Graduate Program Coordinator:**  
Carrie Armstrong-Ruport  
129 Hunt Hall  
(530) 752-4119  
caruport@ucdavis.edu

*version 2023/06*
# Table of Contents

**Introduction** ...................................................................................................................................................... 4

**Academic Advising** ........................................................................................................................................... 5

- Major Professor .................................................................................................................................................. 5
- Graduate Advisors .......................................................................................................................................... 5
- Paperwork ......................................................................................................................................................... 6

**Coursework and Planning Your Program Path** ................................................................................................ 6

- Entering the Program from outside Geography .......................................................................................... 6
- Courses ............................................................................................................................................................ 6
- GGG Seminar .................................................................................................................................................. 7
- Designated Emphases for the Ph.D. .............................................................................................................. 7

**Requirements for an M.A. in Geography** ........................................................................................................... 8

- *M.A. Coursework* ....................................................................................................................................... 8
  - Basic Course Requirements for Master’s Degrees ..................................................................................... 8
  - Transfer Units ............................................................................................................................................... 8
- *M.A. Thesis or Comprehensive Exam* ........................................................................................................ 9
  - M.A. Plan I (Thesis), Additional Requirements ...................................................................................... 9
  - M.A. Plan II (Comprehensive Examination), Additional Requirements ................................................. 9

**Requirements for a Ph.D. in Geography** .......................................................................................................... 10

- Basic Course Requirements for Ph.D. Students ............................................................................................ 10
- Transfer Units ................................................................................................................................................. 11
- *Ph.D. Qualifying Examination* ........................................................................................................................ 12
  - Qualifying Examination ............................................................................................................................... 12
  - Timeline for Qualifying Exam, Proposal Defense, and Preparation ....................................................... 12
  - Ph.D. Qualifying Examination Committee ............................................................................................... 13
  - Ph.D. Qualifying Examination Process ...................................................................................................... 14
- *Dissertation Research* ..................................................................................................................................... 17
  - Dissertation Structure ................................................................................................................................ 17
  - Dissertation Committee .............................................................................................................................. 17

**Financial Support** .......................................................................................................................................... 18

- *Employment* .................................................................................................................................................. 18
  - Teaching Assistant ...................................................................................................................................... 18
  - Graduate Student Researcher ....................................................................................................................... 18
  - Work-Study .................................................................................................................................................. 18
  - Other On-Campus Employment .................................................................................................................. 18
  - Off-Campus Employment ............................................................................................................................ 18
- *Fellowships, Scholarships, and Grants* ........................................................................................................... 19
  - Geography Graduate Group Fellowships .................................................................................................... 19
  - UC Davis Internal Fellowships ................................................................................................................... 19
  - Jastro Research Scholarship .......................................................................................................................... 19
  - External Fellowships .................................................................................................................................. 19
- *Federal Financial Aid* ..................................................................................................................................... 20
Campus Organizations and Activities Related to GGG ................................................................. 21
  GGG Executive Committee ........................................................................................................ 21
  Graduate Student Association ................................................................................................... 21
  GLOBAL ....................................................................................................................................... 21
  Gamma Theta Upsilon, Nu Iota Chapter ...................................................................................... 22
  Annual Business Meetings of the GGG ..................................................................................... 22
  Geography Newsletter ................................................................................................................ 22
  GGG Seminar Student Committee .......................................................................................... 22

Miscellaneous Resources ............................................................................................................. 23
  Office Space ............................................................................................................................... 23
  Student Resources Canvas Page ................................................................................................ 23
  Email Listservs for GGG Students .......................................................................................... 23
  Other Campus Listservs ............................................................................................................ 24
  Graduate Student Guide for Managing UCD Expenses .......................................................... 25
  HELP! ......................................................................................................................................... 27

Appendices and Forms ................................................................................................................ 28
  A. Required Formatting for Academic Writing ......................................................................... 28
  B. Expected Annual Degree Progress ...................................................................................... 29
     Normative Time To MA Degree ............................................................................................ 29
     Normative Time To PhD Degree if entering with MA/MS or equivalent ......................... 29
     Normative Time To PhD Degree if entering with only BA/BS .......................................... 30
  C. Elements of a Dissertation Proposal ................................................................................... 31
  D. Degree Requirements Checklists
     Preparation for Geography Graduate Study for Students without a Geography Undergraduate Degree 34
     GGG Program of Study for Master’s Degree (MA) Requirements Checklist ....................... 35
     GGG Program of Study for Doctoral Degree (Ph.D.) Requirements Checklist .................. 36
     Pre-approved Geographic Preparatory Courses ................................................................. 37
     Pre-approved Geographic Depth Courses .......................................................................... 38
  E. Guidance Procedures for GEO 299 (research units)
Introduction

The UC Davis Graduate Group in Geography (GGG) has about 70 graduate students more than 60 faculty members, drawn from 24 departments. In terms of the number and diversity of affiliated faculty, we are the nation’s largest geography graduate program, and the group supports a wide range of geographic scholarship. See our website for more details: http://geography.ucdavis.edu

The Graduate Group’s office is in 129 Hunt Hall. The Graduate Program Coordinator is Carrie Armstrong-Ruport. Her office hours are posted on the door of 129 Hunt Hall. Paperwork also may be left in the Program Coordinator’s mailbox in Room 131 Hunt Hall during normal business hours.

UC Davis Geography is a unique program because it offers graduate degrees not through a department but through an inter-departmental graduate group made up of a network of more than 60 scholars, in approximately 20 departments across campus, who use geographical perspectives and methods in their research and teaching. The program provides the opportunity for a very rich, flexible, and dynamic educational experience. Students develop a strong foundation in geography through required core courses in the program but have flexibility in designing an educational program that meets their own interests and goals.

The program's diversity and size can make it a challenge to navigate, and this guide is intended to help you with that. If in doubt, do not hesitate to talk to your Major Professor (faculty advisor/mentor), the Program Coordinator, or a Graduate Advisor.
Academic Advising

Major Professor
A student’s Major Professor serves as a mentor and is a primary resource for scholarly advising, external funding, and career development. The Major Professor’s home department is also the student's home department (acting as a second home to the GGG), and students are encouraged to participate in their department's activities, such as seminar series. The department is responsible for providing the graduate student with an office, mailbox, and laboratory space, as available. There is also a general-use graduate student research room that GGG students can use in Hunt 158.

Each student is admitted to the program with a Major Professor. Major Professors advise their students on courses to take to formulate a program of study best suited to the student's research and on other professional needs. The Major Professor serves as chair of the doctoral dissertation/MA thesis committees and the MA exam committee. The Major Professor may not chair the qualifying exam committee.

The Major Professor mentors and guides the student on exam preparation, thesis and/or dissertation writing, and preparation for the Ph.D. qualifying examination. Mentoring is defined as a close relationship between a graduate student and a faculty member who provides guidance, support and research advice in an individualized manner. Major Professors and students should consult UC Davis' Mentoring Guidelines regularly (https://geography.sf.ucdavis.edu/mentoring-guidelines).

Although the Major Professor plays the lead role in providing guidance, students should also regularly consult with the Graduate Program Coordinator and their Graduate Advisor and report on their academic progress. Should a student need to change their Major Professor during their studies, they should first consult with their Graduate Advisor. If a Major Professor believes a student should change to a different Major Professor, they should first consult with the GGG Chair or Lead Graduate Advisor.

Graduate Advisors
Graduate Advisors are an essential part of advising and mentoring within UC Davis’s graduate group system. They are nominated by the Chair of the Geography Graduate Group, approved by the Executive Committee, and formally appointed by the Dean of Graduate Studies to serve as advisors about matters affecting graduate students in their academic program. Currently appointed Graduate Advisors are listed on the front page of this handbook. The Graduate Advisor’s signature is the only signature officially recognized by Graduate Studies on a variety of forms and petitions used by graduate students.

In general, Graduate Advisors act as a source of academic program information and provide assistance with understanding program requirements. You will be assigned to work with a Graduate Advisor that has a similar area of interest to your own. Students should meet with their Graduate Advisor on a regular basis, at least once per quarter, and keep them up to date on their progress. Graduate Advisors are expected to reply to student queries within one week and to sign any necessary forms within one to two weeks.

In particular, the Graduate Advisors are responsible for:

1. Providing feedback on academic study plans developed by the student.
2. Reviewing and acting on requests by graduate students to drop or add courses or to take courses on a Satisfactory/Unsatisfactory basis.
3. Reviewing and approving petitions for advancement to candidacy for the Ph.D. degree and making recommendations for the composition of committees for M.A. theses and exams, doctoral dissertations, and/or qualifying examinations.
4. Periodic review of the student’s progress towards degree objectives, and in particular:
   a. meeting with each student in Fall quarter to discuss and approve their course plan for the year,
b. completing a degree requirement checklist (p. 35-36) with each student and submitting these to the program coordinator by December 1 each year,
c. filing an annual Student Progress Assessment concerning each student’s progress toward completion of degree requirements by June 30.

5. Going over the details in this handbook regarding QE procedures, forming committees, and thesis/dissertation research and writing to ensure student comprehension and compliance.

6. The approval of Planned Educational Leave (PELP).

7. For students without prior academic degrees in Geography, the Graduate Advisor is responsible for approving a preparatory program of courses in geographic theory and methods, in consultation with the student and their Major Professor.

Paperwork
The Graduate Program Coordinator manages almost all paperwork related to the Graduate Group. The Graduate Advisors (listed on the front page of this guide) need to sign most student forms. You can make arrangements to speak with them at any time. If all you need is a signature, you can email it to the Graduate Program Coordinator in 129 Hunt Hall. The Graduate Program Coordinator is responsible for submitting all forms to the Office of Graduate Studies.

Coursework and Planning Your Program Path

Entering the Program from outside Geography
For students entering the graduate program without an undergraduate or prior graduate degree in geography, it will be necessary to evaluate your prior coursework, and you will most likely need to take additional preparatory coursework in geography. This preparatory work must be agreed upon early in your program in consultation with your Major Professor and Graduate Advisor. A list of pre-approved preparatory courses and a form for this purpose appears in Appendix D of this guide (Preparation for Geography Graduate Studies for Students without a Geography Undergraduate Degree). Students wishing to enter the GGG from other graduate programs on campus should contact a Graduate Advisor.

Generally, a student without an undergraduate degree in a closely allied field can expect to be required to complete the rough equivalent of a minor in Geography, consisting of one course each in human geography, physical geography, and geographic methods, plus an additional 9 units of geographic coursework. Those students with a degree in a closely allied field will likely need to complete fewer courses but must also meet with a Graduate Advisor.

Courses
A list of the geography courses offered at UC Davis is available on-line here: https://catalog.ucdavis.edu/courses-subject-code/geo/. There are, however, many more courses that are of interest to geography graduate students that are offered by several departments, including ad-hoc seminars on current topics that are offered each quarter. We encourage you to review the registrar’s schedule of upcoming classes (https://registrar-apps.ucdavis.edu/courses/search/index.cfm), and to contact professors and departmental administrators to learn about relevant coursework that may not be part of the regular geography offerings.

GGG students have created a list of courses they have taken in the past that are likely to be of interest to our diverse student body in the graduate group. You can find this list and contribute to it in the Geography Student Resources site on Canvas (more information under the Miscellaneous Resources section below).
Courses vary year to year and a class taught one year may not be taught the next. It is good practice to directly contact professors that you are interested in taking a course from to find out their teaching schedule (usually planned 1 to 2 years in advance).

The goal of the GGG is to provide both basic training in geography and further specialized training. To meet this goal, the training of each student involves two essential components:

1. Core courses (GEO 200AN, 200BN, 200CN, 200DN and 200E) and seminars (GEO 297) in the discipline.
2. Methods and subject matter courses in an Area of Geographic Depth (which are broad subject areas of specialization). Students select a series of courses that fall within this area of specialization.

GGG Seminar
The GGG organizes a weekly seminar series during the Spring quarter. The GEO 297 seminar features speakers are selected by the seminar committee based on nominations by faculty and students as well as several faculty speakers who are members of the GGG. The Spring Geography Seminar is our core intellectual and social event, and all members of the group are expected to attend regularly even if they are not enrolled. Students have been very actively involved in organizing these seminars and they have also been successful in securing additional funding to bring in outside speakers. Students are required to enroll in the GEO 297 seminar twice.

Designated Emphases for the Ph.D.
The campus has approved several Designated Emphases (DEs) for Ph.D. students, which is an additional specialization in another academic field. For a student to participate in one of these DEs, the GGG must have been approved as a part of the DE. The GGG currently participates in eight DEs:

- African American and African Studies
- Computational Social Science
- Environmental Humanities (pending approval)
- Feminist Theory and Research
- International and Community Nutrition
- Native American Studies
- Science and Technology Studies (pending approval)
- Studies in Performance and Practice (pending approval).

Other DEs may be added. For more information see:
https://grad.ucdavis.edu/programs/designated-emphases
Requirements for an M.A. in Geography

M.A. Coursework

Basic Course Requirements for Master’s Degrees
Note that there are two plans that students may follow when pursuing an M.A. in Geography (see below). There is also a set of basic course requirements, outlined below, that students following either plan are required to complete. The GGG does not allow concurrent graduate degrees. Therefore any students wishing to begin a separate graduate degree in the GGG must have completed (been awarded) any outstanding graduate degrees in progress (such as IAD, CD, etc.). That is, when applying for a "double major" in geography you may not start taking the core GEO courses (200 series) or receive geography funding until you finish your graduate degree in your current subject. Deadline to apply for admission is 15 January.

1. A total of at least 36 post-graduation units (i.e., beyond the bachelor’s degree) must be completed. These 36 units include the 20 units of core courses listed below.

2. A series of requirements must be completed at UC Davis. These include:
   a. GGG Core Courses (quarter offered is subject to change): 20 units
      GEO 200AN — Geographical Concepts (4 units, fall quarter)
      GEO 200BN — Theory and Practice of Geography (4 units, winter quarter)
      GEO 200CN — Quantitative Geography (4 units, spring quarter)
      GEO 200DN — Socio-Spatial Analysis in Geography (4 units, winter quarter)
      GEO 297 — Seminar in Geography (2 units, taken twice)

      Students are expected to take the core courses during their first year in the program to fully benefit from the curriculum and to maintain degree progress in a timely fashion. Please note that GEO200AN and GEO 200BN must be taken in order. GEO 200BN may not be taken before GEO 200AN. Graduate Advisors will not waive these core courses unless the student has transcript notation and an appropriate syllabus from a similar graduate-level geography course taken at another institution.

   b. Area(s) of Specialization and Geographic Depth Courses must be approved by the student’s Major Professor and a Graduate Advisor.

3. Restricted electives within the Area of Geographic Depth or other area of specialization.

Transfer Units
University regulations on transfer units towards Master’s degree requirements are specified by the UC Davis Graduate Council. More information from Graduate Studies about transfer credits (and grading, courses and credit generally) can be found here: https://grad.ucdavis.edu/grading-courses-and-credit
M.A. Thesis or Comprehensive Exam

M.A. Plan I (Thesis), Additional Requirements
1. Of the above 36 units, at least 24 upper division (100-level) and graduate (200-level) course units must be completed, exclusive of 299 (Research) units and 396 (Teaching Practicum) units. Expected time to degree is normally two years.

2. A thesis must be completed, and students should enroll for units in GEO 299 (see appendix E) while working on their thesis. The thesis must be approved and signed by a committee constituted per the following guidelines:
   a. The Thesis Committee must have at least three members.
   b. The Chair of the Thesis Committee is the student's Major Professor and a Geography Graduate Group member. At least one other member of the Thesis Committee must be a Geography Graduate Group member.
   c. Any research including human or animal subjects must obtain IRB approval or exemption.
   d. The thesis should be between approximately 10,000-20,000 words, excluding references (35-75 pages, depending on formatting) and contain, in addition to an introduction (with clear thesis statement) and conclusion, between 2-5 substantial chapters and a properly formatted bibliography. Writing must follow the writing guidelines as detailed appendix A.
   e. A thesis defense/exam is not required by GGG but may be requested by the student’s Major Professor.

M.A. Plan II (Comprehensive Examination), Additional Requirements
1. Of the above 36 units, at least 32 upper division (100-level) and graduate (200-level) course units must be completed, exclusive of 299 (Research) units (appendix E) and 396 (Teaching Practicum) units. Expected time to degree is normally two years.

2. Before sitting for the Comprehensive Examination, the student must submit a paper in the style and quality of a manuscript submitted to an academic journal to the examination committee for unanimous approval. This paper should be prepared in consultation with the examination committee members (see below). This paper must be approved by the Major Professor, and then circulated to the committee at least 1 month before the exam date.

3. The student must pass a Comprehensive Examination administered by a committee. The format of the exam is typically an oral examination of up to two hours but may include a written component. The exam may be postponed if the Chair feels the student is not prepared. Passing requires the unanimous vote of the committee. The Comprehensive Examination Committee requirements are:
   a. The Comprehensive Examination Committee must have three members.
   b. The Chair of the Comprehensive Examination Committee is the student's Major Professor and a Geography Graduate Group (GGG) member. At least one other member of the committee must be a GGG member.
   c. The paper should be approximately 7,000-10,000 words in length (excluding references) with an introduction, clear thesis statement, several subsections supporting the thesis statement, strong conclusion, and bibliography. Writing must follow the standard guidelines (appendix A).
   d. Half of the exam will be based on a reading list agreed to by the student and committee members. The list should be organized in 2 or 3 different sections (based on common topics in geography) of approximately 20-30 readings each, derived from classes taken by the student and from consultation with committee members. Half of the exam will be based on questions about, and discussion of, the paper.
   e. The Chair of the Committee will report the result of the examination through the appropriate Graduate Studies form to the Program Coordinator.
Requirements for a Ph.D. in Geography

Basic Course Requirements for Ph.D. Students

Students pursuing a Ph.D. have the opportunity to craft and pursue a program that best fits and supports their needs and research interests. With that in mind, there are some basic course requirements for all Geography Ph.D. students, as detailed below. The GGG does not allow concurrent graduate degrees. Therefore any students wishing to begin a separate graduate degree in the GGG must have completed (been awarded) any outstanding graduate degrees in progress (such as IAD, CD, GGG, etc.). That is, when applying for a "double major" in geography you may not start taking the core GEO courses (200 series) or receive geography funding until you finish your graduate degree in your current subject. Deadline to apply for admission is 15 December.

1. At least 48 post-graduation course units at the 200-level must be completed, exclusive of 299 (Research) units (appendix E) and 396 (Teaching Practicum) units. The 48 units include the 22 units of Core Courses, 16 units of Geographic Depth Courses, and Elective Courses.

a. Core Courses (22 units)
A series of Core Courses must be completed at UC Davis. These consist of: (quarter offered is subject to change):
GEO 200AN — Geographical Concepts (4 unit, fall quarter)
GEO 200BN — Theory and Practice of Geography (4 units, winter quarter)
GEO 200CN — Quantitative Geography (4 units, spring quarter)
GEO 200DN — Socio-Spatial Analysis in Geography (4 units, winter quarter)
GEO 200E — Advanced Research Design in Geography (2 units, fall quarter of 2nd year).
GEO 297 — Seminar in Geography (2 units, taken twice)

Students are expected to take these core courses their first year in the program to fully benefit from the curriculum and to maintain degree progress in a timely fashion. Please note that GEO 200AN and GEO 200BN must be taken in order. GEO 200BN may not be taken before GEO 200AN. Graduate Advisors will not waive these core courses unless the student has transcript notation and an appropriate syllabus from a similar graduate-level geography course taken at another institution.

b. Area of Specialization/Geographic Depth Courses (16 units)
Every student is required an Area of Specialization and take at least 16 units of Geographic Depth Courses in that area. A list of pre-approved courses for four broad areas is provided in the appendices to this guide.

c. Elective Courses
Most students will need to take additional units to satisfy the minimum 48 post-graduate unit requirement. Elective courses may cover other area(s) of interest and specialization. Elective courses taken to satisfy the 48-unit requirement must at the 200-level courses and above (graduate-only courses.) Ph.D. students may enroll in elective 100-level courses (upper-level undergraduate), but these do not count toward the 48 post-graduate unit requirement.

2. Area(s) of Specialization and Geographic Depth Courses must be approved by the student’s Major Professor and a Graduate Advisor.

3. Ph.D. students must be in residence for at least six quarters and accrue course units during that period.
Transfer Units
The Graduate Advisor can assist students who wish to transfer a limited number of courses from other institutions or through UC Davis Extension (via petition) into their course of study. University regulations on transfer units towards Ph.D. degree requirements are specified by the UC Davis Graduate Council. More information from Graduate Studies about transfer credits (and grading, courses and credit generally) can be found here: https://grad.ucdavis.edu/grading-courses-and-credit
Ph.D. Qualifying Examination

Qualifying Examination
As part of the Ph.D. program requirements students are required to complete a Qualifying Examination. This exam tests the student’s knowledge of Geography core competencies and aims to prepare them to teach a broad range of geography courses and to be able to conduct geographical research throughout one's career.

In the GGG, there are three parts to the QE and advancement to candidacy: 1) the written exam over the reading lists, 2) the oral exam over the reading lists and the field statement and 3) the dissertation proposal presentation and defense. The proposal defense serves as an integral part of the research process as it provides an official platform and feedback mechanism for the research proposal.

The GGG allows for some flexibility in developing Ph.D. courses of study and students typically work with faculty from a wide range of departments. With this in mind, GGG adheres to the following basic Qualifying Examination requirements:

- A Qualifying Examination must be administered by the student’s Qualifying Examination Committee and passed according to the rules of Graduate Studies.
- The Qualifying Examination will be both oral and written and will cover general Geography, the student’s area(s) of specialization, depth of knowledge in selected subfields in Geography, course preparation indicated in the student's program of study, and the area of proposed research.

Timeline for Qualifying Exam, Proposal Defense, and Preparation

- 6 months before qualifying exam: the student should form their committee, meet with their Qualifying Examination Committee Chair, begin discussions of reading lists, outlining the dissertation proposal, and set a tentative date for the exam.
- 4 months before qualifying exam: the student should circulate their complete reading list to the committee for comments and additions, continue work on proposal, set an exact date for the exam, and apply for approval with Graduate Studies.
- 2 - 3 months before qualifying exam date: the student should finalize their reading list and circulate this final list to the committee.
- 2 months (or more) before qualifying exam date: a complete draft of the dissertation proposal must be provided to the student's major advisor for review and revision. The proposal must be approved by the major advisor before being circulated to the committee.
- 1 month (or more) before qualifying exam date: the advisor-approved proposal must be circulated to the entire dissertation committee. If the committee feels that the proposal requires revision before being suitable for the defense they may request revisions. Revisions must be made and the revised proposal must be provided to the committee at least two weeks before the qualifying exam date.
- 1 month (or more) before qualifying exam date: the student should circulate their final field statement to the committee. The student should also set aside time for answering the essay questions.
- 1 week before qualifying exam date: the student must have completed the essay questions and returned responses to the exam chair.
Ph.D. Qualifying Examination Committee

- The Qualifying Examination committee must have at least five members.
- At least two members must represent the area of specialization.
- At least one member must represent areas of geography outside the student’s area of specialization (to ensure knowledge of the breadth of the discipline).
- At least three members must be Geography Graduate Group members, and at least one member must be from outside the Geography Graduate Group. If there is no external member (i.e., if all belong to the GGG), a separate letter from a Graduate Advisor must be attached to the exam application stating why the committee composition is appropriate (usually based on breadth of disciplinary expertise of faculty).
- The Chair of the Qualifying Examination Committee must be a Geography Graduate Group member.
- Unlike in some other graduate groups, the dissertation chair (Major Professor) may, and typically does, serve on the qualifying examination committee. However, the Major Professor may not chair the Qualifying Examination committee.
- The student identifies five Qualifying Examination Committee members in consultation with their Major Professor and Graduate Advisor; this committee must be approved by the student’s Graduate Advisor and then formally appointed by the Dean of Graduate Studies.
Ph.D. Qualifying Examination Process

1. Determining eligibility to take the Qualifying Examination: The student must have passed all required coursework prior to the exam. A GGG Graduate Advisor must approve the coursework form, and it must be attached to the Qualifying Examination application. The members of the QE Committee must be finalized before the exam may be scheduled. If at any point the QE Chair or the Major Professor feels the student is not adequately prepared, the QE may be postponed. The student should start this process at least 6 months before they intend to take the exam, as scheduling the exam can be difficult. See recommended timeline below.

2. Filing to take the Qualifying Examination: The student must file with Graduate Studies to take the Qualifying Examination, and Graduate Studies must approve the candidate for examination and their committee. The date of the exam must be listed on this form, and Graduate Studies must be notified if the date or the approved committee changes. Graduate Studies sends the approved paperwork for the exam to the Chair of the Qualifying Examination Committee via e-mail.

3. Developing a reading list: A reading list must be generated that includes input from the student and all of the committee members. Syllabi from graduate seminars taken by the student normally form part of the list and committee members usually have additions for the list. This list should be based on 3 or 4 major geography topics, each of which should have 3 or 4 subtopics (for a total of between 9 and 16 subtopic lists grouped by the major topics). The reading list should contain a minimum of 90 and no more than about 250 entries (books and articles) and formatted as a reference list using a recognized citation style and properly formatted by author last name and using hanging indents with carriage returns between entries, etc. A finalized, complete reading list must be approved by the entire committee before beginning the field statement.

4. Developing a field statement and bibliography: The student should write a field statement that provides an analytical review of each of the major topic areas from the approved reading list. The field statement is a review of scholarly literature (an extended literature review) related to – but broader than – the student’s intended topic of Ph.D. research. The field statement should be a "state of the art" essay that provides an analytical summary, critically engages research and literature, demonstrates understanding of past and contemporary issues and debates, and identifies lacunae, and suggests future research directions in the major topic areas. The field statement serves to define the student’s areas of expertise, establish a foundation for dissertation research, provide a base for future teaching, and guide the development of the student’s professional identity. It should include, and refer to, an extensive bibliography that includes much of the literature from the student’s reading list. The field statement is expected to be 9,000-15,000 words total (around 30-50 double spaced pages using a standard 12-point font with 1” margins, see the writing guidelines as detailed in the appendix below.). For examples of excellent literature reviews published in the relevant literature, see Goldman & Schurman (2000) "Closing the Great Divide: New Social Theory on Society and Nature," Annual Review of Sociology, V. 26, pp. 563-584), and Bakker, K., & Bridge, G. (2006) "Material Worlds? Resource Geographies and the Matter of Nature," Progress in Human Geography, 30(1), 5-27.

5. The field statement must be turned in to the student's advisor for approval at least two months before the qualifying exam date. After being approved by the student's Major Professor, the field statement must be submitted to the entire committee at least one month before the qualifying exam date.

6. Developing a dissertation proposal: Writing of the dissertation proposal should begin early, with the Major Professor's guidance. A complete, polished draft must be given to the student's Major Professor for approval at least 2 months before the date of the proposal defense/exam. Once
approved, the proposal must be sent to the committee at least one month before the exam date. A finalized, possibly revised proposal must be provided to the committee a minimum of 2 weeks before the exam date. The proposal must be approved as defensible for the proposal defense/qualifying exam by the Major Professor before circulation to the committee.

**QE Part One: Written Exam on Reading Lists:**
Each committee member writes 2 questions over the student's reading lists (not the proposal). The chair of the Qualifying Examination Committee collects these questions from the committee members and delivers them to the student two weeks before the oral exam. The student chooses one question from each committee member to answer with a written essay. Each of the 5 written essays should be 1,500- to 2,500-words (exclusive of references.) The student has one week (7 days) to answer, and submits the five completed essays to the chair of the exam committee at least one (1) full week before the date of the QE; the chair of the exam committee then immediately distributes the essays to the full committee. Written answers must follow the standard writing guidelines as detailed in the appendix below.

**Note:** QE Part Two and QE Part Three are conducted on the same day and require a 3-4 hour block of time.

**QE Part Two: Oral Exam on Reading Lists and Field Statement
**
**Content:** The student is examined on their declared areas of geographic depth as indicated in the reading lists, their field statement, their written essays, and on geography as a discipline. This part of the qualifying exam has 3 primary purposes: 1) to ensure the student is adequately and broadly trained in geography in order to be able to teach effectively; 2) to ensure the student is adequately prepared to develop research projects with success; and 3) to ensure the student has adequate expertise in their designated area(s) of emphasis within geography.

**Format:** The format of the oral exam (which lasts 1.5 - 2 hours) is typically as follows:

a. Committee meets without the student for 5 to 10 minutes to review exam format, discuss responses to written questions, and the student’s overall performance in the program (as passing the exam is also a function of past performance and future potential,) The written essays are also often discussed in part with the student during the exam.

b. The committee brings the student in and asks the student to spend no more than 5 to 10 minutes describing their academic history, career goals, etc. This serves as a warm-up period. The dissertation proposal is not discussed or presented here.

c. The group then poses questions to the student on the responses to the written questions, the field statement, and the specified areas of geographic depth from the reading lists, from each committee member. Each member will be given approximately 15 - 20 minutes to ask questions, with follow-up opportunities.

d. If everyone is satisfied that they have asked enough questions, the committee asks the student to step outside while it confers. This typically takes 15 minutes, as all committee members contribute to the discussion.

e. A short break is taken before the final part of the QE.

**QE Part Three: Ph.D. Dissertation Proposal Presentation and Defense**
**Content:** Dissertation proposals are generally 20 to 30 pages (12-point font, double spaced, standard format) in length and contain introductory material, a working hypothesis or clear research problem, a relevant literature review, and a clear iteration of the research plan including details on methods, field sites, data sources, and modes of analysis, and a detailed chapter outline. The overall importance of the research problem must be made clear, as well as the broader implications. For more detailed information on how to write a strong proposal, see appendix
“Elements of a Dissertation Proposal” below. Writing must follow the writing guidelines as detailed in the appendix below.

**Format:** The format of the proposal defense (which lasts 1.5 - 2 hours) is typically as follows:

a. Committee meets without the student for a few minutes to review defense format and discuss the student's overall performance in preparing for research.
b. The committee brings the student in, and the student is given 15 to 20 minutes to present the dissertation proposal. This should be well organized and presented in a style similar to a conference presentation. The student may use slides and professional visual materials.
c. The committee then asks questions on the proposal, which typically lasts 1 - 1.5 hours. Each member will be given approximately 15 - 20 minutes to ask questions, with follow-up opportunities.
d. If everyone is satisfied that they have asked enough questions, the committee asks the student to step outside while it confers. This typically takes 15 minutes, as all committee members contribute to the discussion.
e. Finally, the student is brought back in and told the outcome of the QE. Relevant paperwork is signed, including the Advancement to Candidacy Form signed by the committee chair and given to the student, and the Qualifying Exam Report/Outcome Form that is given to the Graduate Program Coordinator and sent to Graduate Studies.

Students should coordinate with their advisor about when to begin work on the IRB (Institutional Review Board) training and then application if their research requires approval. This is often done directly after advancement to candidacy if not before. See https://research.ucdavis.edu/policiescompliance/irb-admin/
**Dissertation Research**

Because of the flexibility of being a Graduate Group, specific details on dissertation research should be discussed with the Major Professor. There are two basic requirements for dissertation research:

1. A dissertation must be completed which provides a significant contribution to the field of geography.

2. All members of the student’s dissertation committee must approve the final dissertation.

Most dissertation research takes place during the academic year following advancement to candidacy and the writing of the dissertation normally takes a subsequent academic year. Any research including human or animal subjects must obtain IRB approval or exemption. This should be applied for well in advance of commencing research. (see https://research.ucdavis.edu/policiescompliance/irb-admin/).

**Dissertation Structure**

A dissertation should normally have a strong introduction and conclusion in addition to between 3 to 5 substantial chapters (a total of 5 - 7 chapters). For many human geography students this may take the form of a book-type manuscript of approximately 200-300 double spaced pages with standard format. For physical geography students (and those with a STEM focus) this may take the form of 3 or 4 substantial chapters tied together with a substantial introduction and conclusion which demonstrates the coherence of the research project and its broader implications (with the aim of submitting each of the 3 substantial chapters as separate articles). The dissertation should follow the writing guidelines as detailed in appendix A and all Graduate Studies requirements. Detailed guidelines for writing a dissertation are provided in appendix C.

**Dissertation Committee**

The following rules govern the composition and appointment of the Dissertation Committee:

- The Dissertation Committee must have at least three members.
- The Chair of the Dissertation Committee is the student's Major Professor and a Geography Graduate Group member.
- At least one other member of the Dissertation Committee must be a Geography Graduate Group member.
- Members of a Ph.D. student’s Dissertation Committee are recommended by the Graduate Advisor, in consultation with the student, and appointed by the Dean of Graduate Studies.
Financial Support

It is the student’s responsibility to obtain needed funding, although the Major Professor and program may also help. Many sources of financial support are available for students.

Employment

Teaching Assistant
Teaching assistant (TA) positions provide a great opportunity to gain teaching experience, solidify your knowledge of subject matter, and receive financial support at the same time. TA positions are often available for classes taught by GGG faculty members through their home departments. The GGG Graduate Program Coordinator has TA applications for the group’s home department, Human Ecology, which includes CRD, LDA, SED, and HDE courses. However, GGG students may apply for TA positions in any department on campus. Please contact faculty in charge of teaching particular courses or the management officer of each department to learn of TA opportunities. Some opportunities may also be found through Aggie Job Link or the Graduate Studies Job Listings site: https://grad.ucdavis.edu/resources/graduate-student-resources/student-employment/job-listings.

Apply early, preferably between December and May, for positions in the upcoming year. TA application forms should be submitted to the Department or Graduate Group offering the course which you wish to assist. A minimum 3.0 cumulative GPA is required to be a TA. Appointments at 25% and above provide full remission of in-state tuition and fees for the quarter the appointment is held. TA positions are covered by a collective bargaining agreement between the University of California (UC) and the International Union, United Automobile, Aerospace and Agricultural Implement Workers of America (UAW) Local 2865. An electronic copy of the UC and UAW collective bargaining agreement can be accessed at http://ucnet.universityofcalifornia.edu/labor/bargaining-units/bx/contract.html.

Graduate Student Researcher
Individual faculty members, as well as laboratories, research clusters, and student service centers, fund Graduate Student Researcher (GSR) positions. They can provide excellent opportunities to gain experience in areas of importance to your graduate education and to receive financial support at the same time. Contact faculty in your area of interest to discover opportunities. Postings for institutional GSRs (such as for the Dean of Graduate Studies, Women’s Resource and Research Center, LGBTQIA Center, or research clusters like the Davis Humanities Institutes) can be found distributed through campus listservs or on Aggie Job Link. A minimum 3.0 cumulative GPA is required. Appointments at 25% and above provide full remission of in-state and non-resident tuition and fees for the quarter the appointment is held.

Work-Study
The Geography Graduate Group has a limited number of 25% work-study grants each year. Eligibility for these grants is related to the students’ individual income. Work-study grants are used to match funding from other employment on campus. A 25% work-study GSR appointment includes full remission of in-state tuition for the quarter the appointment is held. Deadlines and procedures for applying for work-study are available from the Graduate Program Coordinator. You must file a FAFSA by March 1 each year to determine eligibility for the following academic year.

Other On-Campus Employment
Other employment on campus may be available in technical and service capacities. See the Internship and Career Center for more information: https://icc.ucdavis.edu/staff-faculty/student-employment/

Off-Campus Employment
Off-campus employment opportunities exist in many areas of geography. These opportunities can often be discovered through the Internship and Career Center or through directly contacting agencies and firms doing work of interest to you. Job opportunities are also frequently sent to our email list for distribution.
Fellowships, Scholarships, and Grants

Geography Graduate Group Fellowships
Graduate Studies allocates the GGG Fellowship awards to help fund students. Most fellowships go to incoming students. Awards may be used towards fees, non-resident tuition, or stipends. For continuing students, there is an annual call for fellowship applications.

UC Davis Internal Fellowships
The university offers several internal fellowships for new and continuing students. Fellowships are allocated on a competitive basis. Fellowship deadlines and applications for academic-year fellowships (for research or writing) are available from the Graduate Program Coordinator, but are generally in December or January of the year prior to the award. You can find a list of internal fellowships and the online application at https://grad.ucdavis.edu/financial-support/internal-fellowships

Additional funding sources are available at UC Davis and through the UC system. Further information may be found on our Graduate Studies and Office of Research campus websites. The following website has resources for navigating university funding: https://grad.ucdavis.edu/financial-aid
Internal summer research fellowships are usually distributed through listservs or posted on relevant department or research cluster websites in winter and spring quarters before the summer.

Jastro Research Scholarship
Henry A. Jastro Research Scholarship Awards are awarded to outstanding graduate students in recognition of their potential to carry out research related to the missions of the College of Agriculture and Environmental Sciences. Scholarships of up to $3,000 will be awarded to students based on the quality of written proposals, the appropriateness of the work, and the proposed budget. Jastro Scholarships are awarded annually. The Graduate Program Coordinator will notify all students when the application period opens (typically around Winter/Spring). Announcements of awards typically come towards the end of the Spring Quarter. Students are eligible for funding through the Jastro Research Scholarship a maximum of 3 times. Please see the Graduate Student Guide for Managing UCD Expenses at the end of this handbook for information on how to manage grant funds and reimbursements.

External Fellowships
There are many local, national, and international external fellowships for graduate students. Your eligibility may vary based on your subfield of geography, research method and plan, research site, work or scholarly background, and personal identity.

GGG students have been very successful in obtaining funding for their research projects from various private, state, and federal agencies. It is very important to work with your Major Professor to obtain external funding. Even if you are not successful in obtaining funds, proposal writing is an important skill, and the text can be reused for other purposes as well. If a student obtains multiple sources of grant funding, all grant agencies must be informed of all other grants awarded.

GGG students keep an ongoing list of external fellowships that are likely to be of interest to our students regardless of specialization. You can find this list and contribute to it in the Geography Student Resources Canvas page.
Federal Financial Aid

Federal Financial Aid, which is only available to U.S. citizens and permanent residents, is awarded on the basis of demonstrated financial need and is administered by the Financial Aid Office. Federal Financial Aid includes student loans, grants, and work-study funding. Contact the Graduate Program Coordinator regarding the availability of work-study funding. Aid is only available to those who fill out a FAFSA. You may apply for financial aid before you have been admitted. As noted above, it is strongly suggested that you file the FAFSA by the priority processing date of March 1. A full-time counselor for graduate financial assistance is available for appointments and scheduled drop-in hours in the Financial Aid Office.

The minimum cumulative undergraduate or graduate grade point average required for a living allowance, in-state fee award, or nonresident tuition fellowship is 3.0 (A=4.00).

Financial need or the availability of other sources of support in your graduate program is not relevant to the evaluation of academic merit, but may be an additional criterion for some fellowships. Students must establish eligibility for need-based awards by filing a FAFSA with the Federal Student Aid Program by the March 1 deadline. To file the FAFSA online, go to http://www.fafsa.ed.gov.
Campus Organizations and Activities Related to GGG

GGG Executive Committee
The GGG Executive Committee meets quarterly (and sometimes more frequently) to conduct the work of the group in regards to curricula, awards, financial support, admissions, activities, and other matters. Two graduate students serve; one as an appointed member and one as an elected member of the Executive Committee, along with the Chair and Vice-Chair, the Graduate Advisors, the Faculty Members-At-Large, and the Graduate Program Coordinator. Serving on this committee is a good way to learn more about how the university works!

Graduate Student Association
The Graduate Student Association (GSA) is a campus-wide organization made up of a General Assembly and an Executive Committee. The General Assembly includes student representatives of every Graduate Group and Department on Campus. The Executive Committee is made up of students elected by the General Assembly. The GSA works on a wide range of graduate student issues and concerns, including but not limited to: social/networking events, student activism, union issues, sexual assault and harassment, mental health, and other student concerns/grievances. The GSA also has funding available for travel awards to conferences to present research.

Each year, GGG students select two primary representatives and one alternate to represent the Program on the GSA General Assembly. Typically, GGG selects one first-year student and one continuing student. The representatives are responsible for attending General Assembly meetings which take place three times a quarter (roughly once a month) for two hours (typically 6-8 PM). In addition to being a part of the UC Davis graduate student government, representatives are lured with free pizza and sodas at every meeting. Finally, for every meeting attended by our representatives, GLOBAL (see below) receives a small amount of money for our student group account that can be spent on social, academic, or other activities we plan. For this reason, it is imperative that the representatives attend the GSA meetings (or have the alternate attend in their place when needed). Students are selected during the Fall Quarter. Look for an email from GLOBAL (GLOBALucd@gmail.com) for more information.

GLOBAL
GLOBAL is the Geography Graduate Student Group at UC Davis. Because of the closeness of the Geography and the Community Development groups, GLOBAL is comprised of members of both Grad Programs. As GGG students, we have the ability to make GLOBAL what we want… to that end we have previously held social events (e.g., trivia night, pumpkin carving, corn maze, happy hours, gingerbread house decorating); volunteer activities; and academic needs meetings (review of the program; feedback to an external review process, etc.). In addition, GLOBAL is in charge of managing the Geography Swag (t-shirts, stickers, etc.).! Swag is typically ordered in the Fall.

Any student in Geography (and Community Development) is welcome to be part of GLOBAL. We are organized around an “executive committee” that is fairly flexible. Meaning, we have a President and Treasurer per UC Davis rules, but we also have officers in other positions. Are you a planning guru? Are you a master of poetry? Mistress of soccer? Really the sky is the limit on officer positions (and titles) so if you want to get involved, we’d love to have you!

Information on joining GLOBAL will be shared during orientation in September, but you are always welcome to reach out to the GLOBAL group at any time (GLOBALucd@gmail.com). You can also follow Geography on twitter, currently managed by GLOBAL: @ucdGEOgrads.
Gamma Theta Upsilon, Nu Iota Chapter
The GGG recently started a chapter of Gamma Theta Upsilon (GTU), the International Geographical Honor Society. Those interested in being initiated into GTU must meet the following requirements:
1. Have a GPA of at least 3.3 (on a 4.0 scale) in geography courses
2. Rank in the top 35% of their class
3. Have completed a minimum of 3 geography courses (at any institution)
4. Have completed at least 3 semesters or 5 quarters of full-time college coursework

Calls for new member applications will be made in the winter or spring quarter. Many incoming students are eligible to join GTU after completing two quarters at UC Davis. Incoming students who have been initiated into GTU at another institution are welcome to join our chapter.

For more information, please contact the Graduate Program Coordinator, who can get you in touch with the current GTU student leader. More information about GTU can be found here: http://gammathetaupsilon.org/

Annual Business Meetings of the GGG
The GGG holds one or two business meetings per year which all students, staff, and faculty are encouraged to attend. These meetings are normally in the middle of the fall quarter and near the end of the spring quarter. These are enjoyable events with both a business and a social function. They provide an opportunity for students to share any concerns or questions they have about the program with staff and faculty. Additionally, GGG students typically nominate and select one outstanding faculty member to receive a “Mentor of the Year Award”. This award is managed by GLOBAL.

Geography Newsletter
Each year current GGG students, under the advisement of the GGG Chair, pull together content and design a Geography Newsletter. The newsletter covers stories on alums, recently published articles, conference presentations, ongoing in-the-field research, etc. A call for interested students will be sent out during the fall quarter. Newsletters are typically published on the GGG website during the spring quarter.

GGG Seminar Student Committee
During each academic year, the GGG hosts at least one seminar series for students and faculty. These seminars take place once a week and are part of the graduate program curriculum requirement (see Coursework section for details). The GGG Chair recruits a small group of graduate students to help plan the seminar series, solicit and welcome speakers, and advertise to students and faculty. The seminar series is typically held during the Spring Quarter. A call for interested students will be sent towards the end of Fall Quarter.
Miscellaneous Resources

Office Space
The primary office space for GGG students is provided by the department of the Major Professor (as available) and, for TA or GSR positions, by the student’s employer on campus. Access to a computer is not guaranteed. The GGG also has been assigned 158 Hunt Hall as a group office for our students. If you use this space as your office, please be considerate of others and their need for space, and personally secure any valuables you leave in the room. Please note that both GGG and Community Development students use this space. They also occasionally send out notifications for students to sign up to help with cleaning. If you use this space frequently, please consider volunteering for a few weeks.

Student Resources Canvas Page
Using UC Davis’ online course management system Canvas (http://canvas.ucdavis.edu) we created a repository of information and resources produced by previous students that might be of use to current and incoming students. The Canvas page is called “Geography Student Resources,” and all incoming students are automatically invited and must accept the invitation to the course page. Included here are resources on funding, sample dissertation proposals and qualifying exam materials, and other resources of use to students.

Email Listservs for GGG Students
There are two main Geography email listservs: 1) official capacity/school business and 2) social/outside of school business. Additionally, UC Davis has a number of other listservs that students can choose to subscribe to. More information is below.

Geography Student (official school business)
The graduate group established an email list for administrative purposes and use among graduate students. The list is managed by the GGG Program Coordinator, and all current students are automatically added during the Summer prior to starting at UC Davis. Any member of the listserv can email this list. It is typically used for Program announcements, funding opportunities, and GLOBAL events. The email is: geographystudent@ucdavis.edu. Note that emails should only be sent to this listserv for official school items.

Note that GGG Program Coordinator also has a listserv for GGG alums and another for GGG faculty/staff. While students cannot email these listservs directly, they can send emails to Carrie Armstrong-Ruport (caruport@ucdavis.edu) and she will forward them.

Geography and Community Development Social Listserv (social stuff)
Graduate students from GLOBAL established an email listserv separate from the official school business email for non-GLOBAL social and personal email. Students need to sign-up to be added to this listserv, but anyone can join. Example emails that are appropriate for this listserv include things like housing requests or announcements, furniture for sale, requests for pet-sitters, questions on local hiking or camping, etc. The email address is: cdxggsocial@ucdavis.edu, but please note that students need to sign-up for the listserv (see below) before they can email the group.

Students that are part of the group are requested to use the following “subject line” structure when sending an email: [PURPOSE OF EMAIL] blah blah blah. For example: [HIKING WITH DOGS] Request for information on local dog-friendly hikes.

To join the social listserv:
1. Visit: https://lists.ucdavis.edu/sympa/info/cdxggsocial
2. If you are not already, sign-in using your UC Davis username/password
3. Click on “Subscribe”
**Other Campus Listservs**
There are a wide range of listservs available on campus that cover everything from academics to social life. You can find more information on them here: [https://lists.ucdavis.edu/sympa/home](https://lists.ucdavis.edu/sympa/home).

Note that some listservs are open to anyone, but others require special permissions.

Examples of listservs that GGG students often join:
- **ecology - social** - VERY active, a ton of information and great network to join
- **data science - announce** - all things data related (including R, Python, etc.; they also hold workshops throughout the year)
- **ej grads** - group for students researching/interested in discussing or working on environmental justice issues
- **geospatial** - all things related to GIS, geospatial analysis, job opportunities, workshops, etc.
- **sciencesaysmembers** - social and academic opportunities around science communications
Graduate Student Guide for Managing UCD Expenses
If your funds have not been set-up with a UCD account number, please first contact your Graduate Group Coordinator &/or Account Manager to establish the funds as needed. Be sure to include an account number with all processing requests.

Reimbursements & purchases fall into the following categories:
A. Travel Purchases/Reimbursement: (Please note there is a Pre-Trip form to use for conference registration and airfare that must be paid several months in advance. However if paid by personal means these purchases are not reimbursed until after the travel dates. These expenses can be purchased through the Business Processor on your behalf)

During your travel keep in mind:
1. The daily allowance while traveling in the USA for Meals, Incidentals and Tips is $62 per day. For most recent allowances check site: A&FS/travel (International travel allows for a Per Diem set By the US State Department, search by country/city/season: https://aoprals.state.gov/web920/per_diem.asp. Any amount spent over the daily allowance will be marked as Personal/Non-Reimbursable and will not be reimbursed.
2. Meal expenses should be claimed for only the amount spent, if maximum is claimed for all trip days, receipts may be required.
3. On the days you are traveling you may only claim meals consumed while actually traveling. (i.e. Return flight scheduled 8am to 2pm you may claim breakfast & lunch - NOT dinner)
4. Receipts, especially for airfare and lodging, need to include the method of payment (typically showing the last four digits of credit card used)
5. Airfare documents should include the purchase receipt and the flight itinerary.
6. Lodging has a domestic daily allowance of $275 (pre-tax). The receipt needs to include the folio that will have a breakdown of daily expenses and is provided at check-out. (meals & incidentals charged to room will be applied to daily M&I allowance) (Parking charged to room will not count toward lodging allowance)
7. Meal receipts need to be itemized + credit card transaction slip (alcohol will NOT be reimbursed)
8. If needed there is a Lost Receipt Form on the Cluster 5 website (below) Note: Lost Receipt Form is not accepted for airfare or lodging expenses.
9. A good rule of thumb: Anything related to a trip i.e. printing needed during or before a conference or meals while traveling is part of Travel.

In addition, to avoid out-of-pocket travel expenses, flights can be booked through BDC in AggieTravel NOTE: New UC travel registration policy for international travel. Flights booked outside of AggieTravel need to be registered, with UC Away, found in your AggieTravel dashboard. Failure to register may cause deduction or disqualification of reimbursements. Policy details

B. Entertainment Purchases/Reimbursements: Venue, food, napkins, note pads, etc. purchased for meetings or events are covered under Entertainment.
1. Use Entertainment Expense Form
2. Include all receipts (must show method of payment)
3. Food & beverage receipts must be itemized.
4. Guest list or sign-in sheet is required for Entertainment meal expenses. List to include: First & Last Name, email and their affiliation with UC Davis.

C. Supplies/Equipment, Misc. Purchases/Reimbursements UCD prefers to avoid out-of-pocket expenses as much as possible. To prevent this, purchase requests should be sent to the Business Unit with the following information:
1. Item name with details. Specific URLs work best to ensure the exact size, color, etc. is purchased.
2. Approximate price of each item.
3. Quantity of each item.
4. The account number to use. (Multiple accounts can be used)
5. A brief Business Purpose for the item(s) purchased/requesting to purchase.
6. Date needed.
7. Non-travel reimbursements over $500 will result in obtaining a confirming order from the Dean’s office that could be denied. Therefore any purchase that is over $500 (including tax & shipping) must come through the Business Unit.

**It is important to confirm there are sufficient funds with your Account Manager before booking BCD travel or making large purchases.**

Submitting receipts for reimbursement processing:

1. Scanning and sending receipts via email is the most time efficient, however whatever works best for you is fine.
2. Please fill out the appropriate reimbursement form(s) which you will find on the Cluster 5 website: [https://cluster5.ucdavis.edu/forms](https://cluster5.ucdavis.edu/forms)
3. Mileage form is required for multiple trips per month. List each start-finish address, check the appropriate box at the bottom for auto-calculation. If only 1-2 trips you may provide the start & finish addresses on the Travel Expense Form for processor to input with Google Map in AggieTravel. Note on Expense Form: *Mileage Log attached.*
4. Signatures at the bottom of the forms:
   a. Traveler, you. Turn in signed
   b. P.I., Principal Investigator, monitors spending. Turn in signed. (Adobe digital signatures acceptable)
   c. Account Manager approves use of account based on funds & related UC policies. Processor will obtain Account Manager Approval.
5. Once the report is ready, give to Grad-Group Program Coordinator for review, then email your Business Unit Processor located in 1309 Hart Hall.
   - ESP: Corina Lopez, eclopez@ucdavis.edu, 530-752-3558
   - ARE: Susan Sloan, smsloan@ucdavis.edu, 530-752-3980
   - HE: HDE, LDA, CFScfivegradbusiness@ucdavis.edu

The Business Unit staff will be glad to answer any questions regarding your UC Davis business processing needs.

Office hours: Monday-Friday, 8:00am-12:00pm & 1:00-5:00pm. (please note that during the pandemic staff may be working hybrid schedules)
HELP!
If you have any questions, please let us know in person, by telephone, or by email. We will do our best to help as fast as we can. Many questions regarding campus graduate policies can be answered by consulting the UC Davis Graduate Student Guide, which is published over the web ONLY. This resource can be found here: https://grad.ucdavis.edu/resources/graduate-student-resources
Appendices and Forms

Appendix A. Required Formatting for Academic Writing

Formal writing by graduate students in the GGG must follow standard academic format for all writing that students will turn in for their degrees, including MA and PhD thesis, all preparatory writing, reading lists, field statements, proposals, exams, etc. and for most required courses (unless faculty indicate otherwise).

These guidelines include:

- double spaced text for all writing, including bibliography, notes, etc.
- 12-point font in a standard font such as Times, Palatino, etc.
- 1-inch margins on all 4 sides.
- left justified/aligned.
- Bibliographies properly formatted in alphabetical order by author last name and with hanging indents with standardized format for the complete references. Must include dates, vol., issue, pages, journal, or book (with press and place of publication), etc. Do not include data base name if retrieved from a source like EBSCO. See the literature review examples listed above (p. 13) for appropriate examples. The Chicago Manual of Style can answer most questions about format and style. Another good source is the style sheet for authors at the Annals of the American Association of Geographers (https://www.tandfonline.com/action/authorSubmission?journalCode=raag21&page=instructions) or (http://www.aag.org/publications/journals/annals and follow links to style sheet).
## Appendix B. Expected Annual Degree Progress

### Normative Time To MA Degree

<table>
<thead>
<tr>
<th>FIRST YEAR</th>
<th>Coursework, including 200AN. Meet w/ major professor systematically, at least once per quarter. Decide on Plan I or Plan II for the MA.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Coursework, including 200BN. Begin thinking about the research plan for the MA Thesis (Plan I) OR Begin preparing reading lists for the Comprehensive Exam and Paper (Plan II). Plan summer research if applicable.</td>
</tr>
<tr>
<td>SECOND YEAR</td>
<td>Complete any outstanding coursework. Plan I: begin writing thesis. Plan II: Write and submit the required Paper. Prepare for the comprehensive exam, complete the reading list.</td>
</tr>
<tr>
<td></td>
<td>Plan I: Complete, Revise and Finalize Thesis, and obtain final approval. Plan II: Prepare for and take the comprehensive exam. Revise paper if required. Graduate.</td>
</tr>
</tbody>
</table>

### Normative Time To PhD Degree if entering with MA/MS or equivalent

<table>
<thead>
<tr>
<th>FIRST YEAR</th>
<th>Coursework, including 200AN. Meet w/ major professor systematically, at least once per quarter. Begin to identify 3 fields for Qualifying Examination (QE).</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Coursework, including 200BN. Begin formulating dissertation research project.</td>
</tr>
<tr>
<td></td>
<td>Coursework. Prepare draft proposal. Finish readings for QE, write field statement, take QE. Advance to candidacy.</td>
</tr>
<tr>
<td>THIRD YEAR</td>
<td>Conduct dissertation research.</td>
</tr>
</tbody>
</table>
| FIRST YEAR   | Coursework, including 200AN.  
Meet w/ major professor systematically, at least once per quarter. |
|--------------|---------------------------------------------------------------------|
|              | Coursework, including 200BN.  
Begin to explore research topic. |
| SECOND YEAR  | Coursework.  
Meet w/ major professor systematically.  
Begin to identify three fields for Qualifying Examination (QE). |
|              | Coursework.  
Identify three fields, and subfields, for QE exams. Prepare QE reading lists. |
| THIRD YEAR   | Coursework.  
Prepare for QE: Finish readings for QE, begin field statement.  
Start work on proposal.  
Begin applying for dissertation research grants. |
|              | Coursework.  
Prepare draft proposal.  
Take QE.  
Advance to candidacy. |
| FOURTH YEAR  | Apply for dissertation research grants. |
|              | Conduct dissertation research. |
| FIFTH YEAR   | Conduct dissertation research. |
|              | Analyze research and begin writing dissertation. |
| SIXTH YEAR   | Dissertation writing. |

See also, from UCD Grad Studies: https://grad.ucdavis.edu/normative-time
Appendix C. Elements of a Dissertation Proposal

• Every dissertation proposal or research prospectus has certain key elements that clarify the project. Different professors may have somewhat different ideas about what to emphasize; but all successful proposals have the following components:

- A problem statement
- A hypothesis or set of hypotheses (this often follows the literature review)
- A review of pertinent literature
- A chapter outline
- A research plan and methods statement, including data sources
- A research timeline
- A bibliography

The segments below elaborate on these elements.

• Each element normally requires a separate and clearly marked section of the proposal.

• It is advisable that a clear thread (or threads) runs through the whole, from section to section. That is, if you have three hypotheses, you ought to have three bodies of literature, three corresponding parts of the narrative, and three approaches to the empirical material. It is not always possible to be this coherent, but it sure helps to try!

• Normally, a proposal runs 20-30 double spaced pages (exclusive of bibliography) using standard academic format of 12-point font, double spaced, 1-inch margins, etc. and a properly formatted bibliography.

The Problem Statement

• The Problem Statement is the introduction to your proposal and to the dissertation, in general. You do not need a separate introduction. The problem statement is usually only one page, no more than two.

• The key question is: What empirical puzzle are you trying to solve?

• What is the general setting within which this puzzle occurs?

• Why is this important, both practically and theoretically? Ever so briefly, indicate who cares and why, both among scholars and out in the world of public policy, human affairs, and/or scientific inquiry.

• There is rarely a single problem involved, and one big question leads to several secondary, but still crucial ones. Let the problem begin to unfold here, so that you can attack all the major issues in the hypothesis section.

Working Hypotheses

• In this section, you should set out a preliminary answer to your puzzle – or answers to the several parts/levels of your problem. This section may often be placed after the literature review (next section).

• A hypothesis is what you think has happened or will happen in an experimental setting, and why. Any worthwhile hypothesis should be brief and to the point, able to be put in no more than a sentence or two.
• You will want to elaborate on each hypothesis, of course. What is the line of thinking/theory that led you to this supposition? Is there a dispute between reigning models relevant to your research? Does your problem call upon any distinct bodies of theory?

• Keep to the major points in this section. You can elaborate more in the following two sections.

**Literature Review**

• Ideally, your hypotheses will be framed around certain key ideas, each of which opens up to a body of relevant literature that pertains to your topic and fills in the background as to why this is an interesting (set of) problem(s) in geography. Successful proposals normally engage with at least 2 - 3 bodies of literature.

• Hence, this section can be much more expansive than the first two and usually constitutes just under half of your proposal. Your thesis can open up and breathe here, but avoid excessive high theory and materiality of only distant relevance to your problem(s).

• Literature reviews should lead clearly to your problem and its solution. Provide a brief overview of each body of literature and point out any gaps or "weaknesses". Then explain how these bodies of literature inform your research and how your results will contribute to these bodies of literature - and fill in the gaps or make improvements to the "weaknesses."

**Chapter Outline**

• There are good reasons for drawing up a tentative chapter outline, because a dissertation is a large writing project and can be overwhelming if taken as a whole, especially by students with little writing experience. This first outline generally changes over time and becomes more refined as you conduct your research.

• Developing a detailed chapter outline, complete with chapter subheadings, is a way of laying out your project as a whole: how will it begin, how will it set up the problem and establish the background, how will it progress through the various arguments, how will it handle the empirical material, and so forth? Does it all hang together once laid out like this?

• A typical dissertation has, in addition to an introduction and conclusion, three, four or five substantive chapters, rarely fewer or more.

• The virtue of breaking the project into chapters is that it renders the whole more understandable and more manageable. You can organize the theory, evidence and narrative around one clear theme, with easily comprehended parts (sections), and then work on each one in turn. It makes pulling together field research and writing much easier.

• Rereading some of the geography monographs that have been most inspiring for your research so far, and studying them, not for content this time, but for form and organization, can be immensely helpful.

**Data and Methodology**

• What are your key data sources? For human geographers, it might be census data, personal interviews, historical records, oral histories, old maps, archival documents and so on. For physical geographers, it might be ocean temperature measurements, remote sensing, pollen cores, air samples, ice cores, soil samples, etc.
• How will you secure these data? Where are they located? What form do they come in? These can be relatively simple answers if the data is preexisting; they will be harder if you are the one collecting data: will you set up interviews and select subjects? How will you choose interviewees? Which part of Antarctica will you visit to collect samples and with what equipment? How will you set up your laboratory procedure to take air samples from plants? Etc. Where are the relevant libraries and/or archives and how are they accessed? Do you speak the language if not working in an anglophone country?

• How will you handle the data? What precise form are they in and how will you analyze them? What kind of sampling procedures are you using? Will you apply certain statistical packages or remote sensing techniques? And how will you present the results: will you map them with GIS, draw graphs in Excel, or quote key informants?

• How will you handle questions of anonymity, protection of subjects, hazardous lab materials, and other potential obstacles to your research? Do you need research permits if traveling outside the USA?

**Timeline**

• Set out a reasonable amount of time for research tasks, travel to field sites, preliminary interviews, laboratory set-up, and so forth.

Make clear when you will apply for and obtain permission from the Institutional Review Board (for the protection of human and animal subjects) if your research includes any living organisms.

• Try to provide a set of deadlines for completing definite parts of the whole project, like chapters or research elements.

• Do not leave all writing time to the end. Many parts of the dissertation can be written while you are doing your research. In fact, writing preliminary drafts of sections *before* all the results are in can be very helpful in clarifying research tasks, filling in gaps, and rethinking hypotheses.

• Remember that everything takes longer than you expect. Writing, in particular, is a slow process for most of us. (As general advice, try to set aside several hours a day, every day, for your dissertation, and refuse all extraneous activities, invitations, emails, blogs, and phone calls or texts during that period).

**Bibliography**

• Should be self-evident. Standard academic format: alphabetical by author last name, complete references, hanging indents, etc. Following the format of a published Annals article is a good idea.

Good luck! Remember, you are now setting out on your own, perhaps for the first time, free of the constraints of regurgitating past theory, solving problem sets, or being a lab gopher. This is your chance to spread your wings and make a statement about what matters to you. And, most of all, solving the puzzles that beset science, social science and scholarship in general is what we do, and it can be exhilarating.
### Appendix D. Degree Requirements Checklists and Pre-Approved Courses

**Preparation for Geography Graduate Study for Students without a Geography Undergraduate Degree**

Name: __________________________ Degree Objective: MA or Ph.D.

B.A. from: _______________________ Major: ___________________ Date: ____________

M.A. from: _______________________ Major: ___________________ Date: ____________

<table>
<thead>
<tr>
<th>Deficiency Area</th>
<th>Completion Equivalent</th>
<th>Term Completed</th>
<th>Units</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>One course in human geography</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>One course in physical geography</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>One course in geographic methods</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elective Geography Course 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elective Geography Course 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elective Geography Course 3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total: __________________________

Major Professor Name   Signature              Date

Graduate Adviser Name   Signature             Date

Original: □   Revision#: □

Please indicate changes below and attach previous undergraduate preparation agreements.

Comments:

Students without prior degrees in geography should expect to be required to complete additional courses or readings, beyond the above requirements, to overcome deficiencies in geographic theory and methods. These Deficiencies should be determined within the first year of the program by the Graduate Adviser, in consultation with the student and another GGG faculty member, usually the Chair of the student’s thesis or examination committee. Generally, a student with an undergraduate degree in a closely allied field can expect to complete the rough equivalent of a minor in geography, consisting of one course each in human geography, physical geography, and geographic methods, plus an additional 9 units of geographic coursework. For Ph.D. students, the student’s guidance committee must certify definition of this requirement.
GGG Program of Study for Master’s Degree (MA) Requirements Checklist

Name: _______________________________ Plan I (Thesis) _____ Plan II (Exam) _____

B.A./B.S. from: _________________________ Major: ______________________________

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
<th>Quarter</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEO 200AN</td>
<td>Geographical Concepts</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>GEO 200BN</td>
<td>Theory and Practice of Geography</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>GEO 200CN</td>
<td>Quantitative Geography</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>GEO 200DN</td>
<td>Socio-Spatial Analysis in Geography</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>GEO 297</td>
<td>Seminar in Geography (2 quarters required)</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>GEO 297</td>
<td>Seminar in Geography (2 quarters required)</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

Geography Depth Courses (12 units)

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
<th>Quarter</th>
</tr>
</thead>
</table>

Electives Courses

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
<th>Quarter</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Transfer Units</th>
<th>School</th>
<th>Course Number</th>
<th>Course Title</th>
<th>UG/G</th>
</tr>
</thead>
</table>

TOTAL UNITS

<table>
<thead>
<tr>
<th>UC Courses (except 299 &amp; 396)</th>
<th>36 total required, exclusive of 299 and 396 units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transfer courses (up to 6 units)</td>
<td></td>
</tr>
<tr>
<td>Total units (courses plus 299 &amp; 396)</td>
<td></td>
</tr>
</tbody>
</table>

Major Professor: _______________________________ Date: __________

Graduate Advisor: _______________________________ Date: __________

Program Coordinator: _______________________________ Date: __________

This form must be completed and submitted to the Program Coordinator by December 1st every year.
GGG Program of Study for Doctoral Degree (Ph.D.) Requirements Checklist

Name: _______________________________
B.A./B.S. from: _________________________ Major: ______________________________
M.A./M.S. from: _________________________ Subject: _____________________________

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
<th>Quarter</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEO 200AN</td>
<td>Geographical Concepts</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>GEO 200BN</td>
<td>Theory and Practice of Geography</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>GEO 200CN</td>
<td>Quantitative Geography</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>GEO 200DN</td>
<td>Socio-Spatial Analysis in Geography</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>GEO 200E</td>
<td>Advanced Research Design in Geography</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>GEO 297</td>
<td>Seminar in Geography (2 quarters required)</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

Geography Depth Courses (16 units)

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
<th>Quarter</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Electives Courses

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Units</th>
<th>Quarter</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Transfer Units

<table>
<thead>
<tr>
<th>School</th>
<th>Course Number</th>
<th>Course Title</th>
<th>UG/G</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

TOTAL UNITS

<table>
<thead>
<tr>
<th>UC Courses (except 299 &amp; 396)</th>
<th>48 total required, exclusive of 299 and 396 units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transfer courses (up to 6 units)</td>
<td></td>
</tr>
<tr>
<td>Total units (courses plus 299 &amp; 396)</td>
<td></td>
</tr>
</tbody>
</table>

Major Professor: ___________________________ Date: ____________
Graduate Advisor: __________________________ Date: ____________
Program Coordinator: ______________________ Date: ____________

*This form must be completed and submitted to the Program Coordinator by December 1st every year.*
Pre-approved Geographic Preparatory Courses

**Human Geography**
- ANT 103 — Indigenous People and Natural Resource Conservation
- ANT 105 — Evolution of Societies and Cultures
- ANT 126B — Women and Development
- CRD 140 — Dynamics of Regional Development
- CRD 141 — Organization of Economic Space
- CRD 142 — Rural Change in the Industrialized World

**Physical Geography**
- ATM 110 — Weather Observation and Analysis
- ATM 115 — Hydroclimatology
- ATM 116 — Modern Climate Change
- ATM 133 — Biometeorology
- ATM 149 — Air Pollution
- ESM 100 — Principles of Hydrologic Science
- ESM 121 — Water Science and Management
- ESM 141 — Role of Fire in Natural Ecosystems
- ESM 144 — Trees and Forests
- EVE 147 — Biogeography
- GEL 115N — Earth Science, History, and People
- GEL 134 — Environmental Geology and Land Use Planning
- GEL 144 — Historical Ecology
- SSC 100 — Principles of Soil Science
- SSC 118 — Soils in Land Use and the Environment
- SSC 120 — Soil Genesis, Morphology, and Classification
- WFC 155 — Habitat Conservation and Restoration
- WFC 156 — Plant Geography
- WFC 157 — Coastal Ecosystems

**Geographic Methods**
- ABT/LDA 150 — Introduction to GIS
- ABT 181N — Concepts and Methods in Geographic Information Systems
- ABT 182 — Environmental Analysis using GIS
- ESM 185 — Aerial Photo Interpretation and Remote Sensing
- ESM 186 and 186L — Environmental Remote Sensing
- ESP 123 — Introduction to Field and Lab Methods in Ecology
- GEL 136 — Ecogeomorphology of Rivers and Streams
- WFC 100 — Field Methods in Wildlife, Fish & Conservation Biology
Pre-approved Geographic Depth Courses

Note that this list is usually out of date, as courses come and go.

Human Geography

Depth Courses Offered by GGG Faculty
LDA 201 — Theory and Philosophy of the Designed Environment
LDA 202 — Methods in Design and Landscape Research
LDA 205 (GEO 233) — Urban Planning and Design
LDA 270 — Environment and Behavior
SOC 295 — International Migration
TTP 220 (GEO 236) — Transportation Planning and Policy
CRD 240 (GEO 240) — Community Development Theory
CRD 241 (GEO 241) — The Economics of Community Development
CRD 245 (GEO 245) — The Political Economy of Urban and Regional Development
CRD 246 (GEO 246) — The Political Economy of Transnational Migration
CRD 247 (GEO 247) — Transformation of Work
CRD 248 (GEO 248) — Social Policy, Welfare Theories and Communities

Other Depth Courses
CRD 242 — Community Development Organizations
CST 206 — Studies in Race Theory
ECL 217 — Conservation and Sustainable Development in Third World Nations
ECL 222 — Human Ecology of Agriculture
LDA 204 — Case Studies in Landscape Design and Research
LDA 215 — Ecologies of Infrastructure
LDA 220 — Public Space and Culture
LDA 230 — Landscape and Memory
LDA 240 — Historic, Cultural Landscapes: Concept, Perception, Preservation
LDA 250 — Life-Place: Bioregional Theory and Principles
LDA 260 — Landscape and Power
LDA 280 — Landscape Conservation
SOC 215 — Economy, Polity, and Society
SOC 225 — Cultural Sociology
SOC 227 — Sociology of Reproduction
SOC 230 — Ethnic (Race) Relations
SOC 233 — Gender, Culture, and Local/Global Transformation
SOC 234 — Gender, Family, and Society
SOC 242AB — Comparative Methods in Historical Sociology
SOC 243 — Urban Society
SOC 245 — Developing Societies
SOC 248 — Social Movements
SOC 292AB — Field Research Methods

Nature-Society Geography

Depth Courses Offered by GGG Faculty
ECL 211 — Advanced Topics in Cultural Ecology
ARE 214 — Development Economics
LDA 260 — Landscape and Power
LDA 280 — Landscape Conservation
CRD 244 (GEO 254) — Political Ecology of Community Development
HIS 201W — Empires of Nature: Imperialism and the Natural World in Africa

Other Depth Courses
ECL 210 — Advanced Topics in Human Ecology
ECL 211 — Advanced Topics in Cultural Ecology
ECL 212A — Environmental Policy Process
ECL 216 — Ecology and Agriculture
ESP 212A — Environmental Policy Process
ESP 212B — Environmental Policy Evaluation
ESP 278 — Research Methods in Environmental Policy
SOC 206 — Quantitative Analysis in Sociology
SOC 207A-207B — Methods of Quantitative Research
SOC 233 — Gender, Culture, and Local/Global Transformation
SOC 245 — Developing Societies
SOC 295 — Special Topics: Environmental Sociology, Social and Political Ecology

Physical Geography
Depth Courses Offered by GGG Faculty
GEO 210 — Topics in Biogeography
GEO 211 — Physical Geography Traditions and Methods
ECI 267 (GEO 212) — Water Resources Management
ECL 201 — Ecosystems and Landscape Ecology
PBG 296 (GEO 214) Seminar in Geographical Ecology
LDA 280 — Landscape Conservation

Other Depth Courses
ECL 201 — Ecosystems and Landscape Ecology
ECL 205 — Community Ecology
ECL 206 — Concepts and Methods in Plant Community Ecology
ECL 207 — Plant Population Biology
ECL 208 — Issues in Conservation Biology
ECL 214 — Marine Ecology
ECL 225 — Terrestrial Field Ecology
ECL 231 — Mathematical Models in Population Biology
ECL 232 — Theoretical Ecology

Spatial Methods and Models
Depth Courses Offered by GGG Faculty
PLS 205 — Experimental Design and Analysis
PLS 206 — Multivariate Systems and Modeling
ECL 220 — Spatio-temporal Ecology
HYD 273 — Introduction to Geostatistics
ESP 228 — Advanced Simulation Modeling
HYD 275 — Analysis of Spatial Processes
WFC 222 — Advanced Population Dynamics
ECL 231 — Mathematical Methods and Population Biology
ECL 254 (GEO 279) — Exploring Data from Built Environment Using R
TTP 200 (GEO 281) — Transportation Survey Methods
HYD 286 (GEO 286) — Selected Topics in Environmental Remote Sensing
LDA 280 — Landscape Conservation
Appendix E. Guidance Procedures for GEO 299 (research units)

Faculty should convey to students their expectations for the academic progress needed for a satisfactory 299 grade.

The following may be topics to consider when formulating goals and expectations:
• timing and duration of expected interactions between faculty and students (office hours, reading groups, lab meetings, etc.)
• participation in lab or group activities (presentations at lab or group meetings, etc.)
• academic outputs stemming from research in lab, field, archive, or other environments
• development of data analyses, scholarly activities, or progress in writing
• participation in scholarly events such as presentations at seminars, conferences, workshops
• quality of scholarly or creative works
• development of reading lists related to research
• development of target lengths for writing projects on specific topics

A written agreement between the faculty member and student is recommended for each set of 299 units and the total number of units needs to be specified.