MASTERS (MA) PROGRAM

1. Admissions Requirements

For students entering the graduate program without an undergraduate degree in geography, it will be necessary to evaluate prior coursework and most likely take additional preparatory coursework in geography. The minimal background for entrance into the master's program is a bachelor's degree with 3.0 in upper-division coursework taken during the applicant’s last two years as an undergraduate or other evidence of comparable scholarship. GRE: only the General Test is required; scores should be recent (within the past five years). Applicants whose native language or language of instruction is not English must take the TOEFL or IELTS. A minimum score is required on the TOEFL or IELTS, see the Graduate Studies website for details.

Other requirements for admission include:

- A completed Office of Graduate Studies online application
- Three letters of recommendation
- Official transcripts from each university attended
- Confirmed Major Professor: a GGG faculty member in good standing must confirm that they will accept the student, and provide mentorship and access to essential resources to complete their degree until the student completes their program of study. It is not necessary to have this commitment before submitting the application. The Major Professor will present the student with a plan for support at the time of acceptance and work with the student to continue to obtain financial support.

a) Prerequisites.

Students with undergraduate degrees not in geography will be required to take additional courses or readings to overcome deficiencies in geographic theory and methods. These units are beyond the degree requirements. Generally a student with an undergraduate degree in a closely-allied field will be required to either complete geographic breadth requirements consisting of one course each in human geography, physical geography and geographic methods, plus an additional 9 units of geographic coursework beyond the GGG program requirements, or to demonstrate the equivalent in their undergraduate courses. Coursework must be approved by the student’s Guidance Committee, then reviewed by the Graduate Advisor, and then approved by the Graduate Group Executive Committee.

The following courses offered at UC Davis (as well as other courses to be approved by the Graduate Advisers) are considered geography or equivalent courses:
**Human Geography**
ANT 102 – Cultural Ecology  
ANT 103 – Indigenous People  
ANT 105 – Societies and People  
ANT 119 – World Writing Systems  
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  
ESP 101 – Human Ecology  
ESP 133 – Cultural Ecology

**Physical Geography**
ATM 110 – Weather Observation and Analysis  
ATM 115 – Hydroclimatology  
ATM 116 – Climate Change  
ATM 133 – Biometerology  
ATM 149 – Air Pollution  
ERS 100 – Principles of Hydrologic Science  
ERS 121 – Water and Society  
ERS 141 – Role of Fire in Natural Ecosystems  
ERS 144 – Trees and Forests  
ERS 173 – Humane and Vegetation Change  
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 180 – Introduction to GIS  
ABT 181 – GIS Modeling  
ABT 182 – Environmental Analysis with GIS  
ABT/LDA 185 – Concepts and Methods in GIS  
ERS 185 – Aerial Photo Interpretation and Remote Sensing  
ERS 186 and 186L – Environmental Remote Sensing  
ESP 123 – Introduction to Field and Lab Methods in Ecology  
GEL 136 – Eco-geomorphology of Rivers and Streams  
LDA 150 – GIS for Land Planners  
WFC 100 – Field Methods in Wildlife Biology
b) **Deficiencies.**
   The student’s deficiencies will be determined upon admission to the program by the Graduate Advisor, in consultation with the student and the student’s Major Professor. Deficiencies should be addressed beginning the first quarter of enrollment and must be completed by the end of the first year in the program.

2) **Masters Plan I (Thesis) and Plan II (Comprehensive Examination)**
The Geography Graduate Group offers both a Plan I and Plan II option. For details on the requirements of each plan, see course requirements below.

**For Plan I students:** This plan requires 36 units of graduate and upper division courses (the 100 and 200 series only) and a thesis. Only 4 of these units may be from 299 courses.

**For Plan II students:** This plan requires 36 units of graduate and upper division courses (the 100 and 200 series only) and a comprehensive exam. Only 4 of these units may be from 299 courses.

3) **Course Requirements - minimum 36 units**

   a) **GGG Core Courses – 16 units**
      GEO 200AN – Geographical Concepts (4 unit, fall quarter)
      GEO 200BN – Theory and Practice of Geography (4 units, winter quarter)
      GEO 200CN – Computational Methods in Geography (4 units)
      GEO 200DN – Methods of Socio-Spatial Analysis in Geography (4 units)

      Students are encouraged to take the first four of these core courses in their first year in the program. The graduate adviser will not waive these core courses unless the student has transcript notation and a syllabus from a similar graduate-level course taken at another institution.

   b) **Geographic Depth Courses – 12 units in one sub-discipline**
      Every student is required to take at least 12 units of Geographic Depth Courses from a pre-approved selection of courses in ONE of the four recognized sub-disciplines of Geography listed below. Students may petition for substitutions to this list, subject to approval first by their Guidance Committee and then the GGG Executive Committee.
      - **Environmental Sciences** (see appendix 2 for approved courses)
      - **Methods, Models, and GIScience** (see appendix 3 for approved courses)
      - **Nature & Society** (see appendix 4 for approved courses)
      - **People, Place, and Region** (see appendix 5 approved course)

   c) **Seminar Requirement (4 units)**
      GEO 297 – Seminar in Geography (2 units each, repeated for total of 4 units)

   d) **Electives – variable units**
      Elective courses may be required to reach the minimum number of units required, and are selected with the approval of the Graduate Advisor.
e) Summary
In the Geography Graduate Group, both Plan I and Plan II students take a minimum of 36 units including the 16 units of required core coursework, 12 units of depth coursework, and 4 units of seminar; students may need to take additional elective coursework to satisfy the minimum 36 unit requirement.

**UC Davis Plan I.** This plan requires 30 units of graduate and upper division courses (the 100 and 200 series only) and, in addition, a thesis or a project in lieu of a thesis. At least 12 of the 30 units must be graduate work in the major field.

**Geography Graduate Group Plan I:** This plan requires 36 units of graduate and upper division courses (the 100 and 200 series only) and a thesis. Only 4 of these units may be from 299 courses.

**UC Davis Plan II.** This plan requires 36 units of graduate and upper division courses, of which at least 18 units must be graduate courses in the major field. Not more than 9 units of research (299 or equivalent) may be used to satisfy the 18-unit requirement. A comprehensive final examination in the major subject is required of each candidate. No thesis is required.

**Geography Graduate Group Plan II:** This plan requires 36 units of graduate and upper division courses (the 100 and 200 series only) and a comprehensive exam. Only 4 of these units may be from 299 courses.

The minimum course load is 12 units per quarter. Note that per UC regulations, students cannot enroll in more than 12 units of graduate level courses (200) or more than 16 units of combined undergraduate and graduate level (100, 200, 300) courses per quarter.

4) **Special requirements**
No special requirements.

5) **Committees**
   a) **Admission-Fellowship Committee**
   Once the completed application, all supporting material, and the application fee have been received, the application will be submitted to the Admissions Committee. The Admissions Committee consists of 4 graduate group faculty and 1 graduate group student. Based on a review of the entire application, a recommendation is made to accept or decline an applicant’s request for admission. That recommendation is forwarded to the Dean of Graduate Studies for final approval of admission. Notification of admissions decisions will be sent by Graduate Studies. Applications are accepted through January 2 through for the next fall entering class. This committee also evaluates and ranks applicants for scholarships and fellowships and awards Teaching Assistantships.

   b) **Guidance Committee**
The student’s Guidance Committee is comprised of the student’s Major Professor and the advisor for the student’s Area of Geographic Depth. The Guidance Committee will work with the student to develop course work requirements, thesis development (Plan I) and MA examination (Plan II). Students are required to complete the guidance committee report by the end of their first quarter in residence in the program.

c) **Thesis Committee or Comprehensive Examination Committee**

Thesis committee nominations are submitted to the Office of Graduate Studies for formal appointment in accordance with the Graduate Council policy (DDB 80, Graduate Council, B.1). Comprehensive Examination committees are approved by the Executive Committee of the Group. The Major Professor serves as Chair of the thesis or comprehensive examination committee.

**Comprehensive Exam Committee**

1) The Comprehensive Exam Committee must have three members
2) At least two members of the committee, including the Chair, must be faculty members of the Geography Graduate Group
3) The decision on the outcome of the examination must be unanimous
4) The Chair of the Committee will report the result of the examination by letter to the Graduate Adviser who will notify the Office of Graduate Studies of the result of the examination

**Thesis Committee**

1) The Thesis Committee must have at least three members
2) The Chair of the Thesis Committee is the Major Professor must be a Geography Graduate Group member
3) At least two members of the Thesis Committee must be Geography Graduate Group members
4) The completed thesis with original signatures is submitted to the Office of Graduate Studies

d) **Executive Committee**

The Executive Committee conducts the routine business of the Group including acting on student petitions, membership requests, and curriculum development.

6) **Advising Structure and Mentoring**

The interdisciplinary and interdepartmental nature of the GGG requires that the student seek advising assistance throughout his/her program.

The **Major Professor** is the faculty member who mentors the student and helps provide access to resources; the Major Professor also supervises the student’s research and thesis and serves as the Chair of the Thesis Committee or the Comprehensive Examination Committee. The Major Professor is also responsible for assisting the student in selecting courses beyond the core courses defined above. The most important advising is done by the Major Professor, who with the student determines the specific course of study that will lead to successful completion of the Comprehensive Examination or Thesis. No other advising can supplant the role of the Major Professor in this.
The **Graduate Advisers** are nominated by the Chair of the program and appointed by the Dean of Graduate Studies, and are a resource for information on academic requirements, policies and procedures, and registration information. The GGG Adviser certifies to the Office of Graduate Studies that the student has followed the required program to reach the completion of the M.A. degree. The GGG Adviser must also certify that a student with deficiencies has satisfied these.

The **Mentoring Guidelines** can be found at


The **Advising Worksheet** can be found in appendix 1.

7) **Advancement to Candidacy**

Master of Arts students in Geography are expected to file for candidacy between the end of their third and fourth quarter of studies at the University of California, Davis. (see Typical Timeline chart below)

Every student must file an official application for Candidacy for the Degree of Master of “Arts” after completing one-half of their course requirements and at least one quarter before completing all degree requirements. The Candidacy for the Degree of Master form can be found online at:  http://www.gradstudies.ucdavis.edu/forms/.

A completed form includes a list of courses the student will take to complete degree requirements. If changes must be made to the student’s course plan after s/he has advanced to candidacy, the Graduate Adviser must recommend these changes to Graduate Studies. Students must have their Graduate Adviser and committee Chair sign the candidacy form before it can be submitted to Graduate Studies. If the candidacy is approved, the Office of Graduate Studies will send a copy to: the appropriate graduate staff person and the student; the thesis committee chair will also receive a copy, if applicable. If the Office of Graduate Studies determines that a student is not eligible for advancement, the department and the student will be told the reasons for the application’s deferral. Some reasons for deferring an application include: grade point average below 3.0, outstanding “I” grades in required courses, or insufficient units.

8) **Comprehensive Examination and Thesis Requirements**

a) **Thesis Requirements (Plan I)**

A thesis must be completed, and students should enroll for units in Geography 299 while working on their thesis. The thesis would normally be reviewed, approved, and signed by the Thesis Committee by the end of the sixth quarter, though this can be extended up to nine quarters with the recommendation of the student’s Major Professor and approval of the Executive Committee. At least two members of the committee must be faculty members of the Geography Graduate Group, with one of the persons being the student’s major professor. There are no other program-specific thesis requirements.

b) **Comprehensive Examination (Plan II)**

Every M.A. Plan II student needs to take a Comprehensive Examination (written and oral) exam in winter quarter of year 2 (5th quarter), with a 2nd chance for those
students who fail being an oral exam in spring quarter of year 2 (6th quarter). The Comprehensive Examination Committee will be comprised of three faculty members, at least two of which are members of the Geography Graduate Group.

The written portion consists of a paper of peer reviewed quality which is presented to the Committee one week prior to the oral examination. The Comprehensive Examination is based on concepts and methods in Geography. Included in the exam are such topics as the history of geographic thought, concepts in general geography, spatial analysis, and interpretation of geographic information. The Committee will examine the student on the methods appropriate to the student’s Area of Emphasis or Concentration in Geography.

The chair of the Geography Graduate Group will appoint an examination committee that will be responsible for preparing, administering and grading the examination. This committee will forward its recommendation to the GGG Chair to be forwarded to the Office of Graduate Studies.

Students may take the comprehensive examination once they have advanced to candidacy. When they take the exam, the students must be registered or in current filing fee status. Graduate Studies requires the committee’s unanimous vote to pass a student on the exam. If a student does not pass the exam, the committee may recommend that the student be reexamined one more time. The student may be reexamined only if the Graduate Adviser concurs with the committee. The examination may not be repeated more than once. A student who does not pass on the second attempt is subject to disqualification from further graduate work in the program.

Students who fail to pass the Comprehensive Examination may retake the exam within one Academic Quarter. Failure to pass the retaken Comprehensive Examination will result in a recommendation to the Dean of Graduate Studies that the student be disqualified from the program.

9) Normative Time to Degree
The normative time to degree for Master of Arts in Geography is six quarters (2 years) for both the Plan II (Comprehensive Examination) and Plan I (Thesis). On recommendation by the student’s Major Professor, the Executive Committee can extend normative time guidelines for students for up to 3 quarters, and will consider progress toward a degree on an individual basis for UC staff working part-time toward a degree.

10) Typical Time Line and Sequence of Events
Master of Arts Degree

<table>
<thead>
<tr>
<th>First Year</th>
<th>Winter</th>
<th>Spring</th>
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<tbody>
<tr>
<td>Fallb</td>
<td>Winter</td>
<td>Springb</td>
</tr>
<tr>
<td>GEO 200AN</td>
<td>GEO 200BN</td>
<td>GEO 200DN</td>
</tr>
<tr>
<td>GEO Depth Course</td>
<td>GEO 200CN</td>
<td>GEO Depth Course</td>
</tr>
<tr>
<td>GEO 297</td>
<td>GEO Depth Course</td>
<td>GEO 297</td>
</tr>
<tr>
<td></td>
<td>Assemble thesis committee and develop thesis proposal (Plan I)</td>
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</tbody>
</table>
Correct any coursework deficiencies from list of prerequisites
Begin preliminary research to define thesis problem

<table>
<thead>
<tr>
<th>Second Year</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
</tr>
<tr>
<td>GEO Depth Courses</td>
</tr>
<tr>
<td>and/or electives</td>
</tr>
<tr>
<td>GEO 299 Thesis</td>
</tr>
<tr>
<td>Research (Plan I)</td>
</tr>
<tr>
<td>File for candidacy*</td>
</tr>
</tbody>
</table>

*if not completed previously

11) **Sources of funding**

The Major Professor will present the student with a plan for support at the time of acceptance and work with the student to obtain financial support. Many sources of financial support are available for students:

**Teaching Assistant Positions.** Teaching assistant (TA) positions are often available for classes taught by GGG faculty members through their departments. The GGG Graduate Program Coordinator has TA applications for the group’s home department: Environmental Design. The TA application is also available online at [http://geography.ucdavis.edu](http://geography.ucdavis.edu). Graduate 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 teaching assistant opportunities. Apply early, preferably between December and May the prior year. Application forms for Teaching Assistantships should be submitted to the Department or Graduate Group offering the course on which the student wishes to assist. TA positions of 25% or greater time carry an in-state fee remission. A partial listing of available positions and contact information is available at the Graduate Studies website at [http://www.gradstudies.ucdavis.edu/listappt/](http://www.gradstudies.ucdavis.edu/listappt/).

**Graduate Student Researcher.** Individual faculty members fund graduate student researcher (GSR) positions. Faculty in your area of interest should be contacted to discover opportunities. GSR positions of 25% or greater time carry an in-state fee remission and non resident tuition remission.

**Work-Study.** The Geography Graduate Group has a limited number of 25% time work-study positions each year. Eligibility for these grants is related to individual income. Work-study grants are used to match funding from other employment on the campus, usually graduate student researchers. A 25% work-study GSR appointment includes full remission of in-state fees for the quarter the appointment is held. Deadlines and procedures for applying for work-study are available from the Graduate Program Coordinator.

**GGG Block Grants.** Graduate Studies allocates the GGG a block grant award to help fund students. The GGG issues a call for block grant applications in the winter quarter, and the Awards Committee makes recommendations to the Chairperson on these awards. Awards may be used towards fees or as stipends.
Other On-Campus. Other employment on campus may be available in technical and service capacities. See the Student Employment Center for more information at: http://jobs.ucdavis.edu/

Fellowships. The University offers several fellowships for new and continuing students. Fellowships are allocated on a competitive basis. Fellowship deadlines and applications are available from the Graduate Staff Assistant. External fellowships are also available through federal agencies and private organizations with Graduate Studies providing information on many of these.

Off-Campus. Off-campus employment opportunities exist in many areas of geography. The opportunities can often be discovered through the Internship and Career Center (2nd floor, South Hall) or through directly contacting agencies and firms doing work of interest to you. Jobs also frequently are sent to our email list for distribution.

Research Funding. Geography Graduate students have been very successful in obtaining funding for their research projects from various private, state and federal agencies. Several funding sources are also available at UCD and UC systemwide. Further information may be found on our Graduate Studies and Office of Research campus websites.

Teaching Assistant and Graduate Student Researcher positions afford excellent opportunities to gain experience in areas of intrinsic importance to your graduate education and to receive financial support at the same time. Information and application materials for TAships are available from the department in which you wish to teach. Contact the faculty directly about the availability of GSR positions. A minimum 3.0 cumulative GPA is required to hold an academic appointment. GSR and TA appointments at 25% and above provide full remission of in-state fees for the quarter the appointment is held. This policy is reviewed for renewal each year. Nonresident tuition (NRT) remission is provided as a non-taxable benefit to all eligible Graduate Student Researchers (GSRs) employed by the University of California, Davis. You can look at a partial listing of currently available TA, GSR and Reader appointments on the Graduate Studies online listing at: http://www.gradstudies.ucdavis.edu/listappt/.

Financial Aid, which is only available to U.S. citizens, permanent residents or immigrants, 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 your graduate program regarding the availability of work-study funding. All applicants (US citizens, permanent residents, and immigrants) are required to apply for financial aid. 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.

Fellowships, graduate scholarships, and block grant awards are awarded primarily on the basis of scholarship and the promise of outstanding academic and professional achievement. Consideration is given to the extent and quality of previous undergraduate and graduate work, evidence of ability in research or other creative accomplishment,
evidence of intellectual capacity, and promise of productive scholarship. Graduate Record Examination (GRE) scores, undergraduate and graduate grade point averages, academic transcripts, statement of purpose, letters of recommendation, and other documentation such as publications or awards are used in this evaluation.

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 or pick up a paper application from the Financial Aid Office in Dutton Hall.

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

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

1) Admissions Requirements
For students entering the graduate program without an undergraduate degree in geography, it will be necessary to evaluate prior coursework and most likely take additional preparatory coursework in geography. The minimal background for entrance into the doctoral program is a bachelor’s degree with 3.0 in upper-division coursework taken during the applicant’s last two years as an undergraduate or other evidence of comparable scholarship. GRE: only the General Test is required; scores should be recent (within the past five years). Applicants whose native language or language of instruction is not English must take the TOEFL or IELTS. A minimum score is required on the TOEFL and IELTS, see the Graduate Studies website for details.

Other requirements for admission include:
- A completed Office of Graduate Studies online application
- Three letters of recommendation
- Official transcripts from each university attended
- Confirmed Major Professor: a GGG faculty member in good standing must confirm that they will accept the student, and provide mentorship and access to essential resources to complete their degree until the student completes their program of study. It is not necessary to have this commitment before submitting the application. The Major Professor will present the student with a plan for support at the time of acceptance and work with the student to continue to obtain financial support.

a) Prerequisites.
Students with undergraduate degrees not in geography will be required to take additional courses or readings to overcome deficiencies in geographic theory and methods. These units are beyond the degree requirements. Generally a student with 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.

The following courses offered at UC Davis (as well as other courses to be approved by the Graduate Advisers) are considered geography or equivalent courses:

**Human Geography**
- ANT 102 – Cultural Ecology
- ANT 103 – Indigenous People
- ANT 105 – Societies and People
- ANT 119 – World Writing Systems
- 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
- ESP 101 – Human Ecology
- ESP 133 – Cultural Ecology
Physical Geography
ATM 110 – Weather Observation and Analysis
ATM 115 – Hydroclimatology
ATM 116 – Climate Change
ATM 133 – Biometerology
ATM 149 – Air Pollution
ERS 100 – Principles of Hydrologic Science
ERS 121 – Water and Society
ERS 141 – Role of Fire in Natural Ecosystems
ERS 144 – Trees and Forests
ERS 173 – Humane and Vegetation Change
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 180 – Introduction to GIS
ABT 181 – GIS Modeling
ABT 182 – Environmental Analysis with GIS
ABT/LDA 185 – Concepts and Methods in GIS
ERS 185 – Aerial Photo Interpretation and Remote Sensing
ERS 186 and 186L – Environmental Remote Sensing
ESP 123 – Introduction to Field and Lab Methods in Ecology
LDA 150 – GIS for Land Planners
GEL 136 – Ecogeomorphology of Rivers and Streams
WFC 100 – Field Methods in Wildlife Biology

b) **Deficiencies.**
The student’s deficiencies will be determined upon admission to the program by the Graduate Advisor, in consultation with the student and the student’s Major Professor. Deficiencies should be addressed beginning the first quarter of enrollment and must be completed by the end of the first year in the program.

2) **Dissertation Plan**
**Plan B.** Specifies a three member (minimum) dissertation committee, an optional final oral examination (made on an individual student basis by the dissertation committee), and no exit seminar.
3) **Course Requirements – 48 units**

At least 48 post-graduate course units (M.A. & Ph.D.) must be completed (exclusive of 299 and 396 units). The 48 units include the 38 units of core courses listed below and additional 200-level courses in appropriate elective courses, as approved by the Graduate Adviser.

**a) GGG Core Courses – 18 units**

- GEO 200AN – Geographical Concepts (4 units, fall quarter)
- GEO 200BN – Theory and Practice of Geography (4 units, winter quarter)
- GEO 200CN – Computational Methods in Geography (4 units)
- GEO 200DN – Methods of Socio-Spatial Analysis in Geography (4 units)
- GEO 200EN—Advanced Research Design in Geography (2 Units)

Students are encouraged to take the first four core courses their first year in the program. The graduate Adviser will not waive these core courses unless the student has transcript notation and a syllabus from a similar graduate-level course taken at another institution. The course GEO 200EN is designed to help students in finalizing their dissertation research proposal, and should be taken during their second or third year of the program, depending on their level of preparation.

**b) Geographic Depth Courses – 16 units in one sub-discipline**

Every student is required to take at least 16 units of Geographic Depth Courses from a pre-approved selection of courses in ONE of the four recognized sub-disciplines of Geography listed below. Students may petition for substitutions to this list, subject to approval first by their Guidance Committee and then the GGG Executive Committee:

- **Environmental Sciences** (see appendix 2 for approved courses)
- **Methods, Models, and GIScience** (see appendix 3 for approved courses)
- **Nature & Society** (see appendix 4 for approved courses)
- **People, Place, and Region** (see appendix 5 approved course)

**c) Seminar Requirement (4 units)**

GEO 297 – Seminar in Geography (2 units each, repeated for total of 4 units)

**d) Electives – variable units**

Elective courses may be required to reach the minimum number of units required. Students choose appropriate electives in consultation with their Adviser.

**e) Summary:**

There are total of 48 post-graduate units required. Of these, at least 36 units must be at the graduate level (200-level). There are 18 units of core coursework, 16 units of depth coursework, and 4 units of required seminar; students may need to take additional elective coursework to satisfy the minimum 48 unit requirement.

A minimum course load per academic quarter is 12 units. Per UC regulations, students cannot enroll in more than 12 units of graduate level courses (200) or more than 16 units of combined undergraduate and graduate level (100, 200, 300) courses per quarter.
Geography depth and elective coursework must be approved by the student’s Guidance Committee, then reviewed by the Graduate Adviser, and then approved by the Graduate Group Executive Committee.

Ph.D. students must be in residence for at least six quarters and must complete 30 units of coursework at UCD. The Graduate Adviser can assist students who wish to transfer courses from other institutions or through UC Extension (via petition) into their program.

4) Special Requirements
   a. Students should be aware of the nine-quarter rule regarding employment (Directive #92-122 from the Office of Graduate Studies, July 21, 1992); that is, students may not be employed after the 9th quarter unless they have passed their qualifying exam.

5) Committees
   a) Admission-Fellowship Committee
      Admission - once the completed application, all supporting material, and the application fee have been received, the application will be submitted to the Admissions Committee. The Admissions Committee consists of 4 graduate group faculty and 1 graduate group student. Based on a review of the entire application, a recommendation is made to accept or decline an applicant’s request for admission. That recommendation is forwarded to the Dean of Graduate Studies for final approval of admission. Notification of admissions decisions will be sent by Graduate Studies. Applications are accepted through January 2 through for the next fall entering class. This committee also evaluates and ranks applicants for scholarships, fellowships and Teaching Assistantships.

   b) Guidance Committee
      The student’s Guidance Committee is comprised of the student’s Major Professor and the advisor for the student’s Area of Geographic Depth. The Guidance Committee will work with the student to develop course work requirements, thesis development (Plan I) and MA examination (Plan II). Students are required to complete the guidance committee report by the end of their first quarter in residence in the program.

   c) Qualifying Examination Committee
      Ph.D. Qualifying Examination committee nominations are made by the student in consultation with the Adviser and are submitted to the Office of Graduate Studies for formal appointment in accordance with Graduate Council policy. Students are expected to have to have formed their Qualifying Exam Committee by the end of their 5th quarter in the Ph.D. program. The Qualifying Exam Committees role is to ensure that the Ph.D. candidate has the necessary preparation, including sufficient breadth and depth within the geography discipline, to advance to candidacy.

      1) The Qualifying Examination committee must have at least five members.
      2) At least two members must represent the major specialization.
3) At least one member must represent areas of geography outside the area of the student’s specialization (to ensure knowledge of the breadth of the discipline).

4) At least three members must be Geography Graduate Group members; and one member must be from outside the Geography Graduate Group.

5) The Chair of the Qualifying Examination committee may not chair the student’s dissertation committee.

6) The Chair of the Qualifying Examination Committee must be a Geography Graduate Group member, but unlike some other graduate groups, the dissertation chair (major professor) does not typically serve on the qualifying examination committee.

7) Members of the student’s Qualifying Examination Committee are recommended by the Graduate Adviser, in consultation with the student, and appointed by the Dean of Graduate Studies.

d) Dissertation Committee

Members of a Ph.D. student’s Dissertation Committee are recommended by the Graduate Adviser, in consultation with the student, and appointed by the Dean of Graduate Studies. Students are expected to have formed their Dissertation Committee at least 60 days prior to taking their Qualifying Exam. The Dissertation Committee is expected to meet regularly with the candidate, from developing the original research proposal, through conducting the research, to completing the final dissertation.

1) The Dissertation Committee must have at least three members.

2) The Chair of the Dissertation Committee must be a Geography Graduate Group member.

3) At least two members of the Dissertation Committee must be Geography Graduate Group members.

e) Executive Committee

The Executive Committee conducts the routine business of the Group including acting on student petitions, membership requests, and curriculum development.

6) Advising Structure and Mentoring

Although the curriculum of the GGG is laid out in the various Areas of Emphasis and Concentrations, the interdisciplinary and interdepartmental nature of the GGG requires that the student seek advising assistance throughout his/her program.

The Major Professor is the faculty member who supervises the student’s research. The Major Professor is also responsible for assisting the student in selecting courses beyond the core and methods courses defined above. The most important advising is done by the Major Professor, who, with the student, determines the specific course of study that will lead to successful completion of the PhD. No other advising can supplant the role of the Major Professor in this.

The Graduate Adviser, nominated by the Chair of the program and appointed by the Dean of Graduate Studies, is a resource for information on academic requirements, policies
and procedures, and registration information. The GGG Adviser certifies to the Office of Graduate Studies that the student has followed the required program to reach the completion of the PhD. degree. The GGG Adviser must also certify that a student with deficiencies has satisfied these.

The **Mentoring Guidelines** can be found at 
http://gradstudies.ucdavis.edu/gradcouncil/mentoring.pdf

The PhD Advising Worksheet can be found in appendix 1.

7) **Advancement to Candidacy**

The student is eligible for Advancement to Candidacy after successfully completing all graduate program degree requirements (except the dissertation), maintaining a minimum GPA of 3.0 in all course work undertaken (except those courses graded S or U), and after passing the Qualifying Examination.

The student must file the appropriate paperwork with the Office of Graduate Studies and pay the candidacy fee in order to be officially promoted to Ph.D. Candidacy. Refer to the Graduate Council website for additional details regarding the Doctoral Qualifying Examination at http://graduatestudies.ucdavis.edu/gradcouncil/Doctoral%20Qualifying%20Examination.

Students are expected to advance to complete the Qualifying Examination and advance to candidacy by the first quarter of their third year of graduate study (7th quarter) or no later than the end of the fourth year (12th quarter). Please note that students who do not pass their qualifying examination by the end of the 9th quarter will not be eligible for any academic employment until they pass the exam.

8) **Dissertation and Examination Requirements:**

a) **The Geography PhD program offers a Plan B** dissertation plan which specifies a three member (minimum) dissertation committee, an optional final oral examination (made on an individual student basis by the dissertation committee), and no exit seminar.

b) **Qualifying Examination requirements**

Before advancing to candidacy for a doctoral degree, a student must pass a Qualifying Examination before a committee appointed to administer that examination. All students will complete the course requirements before taking their Qualifying Examination.

**Timing of the Exam:**

The qualifying exam should be taken by the 7th quarter in the program (end of Fall quarter, third year). According to university policy, graduate students cannot hold an academic title (e.g., Teaching Assistant, Research Assistant) for more than 9 quarters before passing their Qualifying examination.

**Format of the Exam:**

The Qualifying Examination will consist of written and oral examinations. The Qualifying Examination will be both oral and written and cover general geography, the
student’s areas of depth concentration, course preparation indicated in the student program of study, and the area of proposed research.

Written Exam
The written portion of the examination will consist of two parts:

1) Questions are submitted by each Committee member and coordinated by the Qualifying Examination Committee Chair; these questions are provided to the student at least one week before the scheduled oral examination. The student will have at least five full working days to complete this portion of the exam which is then graded by the Committee before the oral exam begins. Typically, the Chair asks each committee member to submit two questions, with the student choosing one question from each committee member to write a 1,000-1,500 word essay.

2) The student must also prepare a written dissertation proposal under the guidance of his/her major professor, and this is submitted to the committee members at least a week (but preferably one month) before the oral exam date. This proposal is to be at least 5 and no more than 10 single spaced pages, exclusive of bibliography. Its format is to include a statement of the research problem, objectives, justification, and methods.

Oral Exam
The oral part of the exam lasts 2-3 hours and includes an examination of the dissertation proposal, any follow-up questions on the written essays, and questions on students’ areas of expertise. Students are encouraged to discuss the Exam’s emphases with the Committee Chair and all committee members before the examination so that he/she may be best prepared. The intent of the exam is to test the student’s depth and breadth of geographic knowledge to ensure he/she is prepared to undertake the dissertation study.

Outcome of the Exam
The committee will reach a decision on the student’s performance immediately after the oral exam. The committee, having reached a unanimous decision, shall inform the student of its decision to:

- “Pass” (non conditions may be appended to this decision)
- “Not Pass” (the Chair’s report will specify whether the student is required to retake all or part of the exam, list any additional requirements, and state the exact timeline for completion of requirements to achieve a “Pass”), or
- “Fail”.

If a unanimous decision takes the form of “Not Pass” or “Fail”, the Chair of the QE committee must include in the report a specific statement, agreed to by all members of the committee, explaining its decision and must inform the student of its decision. Having received a “Not Pass”, the student may attempt the QE one additional time; the QE report must list the specific conditions and timing for the second exam. After a second exam, a vote of “Not Pass” is unacceptable; only “Pass” or “Fail” is recognized. Only one retake of the QE is allowed. Should the student receive a “Fail” on the first or
second attempt at the exam, the student will be recommended for disqualification from the program to the Dean of Graduate Studies.

c) The Dissertation
Filing of the Dissertation with the Office of Graduate Studies is the last requirement satisfied by the candidate. The deadlines for completing this requirement are listed each quarter in the catalog and on the Graduate Studies website. A candidate must be a registered student or in Filing Fee status at the time of filing the dissertation. The dissertation must be prepared and submitted according to all regulations instated by the Office of Graduate Studies.

The research conducted by the student must be of such character as to show ability to pursue independent research. The dissertation reports a scholarly piece of work of publishable quality that solves a significant scientific problem in the field and is carried out under the supervision of a member of program while the student is enrolled in the program.

Students should meet regularly with their dissertation committee. The dissertation must be submitted to each member of the dissertation committee at least one month before the student expects to make requested revisions; committee members are expected to respond within 4 weeks, not including summer months for nine month faculty. Informing committee members of progress as writing proceeds helps the members to plan to read the dissertation and provide feedback within this time frame. The dissertation must be approved and signed by the dissertation committee before it is submitted to Graduate Studies for final approval.

9) Normative Time to Degree
Students are expected to complete the Qualifying Examination and to advance to candidacy by the first quarter of their third year of graduate study (7th quarter) or no later than the end of the fourth year (12th quarter). Students are expected to complete the dissertation within three years of completion of the qualifying examination. Note that Graduate Council has set a maximum of four years after completion of the qualifying examination to complete all degree requirements, failing which a student will go on probation for one year. At the end of the probationary period if all the degree requirements are not satisfied, the student will be recommended for disqualification.

10) Typical Time Line and Sequence of Events

<table>
<thead>
<tr>
<th>Doctor of Philosophy Degree</th>
<th>First Year</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Fall</td>
</tr>
<tr>
<td>GEO 200AN</td>
<td>GEO 200BN</td>
</tr>
<tr>
<td>GEO Depth Course</td>
<td>GEO 200CN</td>
</tr>
<tr>
<td>GEO 297</td>
<td>GEO Depth Course</td>
</tr>
</tbody>
</table>
Correct any coursework deficiencies from list of prerequisites

Begin preliminary research to define thesis problem

### Second Year

<table>
<thead>
<tr>
<th>Fall</th>
<th>Winter</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEO 200EN</td>
<td>Depth Courses or Electives Form Qualifying Exam committee</td>
<td>Depth Courses or Electives</td>
</tr>
<tr>
<td>GEO Depth Courses Electives</td>
<td>Begin to identify and form dissertation committee, and develop dissertation topic/proposal</td>
<td></td>
</tr>
<tr>
<td>GEO 299 Dissertation Research</td>
<td></td>
<td></td>
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</tbody>
</table>

### Third Year

<table>
<thead>
<tr>
<th>Fall</th>
<th>Winter</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complete dissertation proposal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Complete qualifying exam</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* recommended

### Fourth and Fifth Years
typically devoted to conducting and completing dissertation research and writing; students must remain in a registered or filing fee status.

11) **Sources of funding**

The GGG requires the Major Professor to have a plan for funding at the time of acceptance, but it is the student’s responsibility to obtain needed funding and the responsibility of the GGG to assist him/her in obtaining funding. Many sources of financial support are available for students:

**Teaching Assistant Positions.** Teaching assistant (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: Environmental Design. The TA application is also available online at [http://ggg.ucdavis.edu](http://ggg.ucdavis.edu). Graduate 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 teaching assistant opportunities. Apply early, preferably between December and May the prior year. Application forms for Teaching Assistantships should be submitted to the Department or Graduate Group offering the course on which the student wishes to assist. TA positions of 25% or greater time carry an in-state fee remission. A partial listing of available positions and contact information is available at the Graduate Studies website at [http://www.gradstudies.ucdavis.edu/listappt/](http://www.gradstudies.ucdavis.edu/listappt/)

**Graduate Student Researcher.** Individual faculty members fund graduate student researcher (GSR) positions. Faculty in your area of interest should be contacted to discover
opportunities. GSR positions of 25% or greater time carry an in-state fee remission and non resident tuition remission.

**Work-Study.** The Geography Graduate Group has a limited number of 25% time work-study positions each year. Eligibility for these grants is related to individual income. Work-study grants are used to match funding from other employment on the campus, usually graduate student researchers. A 25% work-study GSR appointment includes full remission of in-state fees for the quarter the appointment is held. Deadlines and procedures for applying for work-study are available from the Graduate Program Coordinator.

**GGG Block Grants.** Graduate Studies allocates the GGG a block grant award to help fund students. The GGG issues a call for block grant applications in the winter quarter, and the Awards Committee makes recommendations to the Chairperson on these awards. Awards may be used towards fees or as stipends.

**Other On-Campus.** Other employment on campus may be available in technical and service capacities. See the Student Employment Center for more information at: http://jobs.ucdavis.edu/

**Fellowships.** The University offers several fellowships for new and continuing students. Fellowships are allocated on a competitive basis. Fellowship deadlines and applications are available from the Graduate Staff Assistant. External fellowships are also available through federal agencies and private organizations with Graduate Studies providing information on many of these.

**Off-Campus.** Off-campus employment opportunities exist in many areas of geography. The opportunities can often be discovered through the Internship and Career Center (2nd floor, South Hall) or through directly contacting agencies and firms doing work of interest to you. Jobs also frequently are sent to our email list for distribution.

**Research Funding.** Geography Graduate students have been very successful in obtaining funding for their research projects from various private, state and federal agencies. Several funding sources are also available at UCD and UC systemwide. Further information may be found on our Graduate Studies and Office of Research campus websites.

Teaching Assistant and Graduate Student Researcher positions afford excellent opportunities to gain experience in areas of intrinsic importance to your graduate education and to receive financial support at the same time. Information and application materials for TAships are available from the department in which you wish to teach. Contact the faculty directly about the availability of GSR positions. A minimum 3.0 cumulative GPA is required to hold an academic appointment. GSR and TA appointments at 25% and above provide full remission of in-state fees for the quarter the appointment is held. This policy is reviewed for renewal each year. Nonresident tuition (NRT) remission is provided as a non-taxable benefit to all eligible Graduate Student Researchers (GSRs) employed by the University of California, Davis. You can look at a partial listing of currently available TA, GSR and Reader appointments on the Graduate Studies online listing at: http://www.gradstudies.ucdavis.edu/listappt/
Financial Aid, which is only available to U.S. citizens, permanent residents or immigrants, 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 your graduate program regarding the availability of work-study funding. All applicants (US citizens, permanent residents, and immigrants) are required to apply for financial aid. 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.

Fellowships, graduate scholarships, and block grant awards are awarded primarily on the basis of scholarship and the promise of outstanding academic and professional achievement. Consideration is given to the extent and quality of previous undergraduate and graduate work, evidence of ability in research or other creative accomplishment, evidence of intellectual capacity, and promise of productive scholarship. Graduate Record Examination (GRE) scores, undergraduate and graduate grade point averages, academic transcripts, statement of purpose, letters of recommendation, and other documentation such as publications or awards are used in this evaluation.

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](http://www.fafsa.ed.gov) or pick up a paper application from the Financial Aid Office in Dutton Hall.

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

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

13) **Leaving the Program Prior to Completion of the PhD Requirements**

Should a student leave the program prior to completing the requirements for the PhD, they may still be eligible to receive the Masters if they have fulfilled all the requirements (see Masters section). Students can use the Change of Degree Objective form available from the Registrar’s Office:

[http://registrar.ucdavis.edu/PDFFiles/D065PetitionForChangeOfGraduateMajor.pdf](http://registrar.ucdavis.edu/PDFFiles/D065PetitionForChangeOfGraduateMajor.pdf)

**Attachments**

Appendix 1: MA and PhD Program of Study Worksheets
Appendix 2: Geographic Depth Courses: Environmental Sciences
Appendix 3: Geographic Depth Courses: Methods, Models, and GIS
Appendix 4: Geographic Depth Courses: Nature and Society
Appendix 5: Geographic Depth Courses: People, Place and Region
Appendix 6: MOU’s
Appendix 1: MA and PhD Program of Study Worksheets
SAMPLE
Program of Study for GGG Master’s Degree

Name:_________________________________ Plan 1 (Thesis) ___ Plan 2 (Exam) ___
B.A./B.S. from __________________________ Major: _________________ Date: ___

<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>Computational Methods in Geography</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>GEO 200DN</td>
<td>Methods of Socio-Spatial Analysis</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>
</tbody>
</table>

Geography Depth Courses (12 units)

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course title</th>
</tr>
</thead>
</table>

Electives

<table>
<thead>
<tr>
<th>Transfer Units</th>
<th>School</th>
<th>Course Number</th>
<th>Course title</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
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</tbody>
</table>

TOTAL UNITS

| UC courses (except 299 & 396) | 36 total required, exclusive of 299 and 396 units |
| Transfer courses             |                                                   |
| Total unites (courses + 299 & 396) |                                               |

Major Professor: __________________________ Date: __________

Graduate Advisor: __________________________ Date: __________
SAMPLE
Program of Study for GGG Doctoral Degree

Name: ___________________________________________  Major: _______________  Date: ___
B.A./B.S. from: __________________________  Major: _______________  Date: ___
M.A./M.S. from: __________________________  Major: _______________  Date: ___

<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>Computational Methods in Geography</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>GEO 200DN</td>
<td>Methods of Socio-Spatial Analysis</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>GEO 200EN</td>
<td>Advanced Research Design</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>

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course title</th>
<th>UG/G</th>
</tr>
</thead>
</table>

**Geography Depth Courses (16 units)**

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course title</th>
<th>UG/G</th>
</tr>
</thead>
</table>

**Electives**

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course title</th>
<th>UG/G</th>
</tr>
</thead>
</table>

**Transfer Units**

<table>
<thead>
<tr>
<th>School</th>
<th>Course Number</th>
<th>Course title</th>
</tr>
</thead>
</table>

**Language Requirement**

<table>
<thead>
<tr>
<th>Language:</th>
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**TOTAL UNITS**

<table>
<thead>
<tr>
<th>TOTAL UNITS</th>
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</thead>
<tbody>
<tr>
<td>48 total required, exclusive of 299 and 396 units</td>
</tr>
</tbody>
</table>

**UC courses (except 299 & 396)**

<table>
<thead>
<tr>
<th>Course title</th>
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</thead>
</table>

**Transfer courses**

<table>
<thead>
<tr>
<th>Course title</th>
</tr>
</thead>
</table>

**Total units (courses+ 299& 396)**

<table>
<thead>
<tr>
<th>Course title</th>
</tr>
</thead>
</table>

Major Professor: ___________________________________________  Date: _______

Graduate Advisor: ___________________________________________  Date: _______
Appendix 2: Environmental Sciences (Physical Geography) — Geographic Depth Courses

The list below is the pre-approved selection of courses in the subfield of Physical Geography that students can choose from to fulfill their 12-16 units of Geographic Depth Courses.

Depth Courses Offered by GGG Faculty (includes those to be Cross-Listed, proposed GEO number in parentheses)

- GEO 210 Topics in Biogeography
- GEO 211 Physical Geography Traditions and Methods
- ECI 267 (GEO 212) Water Resources Management
- ECL 201 (GEO 213) Ecosystems and Landscape Ecology
- PBG 296 (GEO 214) Seminar in Geography Ecology
- LDA 280 (GEO 253) Landscape Conservation
- GEO 280 Field Studies in Geography

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
Appendix 3: Methods, Models, and GIScience — Geographic Depth Courses

The list below is the pre-approved selection of courses in the subfield of Methods, Models, and GIScience that students can choose from to fulfill their 12-16 units of Geographic Depth Courses.

Depth Courses Offered by GGG Faculty (includes those to be Cross-Listed, proposed GEO number in parentheses)
PLS 205 (GEO 270) Experimental Design and Analysis
PLS 206 (GEO 271) Multivariate Systems and Modeling
ECL 220 (GEO 272) Spatio-temporal Ecology
HYD 273 (GEO 273) Introduction to Geostatistics
ESP 228 (GEO 274) Advanced Simulation Modeling
HYD 275 (GEO 275) Analysis of Spatial Processes
ECS 266 (GEO 276) Spatial Databases
WFC 222 (GEO 277) Advanced Population Dynamics
ECL 231 (GEO 278) Mathematical Methods and Population Biology
ECL 254 (GEO 279) Discrete Choice Analysis of Travel Demand
TTP 200 (GEO 280) Transportation Survey Methods
HYD 286 (GEO 281) Advanced Remote Sensing
LDA 280 (GEO 253) Landscape Conservation

Other Depth Courses
ESP 231 Population Biology
Appendix 4: Nature & Society — Geographic Depth Courses

The list below is the pre-approved selection of courses in the subfield of Nature-Society Geography that students can choose from to fulfill their 12-16 units of Geographic Depth Courses.

Depth Courses Offered by GGG Faculty (includes those to be Cross-Listed, proposed GEO number in parentheses)
ECL 211 (GEO 250) Advanced Topics in Cultural Ecology
ARE 214 (GEO 251) Development Economics
LDA 260 (GEO 252) Landscape and Power
LDA 280 (GEO 253) Landscape Conservation
CRD 244 (GEO 254) Political Ecology of Community Development
HIS 201W (GEO 256) Empires of Nature: Imperialism and the Natural World in Africa

Other Depth Courses
CRD 245 The Political Economy of Urban and Regional Development
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 170 Environmental Impact Reporting
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, Environmental Philosophy
Appendix 5: People, Place, and Region (Human Geography) — Geographic Depth Courses

The list below is the pre-approved selection of courses in the subfield of Human Geography that students can choose from to fulfill their 12-16 units of Geographic Depth Courses.

Depth Courses Offered by GGG Faculty (includes those to be Cross-Listed, proposed GEO number in parentheses)

LDA 200 (GEO 230) Citizenship, Democracy, & Public Space
LDA 201 (GEO 231) Theory and Philosophy of the Designed Environment
LDA 202 (GEO 232) Methods in Design and Landscape Research
LDA 205 (GEO 233) Physical Planning and Design
LDA 270 (GEO 234) Environment and Behavior
SOC 295 (GEO 235) 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 248 (GEO 248) Social Policy, Welfare Theories and Communities

Other Depth Courses

CRD 242 Community Development Organizations
CRD 247 Transformation of Work
ECL 217 Conservation and Sustainable Development in Third World Nations
ECL 222 Human Ecology of Agriculture CST 206 Studies in Race Theory
LDA 204 Case Studies in Landscape Design and Research
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
Appendix 6: MOUs