

Continuing Graduate Student Handbook

2018-2019

THE GEOGRAPHY Ph.D. PROGRAM

General Outline

All students take GEOG 200A/B in their first year. This course is designed to help each student to see, think, and write contemporary geographic thought; to learn how to make and to judge arguments; and to prepare a thesis proposal. All students in the doctoral program must take at least 12 units every semester (primarily in the form of appropriate graduate seminars) before taking the Qualifying Exam and advancing to candidacy. In addition, students must enroll in the Geography Colloquium (GEOG 295). This is a weekly colloquium which features invited speakers.

By the end of the third year, students entering with a B.A. or B.S. only must hand in a paper that would be suitable—in length and in quality—for submission to an academic or scientific journal. The paper may be an investigation of an intellectual problem in the form of an original synthesis of secondary literature; it may advance a new idea, or question an existing theory or notion, by assembling information that already exists in the literature; or it may use original information gathered from archives or in the field. The student should have a proposal for the paper by the end of the first year, and must be in constant and close consultation with his or her main advisor. The advisor will determine the appropriate format and length of the paper. The paper must be handed in, and approved by the main advisor, no later than a month before the Qualifying Exam.* A copy of the paper with the advisor's approval should be turned in to the Student Academic Advisor.

Prior to taking the Qualifying Examination, all students must prepare a preliminary dissertation prospectus of between five and ten pages for their exam committee.

The Qualifying Exam (the "orals") must be taken by the end of the third year, although it is recommended that students entering with a Master's degree take it by the end of their second year. The exam is based on a discussion of three broad geographic fields built around bibliographies produced in consultation with the examining committee.**

Immediately after passing the orals, a student applies to the Graduate Division for "Advancement to Candidacy for the Ph.D." Advancing to candidacy by the end of the third year qualifies a student for the Dissertation Completion Fellowship.

As part of their training, all students will be expected to serve as Graduate Student Instructors for at least one semester.

Before starting dissertation research, each student must have a Dissertation Prospectus Meeting—during which the student discusses a written research proposal—with at least two members of the Exam Committee. The Ph.D. dissertation is written under the supervision of a committee of three University faculty members, one of whom must be from outside the Geography Department and a member of the Berkeley Academic Senate. Upon final acceptance of the dissertation, the degree of Ph.D. is awarded. It is expected that the student will complete the Ph.D. by the end of the sixth year in the program.

All students are required to give an "exit talk" the semester they are filing their dissertation.

All students must give the department a copy of their thesis before their Final Report to the Graduate Division will be signed.

Additional Details

The Analytic Paper

By the end of the third year, students entering with a B.A. or B.S. only must hand in an 'Analytic Paper'. The analytic paper replaces the former requirement of a Master's Thesis. It is a good way to investigate a problem that is a stepping-stone on the way to a dissertation topic and to practice making a coherent argument backed up by ideas and evidence from the secondary literature.

Guidelines for Preparing the Analytic Paper

The Analytic Paper should be of a form suitable for submission to an academic or scientific journal. It should be relatively short (20-30 pages, maximum), succinct, and to the point, with a central problem, a major thesis and supporting arguments and evidence. It is a learning exercise in what it means to come up with an idea and present it in the manner of a publishable paper. It is not meant to be exhaustive, wideranging, nor a definitive proof. It is not expected to be based on original data gathered from archives, laboratory experiments, or in the field unless the student has ready access to such information that already exists.

The Analytic Paper can take several forms. It might lay out a field of inquiry, such as the industrial history of Emeryville or state formation in Senegal, show how the existing literature handles it, and propose a new way of looking at the key issues by bringing a different literature to bear and, possibly, a new thesis for further investigation. It might take the form of a specific empirical puzzle, such as the climate record during the late Mayan period or the geography of the market in credit swaps, and show what is lacking in the data needed to answer the problem and proposing what might be done to rectify the shortcoming. Or, it might be an investigation into and contribution to a specific problem in modeling (as in steam basin hydrology) or high theory (as in LaTour's actor-network approach) that already appears in the literature.

The student should have a proposal for the paper by the beginning of the second year, and should proceed in close consultation with his or her main advisor thereafter. The paper must be handed in and approved by the main advisor no later than a month before the Qualifying Exam. A copy of the paper with the advisor's signature must be turned in to the Student Affairs Officer. A template for the signature page follows.

The Ph.D. Qualifying Exam ("the orals")

To take the Qualifying Examination a student must:

- Maintain no less than a B average in all work undertaken in graduate standing;
- Have no more than two courses graded "Incomplete";
- Complete at least one semester of academic residency;

^{*} A student who does not hand in a satisfactory paper can be terminated from the program and awarded a terminal M.A. degree.

^{**} A student who does not pass the Qualifying Exam can be terminated from the program and awarded a terminal M.A. degree.

- Be registered during the semester in which the exam is taken;
- Submit an application to take the Qualifying Exam 4 weeks prior to the exam;
- Complete the Analytical paper if entering with only a Bachelor's degree;

The "orals" examination is conducted by a committee of **four faculty members** appointed by the Graduate Dean on the advice of the department (nearly always a selection by the student with his or her program advisor). At least one member of the committee must be from outside the Department of Geography and a member of the Berkeley Academic Senate. The Chair of the orals committee cannot serve as Chair of the student's dissertation committee.

Guidelines for Preparing for Oral (QE) Exams

The Point

- The Oral exam is required by the university for the doctoral degree. They are meant to be a test of general knowledge in preparation for doing a dissertation.
- They are normally taken at the end of the third year (second, if you entered with a Masters Degree).
- They are a rite of passage, to be sure, but they also are a way of signaling that you are making good progress intellectually and that you have a reasonable mastery of certain fields of knowledge.
 - For Human Geographers orals are not supposed to be a test of your dissertation prospectus (though some departments mix that in we do not).
 - For physical geographers, on the other hand, your proposed research will play a much more significant role. While your dissertation prospectus is not the subject of your oral exam, it will be used as a starting point to test your understanding of relevant topics in earth system science.

The Committee

- You should have a committee identified at least six months ahead of time, preferably two semesters ahead. That means meeting with each professor and getting his/her assent.
 - For human geographers an orals committee includes your primary advisor and one other from the department, who serves as chair. There must be at least one outside member. The membership is your choice.
 - For human geographers the chair of the committee is a formality and is not crucial to the proceedings. The chair simply sees that things are done properly.

- For physical geographers, the committee chair must be a member within the department who is not your primary advisor.
- For physical geographers, the chair coordinates the actual meeting and discusses the committee decision with you after the exam.

The Detailed Reading List

- A reading list must cover three broad fields (that's a university requirement). Each of those fields is normally broken up into 3-5 sections. Each section might have 5-10 entries (often books, but sometimes key articles).
- You will prepare a reading list, in conjunction with your professors. Start sketching out the topics and readings early on. Some things you will have read before, some will be recommendations to round out your knowledge of a field. (Talk to fellow students who have done their orals about their lists, and build on the work of others instead of reinventing the wheel)
- Usually one professor works with you on one major field. But there can be overlap (it's hard to avoid) and then there's the problem of the fourth professor for three fields. You'll have to work that out.
- Have the reading list in good shape at the beginning of the term when you will be taking your orals. That will give you enough time to read everything. Some adjustments will be made in the lists right up to the time of the exam, as you read everything. You may realize that some entries are not as good as hoped, or are redundant, or are tangential. Some new things may also come along.
- Be sure to give the final version of your complete reading lists to your committee members at least a few days before the exam not the day before! (The lists are only for you and the committee; they do not have to be filed with the department or the graduate division.)

For human geographers:

- The real work for orals is the reading: preparing your lists and working your way through all the books.
- Typically, the major fields include two areas of theory and one pertaining to a place (your research area), e.g., "Political Economy of Food", "Geographies of Gender", "Southern Africa". But the actual breakdown of topics is up to you and your advisors. There is no perfect organization of topics and reading, and there is often some overlap of readings between fields.
- Readings should be essential works in a field, not an exhaustive list. (This is not a bibliography. Keep trimming!)
- You should prepare a 'blurb', or summary statement, for each section of your reading list longer ones for the major headings (1 page), shorter for the subheadings (1-2 paragraphs).
- This should be done near the end of your preparation, perhaps a month (but at least two weeks) before the exam. It focuses the mind and reminds you why that section exists and how the readings cohere. It also shows the professors you know what you're up to.

For physical geographers:

- Instead of a blurb, you should precede your reading list with a research statement of your intended research goals (i.e., a draft prospectus). If you have conducted research towards these goals (you probably have), then you can include this. You cannot merely submit your analytical paper, but you can address the same themes, if appropriate. The reading list will be appended at the end. This draft prospectus plus reading list can vary in length from 3-10 pages. There is no set guideline at this time.
- The real challenge for the orals is to demonstrate a firm grasp on the state of knowledge regarding various subfields of earth system science. This means a qualitative and quantitative understanding of current research, and your reading list is a statement of those subfields you have chosen to master.
- The reading list can consist of a mix of textbooks and articles.
- The reading list is a useful guide for the examiners, but questions during the exam will likely be generated from your draft prospectus and courses that you have taken with committee members.
- To be most useful, the three broad subjects and associated reading list that you choose should coincide with the specific members on your committee. You can subdivide one broad subject or add another to address the issue of 4 committee members.

The Lead-Up

- Schedule the qualifying exam. This is often the hardest part of the whole process getting four professors in a room at the same time! You are expected to organize the scheduling. (Ask Josh Mandel about scheduling room 509 McCone for the exam.)
- Tell the Student Academic Advisor (Marjorie) when you know the exam date, but no later than a month before the exam, so she can prepare the paperwork. Do not leave her in the dark. (Marjorie will provide refreshments during the exam; you do not have to do anything).
- Talk to your professors! The more exchange you have before the exam, the more confidence you have in each other.
- Feel free to ask what the professors might ask you, in general terms. Ask them about strategies of answering and about the nature of the oral exams, in general.
- Give the Chair of the exam committee the order of questioning you would like.
- Prepare a brief draft prospectus. This will help you define your fields and direction, and will give the committee a better idea where you are headed. A full prospectus is

not required until after the Orals. An official prospectus approval meeting with your dissertation committee should take place within a couple months of the orals.

The Exam -- Process

- Exams are officially 3 hours long. They usually run closer to 2 1/2 hours.
- The basic format is this:
 - -You will be asked to leave the room while the committee has a brief discussion of procedures and of you and your preparation.
 - -You will return and be asked to give an introduction to your intellectual trajectory: where you've been and where you are going with your doctoral research.

For human geographers, this should be 5 minutes.

For physical geographers, aim for a 20 minute presentation with visuals (either by slide presentation programs or using the chalkboard/whiteboard).

- -Questions from committee members will likely cause this section to be 30 minutes to an hour length.
- -Afterwards, each professor has 20 minutes to ask questions, in the order you select. There will be some jumping in by other profs, here and there.
 - -There is a break at midpoint, with refreshments.
- -After the exam, you will be asked to leave the room while the professors decide your fate, then called back for their decision. This takes about 10 minutes, but can be longer. Don't panic! A long discussion may be about any number of things, and what exactly to tell the candidate it doesn't mean you are doing badly!

The Exam – Content: Human geographers

- Questions can be of almost any nature, but they are supposed to pertain to the topics and readings on your list. They tend to be general and often aimed at getting you to integrate different readings and think abstractly about a problem not just regurgitate what you read.
- Questions may be about high theory, such as, "How would you handle the problem of scale in economic geography?"; or empirics, such as, "How did the United States get ahold of half of Mexico?"; or specific writings, as in, "What does Harvey have to say about the role of Haussmann in rebuilding Paris?" Alas, there's no knowing what might pop into the head of your examiners so don't be surprised or shocked. Randomness is a part of the process.
- A basic strategy is to build up answers from the readings, as in "Well, Foucault would say this about that, but Lefebvre might have disagreed; and, in any case, they were stuck in a French debate of the 1970s, since then, Butler has said....etc. etc." But the ultimate purpose is to say what you think, given what you know.
- You can always ask a professor to repeat a question, or clarify it. You can always say, "I don't understand the question" or "I don't know". Remember, there is almost never one right answer to a question, in any case.
- An exam is more than a set of questions. It is, first of all, a dialogue: the professors want to know if you are comfortable enough with the material on your reading list to have a discussion about it. Do not worry so much about what exactly a questioner is looking for, but about what you want to say.
- What professors most hope for is that you are now in a position to think for yourself, to become their peer. But they know it's a turning point and you are likely still to be struggling to get over that transition.
- Remember, too: no one wants you to fail. If they are doing their job, they wouldn't let you in that room if they thought you couldn't pass.

The Exam – Content: Physical geographers

- After your introductory presentation, questions can be of almost any nature, but they are supposed to pertain to the topics and readings on your list. They can be general or specific, but most questions involve a response that demonstrates a thinking process rather than a simple answer. This may also come in the form of rapid-fire questions that lead you through the thinking process. Other questions may be completely open-ended.
- Most questions will involve the current state of knowledge. Some committee members may specifically want you to know the history of the field of research, and even if your committee does not ask, you should appreciate the historical context of your field of study.
- A basic strategy is to start answering an open ended question is to reword of the question to make sure you understand, then to proceed with a description of fundamental concepts that demonstrate how you would come up with the solution.
- If you don't know the answer to a question, you should not answer a different question, or worse, try to bluff your way through. You should address specifically what you do and do not know and expect that this will lead to a dialogue with committee members. Remember, the exam will be more a demonstration of how you think on your feet rather than your ability to recall specific numbers or answers.
- You should practice answering questions at the board. It is one thing to be able to answer questions in your head or on paper, and it is another thing to be able to answer questions on your feet while writing on the board.
- You should consider the amount of mental and physical endurance this exam will take, and plan appropriately in terms of food, water, caffeine and sleep that you need.
- View this exam as a great learning experience— a prime opportunity to get feedback on your intellectual trajectory.

The Aftermath

- After the end of the exam, you will be given a brief summary of the committee's opinion and advice for further improvement, by the chair. You should also go talk to your professors later on to get their feedback.
- If you fail, you will be asked to do further preparation and a reexamination. It's not the end of the world, just some more time in the trenches.

- Even if you pass, you may feel dissatisfied, either with your answers or with the questions put to you. That is very common. After all, you've just worked for months to get ready and you want to have something grand to show for it. But orals is only a couple hours long and can only touch a part of what you have done and what you know. It is just a sample.
- If it's any consolation, the oral exam is a good preview of what it's like to do a job interview you never know what people will ask, and you need to be light on your feet.
- A pass is a pass. Take pride in it and put it behind you. Don't worry over it (Was I brilliant? Was I marginal? Did Prof. Snarf make a face at that answer?!....). Don't forget to celebrate! Your fellow students will be happy to join you...
- The oral exam is, indeed, a rite of passage. Once oral's are done, you can clear your head and begin to think about your dissertation. Moreover, you can begin to step out of the shadow of your professors and stand on your own (intellectual) feet.

Guideline for Preparing a Dissertation Prospectus

The Point

A prospectus is a valuable first step in writing a dissertation. It forces you to get your ideas sorted out and put the problem and its solution into a coherent statement.

A prospectus allows your dissertation committee to help you prepare to write a dissertation and see that you are ready to carry out the research BEFORE you head into the field, the lab, or the library. It is a chance to stand up on your own intellectual legs and establish your place and identity in the academic world.

Pre-Orals Prospectus: First Pass

- You are expected to have a short prospectus ready by the time of your Oral Examination, as a way of clarifying your project and putting the reading lists in perspective.
- This is a first pass at the Prospectus, and is not expected to be fully formed and completely worked out. There will be time after the Orals to perfect it.
- You should work with your primary advisor on the pre-Prospectus, starting at least a month (preferably two months) before the Oral Exams.

The Prospectus Meeting

- Within four months after your Oral Exams, you must have a Prospectus ready for review and meet with your dissertation committee to secure approval of your project.
- The meeting must be with at least two members of the committee and allow for a full discussion of your Prospectus. The committee members must sign off on an approval form for the Department before you can proceed.
- The committee may require certain changes and improvements in the Prospectus before signing off, or as a condition of signing off.
- A signed copy of the prospectus should be turned into the Student Academic Advisor.

Elements of a Prospectus

- There is no single best form for a Prospectus, and every professor will have somewhat different ideas about how to proceed; but nearly every prospectus and research proposal has the following elements:
 - A problem statement
 - An hypothesis or set of hypotheses
 - A review of pertinent literature
 - A narrative summary or chapter outline
 - A research methods statement, including data sources
 - A research time-line
 - A bibliography

The segments below elaborate on these elements.

- Each element normally requires a separate and clearly-marked section of the Prospectus.
- 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 Prospectus runs 10-15 pages, single-spaced.

The Problem Statement

- The Problem Statement is the introduction to your prospectus 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? Is it a question about climate change in the early Holocene, as revealed through pollen records in Clear Lake? Is it how to understand neighborhood change in American cities, as illustrated by the last twenty years of property development in Oakland? Is it a matter of environmental perception of hurricanes in Honduras among coastal indigenes or of the outcome of property disputes in the transition to commercial forestry in Sumatra?
- What is the general setting within which this puzzle occurs? Is it a period of rapid warming and ice-melt with uncertain feedbacks on the North Atlantic? Is it a epoch of extreme real estate speculation due to financial bloat and rapid gentrification of inner cities? Is it a time of rising tropical storm occurrence combined with population influx to coastal zones of Central America? Or is it an era of neoliberalization of Indonesian agrarian policy following on the Asian economic crisis of 1997?

- 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.

Hypotheses, or Proposed Solutions

- In this section, you should set out a preliminary answer to your puzzle or answers to the several parts/levels of your problem.
- A hypothesis is what you think has happened or will happen in an experimental setting, and why. Any hypothesis worth its salt 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 of mid-Atlantic circulation and climate oscillations, and do certain developments point to a preferred or different approach? Does you problem call up the theory of Bourdieu about cultural capital, which might be juxtaposed in an original way with Daphne Spain's feminist theory of gendered spaces in the city and Neil Smith's idea of the rent gap in gentrification?
- 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 cultural geography, urban studies, atmospheric science, glaciology, and so on.
- Hence, this section can be much more expansive than the first two. Your thesis can open up and breathe here, but avoid excessive heavy breathing over high theory and philosophy of only distant relevance to the problem(s) at hand.
- Literature reviews should lead clearly to your problem and its solution. Overly generic discussions of Foucault, globalization, science studies, or problems in modeling climate change are to be avoided.

Narrative Summary or Chapter Outline

• Normally, grant proposals do not have a narrative; so some professors do not expect this in a dissertation Prospectus. Nonetheless, there are good reasons for it, because a

dissertation is a large writing project and can be overwhelming if taken as a whole, especially by students with little writing experience.

- The narrative summary 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?
- A simple way to handle the narrative is to think of the dissertation in terms of chapters. A typical dissertation has four or five chapters, rarely fewer or more.
- The virtue of breaking the project into chapters is that it renders the whole 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.
- Here's an example, drawn from distant memory of past student: the first chapter is about the problem of agrarian transition, the second about the peculiarity of gender relations in rural West Africa, a third about water supply in irrigated agriculture in Senegal, a fourth about state dam and canals projects on the Senegal River, and a final one about changing property and farm practices between genders because of the projects.

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, and so on. For physical geographers, it might be ocean temperature measurements, pollen cores, air samples, ice cores, 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? 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.
- 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?

Time-Line

- Set out a reasonable amount of time for research tasks, travel to field sites, laboratory set-up, and so forth.
- 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, and phone calls during that period).

Bibliography

• Should be self-evident. There is no standard form.

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.

Advancement to Candidacy

On successful completion of the Ph.D. qualifying examination, the student should apply immediately through the Graduate Division for formal "Advancement to Candidacy for the Ph.D." A student may be advanced to candidacy only after the qualifying examination has been passed. Students who are using human subjects in their research must take the Collaborative IRB Training Initiative (CITI) on-line training course at https://www.citiprogram.org/default.asp, and print out the results to submit with their application. The Application for Candidacy eform is found in Cal Central (calcentral.berkeley.edu). This application with trigger a candidacy fee (currently \$90) to be assessed in your student account. This eform must be submitted at the end of the semester in which the qualifying examination was passed. Students should apply for advancement as soon as possible after passing their orals, so they will be eligible for a Doctoral Completion Fellowship (DCF).

The Doctoral Completion Fellowship (DCF)

The Doctoral Completion Fellowship (DCF) was created to provide incentives for students in selected programs to complete their degree no later than one year (two semesters) beyond their major's Normative Time to Degree. The DCF applies only to students admitted in Fall 2010 or later, in specific programs eligible for the fellowship.

The fellowship pays in-state tuition and a stipend for two semesters. A student is subject to work limitations while receiving this fellowship, i.e., only one 25%-time GSI or GSR position may be held during one of the two semesters of the fellowship. No other positions or appointments may be held.

Eligible majors were selected after analysis of net stipends received by doctoral students in the program, recourse to loans by students in the program, and challenges with respect to time to degree and completion rate. Eligible majors were required to submit plans for improved advising and professional development of students; these plans were reviewed and approved by the Dean of the Graduate Division. Program eligibility is subject to review and could be discontinued. Up-to-date lists of participating programs may be found on the Graduate Division website.

Eligibility for the DCF

- Students must be advanced to candidacy
- Students must be in good academic standing with a minimum GPA of 3.0
- Students must have completed a satisfactory online Doctoral Candidacy Review for the most recently completed academic year
- Students must have participated in PhD completion activities or in other requirements, as directed by their program
- Students must apply for at least one external fellowship in order to be eligible for the DCF. DCF eligibility is not contingent upon winning an external fellowship, nor would the receipt of external funding in any way affect a student's eligibility for a DCF. This requirement is intended to enhance students' intellectual and professional development by making them aware of funding opportunities and working with their advisors to prepare application materials. International

students are exempt from this condition, however, because there typically are very few external fellowships for which international students are eligible.

Timetable for Using the DCF

Eligible students may use the fellowship at any time after advancement to candidacy, through the end of the year Normative Time to Degree (NTD) plus one year. Programs may establish more specific guidelines regarding the advisable timing for their students to use the DCF, which will normally be a dissertation writing year, not a research year.

Doctoral Candidacy Review

A student wishing to activate the DCF must have initiated the online Annual Progress Report in the previous year (ending the day before the start of fall semester) and their dissertation committee chair must attest that the student's academic progress is satisfactory. For students who choose to use their DCF within the first semester of candidacy, the Application for Candidacy Form serves as the first Academic Progress Report. Students must file APRs annually after the first year of candidacy.

Consequences of Using the DCF

Filing of the dissertation is expected to occur before the end of one year past Normative Time to Degree, at the latest. Subsequently, no university fellowship funding can be awarded to a student who has activated the DCF beyond one year past Normative Time to Degree (Normative Time plus one year grace period). [1] The DCF does not in any way affect the eligibility of students for university employment, access to loans, or use of outside funding to continue after one year past Normative Time to Degree.

[1] University fellowship funding is defined as funding awarded or controlled by the Graduate Division or UC Berkeley. This includes departmental block grants, Graduate Division Conference Travel Grants and Summer Grants, Berkeley Connect, and Hellman Graduate Awards, etc. Exceptions include awards from departmentally restricted funds, reimbursement for travel and conferences from non-fellowship funds, student parent grants, FLAS stipends used to pay non-Berkeley fees, and awards for meritorious service (e.g., Teaching Effectiveness Awards for GSIs, Outstanding GSI Awards). For more information, contact gradfell@berkeley.edu.

Normative Time Calculation

The DCF requires students to maintain progress based on Normative Time for their degree program. Every semester enrolled or withdrawn, formally or informally, counts in the calculation of elapsed semesters of Normative Time, with limited exceptions for approved medical withdrawal or parenting accommodation (see below). Any withdrawal for research or other academic purposes will count in accrued time, as will semesters included in retroactive withdrawals (except approved retroactive medical withdrawals).

Medical Withdrawal

A maximum of two semesters of withdrawal for medical purposes, documented by a formal medical withdrawal, will not count in calculating a student's eligibility for the DCF.

Parenting Accommodation

An adjustment to Normative Time calculation for the purposes of eligibility for the DCF will be granted to students in accord with Section F6.

NORMATIVE TIME SCHEDULE ENTERING WITH A BACHELOR'S DEGREE						
FIRST YEAR	1 st semester	Coursework, including 200A				
	2 nd semester	Coursework, including 200B. Identify main advisor and theme for analytical paper.*				
SECOND YEAR	3 rd semester	Coursework. Begin analytical paper. Meet w/advisor systematically. Begin to identify three fields for oral exams.				
	4 th semester	Coursework. Continue work on analytical paper. Identify three fields for oral exams and prepare bibliographies.				
THIRD YEAR	5 th semester	Coursework. Continue work on analytical paper if not already finished. Start work on prospectus. Preparing for orals. Begin applying for dissertation research grants.				
	6 th semester	Coursework. Finish analytical paper. Prepare preliminary prospectus. Take the orals. Advance to candidacy.				
FOURTH YEAR	7 th semester	Apply for dissertation research grants if needed. Dissertation prospectus meeting, if not already done.				
	8 th semester	Begin dissertation research.				
FIFTH YEAR	9 th semester	Dissertation research.				
	10 th semester	Dissertation writing.				
SIXTH YEAR	11 th semester	Dissertation writing. Exit talk.				
	12 th semester	Finish dissertation and file. Give unbound copy of dissertation to Geography Department.				

^{*}If you will be doing work that includes interviews, oral histories, or surveys, please consult the Committee for the Protection of Human Subjects' website at:http://cphs.berkeley.edu:7006/

NORMATIVE TIME SCHEDULE ENTERING WITH AN M.A.					
FIRST YEAR	1st semester	Coursework, including 200A. Identify 3 fields for oral exams.			
	2 nd semester	Coursework, including 200B. Complete bibliography for orals. Identify main advisor and thesis research project.*			
SECOND YEAR	3 rd semester	Coursework. Begin preliminary prospectus. Begin applying for dissertation research grants. Prepare for orals.			
	4 th semester	Coursework. Prepare preliminary prospectus. Study for orals and take them (Qualifying Exam). Advance to candidacy.			
THIRD YEAR	5 th semester	Approval of dissertation prospectus by committee. Conduct dissertation research.*			
	6 th semester	Conduct dissertation research.			
FOURTH YEAR	7 th semester	Begin writing dissertation.			
	8 th semester	Finish dissertation and file. Exit talk. Give unbound copy of dissertation to Geography Department.			

^{*}If you will be doing work that includes interviews, oral histories, or surveys, please consult the Committee for the Protection of Human Subjects' website at: http://cphs.berkeley.edu:7006/

The Dissertation Committee

The Ph.D. dissertation is written under the supervision of a committee comprised of three faculty members. One of the three members must be from outside the department and a member of the Berkeley Academic Senate. The Chair of the Dissertation Committee may not be the same person as the Chair of the Qualifying Examination Committee, although the Dissertation Chair may sit on the Qualifying Examination Committee.

Annual Review of Graduate Students (Spring Review)/APR

Sometime in the Spring semester, every student must have an annual review to discuss progress made during the previous year and to outline future objectives. Those students who have not yet advanced to candidacy need meet only with their main advisor, or Head Graduate Advisor. Those students who have advanced to candidacy must meet (individually or collectively) with at least two members of their dissertation committee. Faculty will comment on progress and the students may respond.

The annual evaluations provide students with timely information about the faculty's evaluation of their progress and performance, steps to be taken to correct deficiencies, and a time frame within which to correct the problem or to show acceptable improvement. If a student is not making adequate progress toward the completion of degree requirements, has a cumulative GPA of less than 3.00, has an excessive number of Incomplete grades on her or his record, and/or is doing unacceptable work on courses and seminars, on the third-year paper or on required preparatory work for the dissertation, he or she may be placed on probation. A student on probationary status may register but may not hold academic appointments such as GSIships, receive graduate fellowship support, or be awarded advanced degrees.

Departmental Grievance Procedure

The purpose of this procedure is to afford graduate students in the Geography Department an opportunity to resolve complaints about dismissal from graduate standing, placement on probationary status, denial of readmission, and other administrative or academic decisions that terminate or otherwise impede progress toward degree goals. This procedure may also be used to resolve disputes over joint authorship of research.

A. Informal Resolution Procedures

A student may pursue informal resolution of a complaint by scheduling a meeting with the Head Graduate Adviser to discuss the complaint and explore possible avenues of resolution. If informal resolution is pursued, it must be initiated, and should be completed, within 30 days. At any point, if a satisfactory solution cannot be reached, the complaint may be brought to the attention of the Chair for resolution. If the grievance concerns an action or decision of the Chair, the Head Graduate Advisor can select a third faculty member to seek a resolution of the grievance.

B. Formal Resolution Procedures

In the case that an informal resolution cannot be worked out, the student may make a written complaint. Such a complaint must include information regarding the action being complained of and the date it occurred, the grounds upon which the appeal is based, and the relief requested. The complaint must be based on one or more of the following grounds:

- 1. Procedural error or violation of official policy by academic or administrative personnel;
- 2. Judgments improperly based upon non-academic criteria including, but not limited to, discrimination or harassment on the basis of sex, race, national origin, color, age, religion, sexual orientation, or disability;
- 3. Specific mitigating circumstances beyond the student's control not properly taken into account in a decision affecting the student's academic progress.

The Head Graduate Adviser must receive a written complaint within thirty days from the time the student knew or could reasonably be expected to have known of the action that is the subject of the complaint.

The time frame for filing a written complaint may be extended by the department if the student has been involved in efforts toward informal resolution, as outlined above. All time frames refer to calendar days, and summer and inter-semester recesses are not included.

Upon receipt of a written complaint, the Head Graduate Adviser will assign a faculty or staff member to investigate the complaint and make a recommendation. Generally, the investigation will include an interview with the complainant, a review of relevant written materials, and an effort to obtain information from available witnesses. The Head Graduate Adviser will notify the student in writing of the outcome of the complaint, within sixty days of the date it was received.

If the complaint is about an action taken by the Head Graduate Adviser, the student may elect to take the complaint directly to the Department Chair. In such a case, the time limits set out in the preceding paragraph still apply.

C. Appeal to the Graduate Division

If the student is not satisfied with the outcome under the department's procedure, he or she may bring a Formal Appeal under the Graduate Appeal Procedure. The formal appeal must be received in the Office of the Dean of the Graduate Division, 424 Sproul Hall, within fifteen days of the date of the written notification of the result of the departmental procedure. Copies of the Graduate Appeals Procedure (updated December 2, 1996)* may be obtained from the Office of the Dean of the Graduate Division.

D. Complaints Involving Discrimination

If the complaint involves allegations of discrimination or harassment on the basis of sex, race, national origin, color, age, religion, sexual orientation, or disability, the department should consult the appropriate campus compliance officers prior to commencing informal or formal resolution. They can be reached through the Academic Compliance Office.

E. Other Complaint Procedures

Graduate students may contact the Office of the Ombudsman for Students, the Title IX Compliance Officer, or the 504/ADA Compliance Officer for assistance with complaint resolution. Other complaint resolution procedures are listed in the Graduate Appeals Procedure for use regarding complaints that do not fall under this procedure.

RESEARCH AND DEVELOPMENT ACTIVITIES INVOLVING HUMAN OR ANIMAL SUBJECTS

Students planning research which involves the use of human or animal subjects must get approval from either the Committee for the Protection of Human Subjects or the Committee for the Protection of Animal Subjects prior to the initiation of the research. Protocols involving human subjects must be filed and the research must be carried out in accordance with the Berkeley Campus' Assurance of Compliance with DHEW Regulations on Protection of Human Subjects. (Guidelines, forms, and sample protocols are available at http://cphs.berkeley.edu/.)

Students will be required to submit a copy of the protocol approved by the Committee for the Protection of Human Subjects, or the Committee for the Protection of Animals Subjects at the time the doctoral dissertation is filed in the Graduate Division. The Graduate Division can accept no dissertation, which includes any material obtained or produced in the absence or contravention of proper authorization from these committees.

FINANCES

Graduate Student Instructorships (GSI's)

As part of their training, all students will be expected to serve as a Graduate Student Instructor for a minimum of one semester [in the Geography Department].

The Department of Geography offers a number of Graduate Student Instructorships (teaching assistantships), paying \$10,326.00 per semester. GSI applications are available from the Student Academic Advisor (Marjorie) in the department.

Students must be registered during the term in which they serve as Graduate Students Instructors, and have no more than two Incompletes in coursework taken during the time of their employment. GSIs are eligible for partial fee remission and remission of the Graduate Student Health Insurance Plan (GSHIP) premium fee if their payroll appointment is 25% time or greater for an entire semester. Students who receive a GSHIP fee waiver from the University Health Service or have their fees paid by fellowship, traineeship, grant-in-aid, or other sources (excluding awards made by the Financial Aid Office) are not eligible for the premium fee remission. Students on Filing Fee status are also not eligible to serve as GSIs.

International Graduate Student Instructors: Graduate students who register for the first time at UC Berkeley as of fall semester 2002 and do not speak English as a native language and are applying for Graduate Student Instructor (GSI) positions are required to show evidence of oral English language proficiency before they can begin teaching as GSIs at UC Berkeley. They can do this by passing either 1) the Speaking Proficiency English Assessment Kit (SPEAK) administered by the Graduate Student Instructor (GSI) Teaching and Resource Center at UC Berkeley, or 2) the Test of Spoken English (TSE) administered through Educational Testing Services (ETS) prior to arrival at Berkeley. Both the SPEAK and the TSE assess general oral English proficiency. Once a student has matriculated at Berkeley, only the SPEAK test is available. TSE and SPEAK scores are valid for two years prior to the first appointment as a GSI. For further details, please refer to this website: http://gsi.berkeley.edu/lpp/teaching.html#proficiency_testing or go to the Graduate Student Instructor Teaching and Resource Center at 301 Sproul Hall.

First-time GSIs

Graduate Council requires the following preparation for all first-time GSIs:

- 1. Every first-time GSI should attend the Orientation Conference sponsored by the GSI Teaching and Resource Center. This is held every Fall and every Spring during Welcome Week.
- 2. No later than the end of the third week of classes, every first-time GSI must successfully complete an on-line short course on professional ethics and standards in teaching. Instruction will include information on such topics as academic integrity, sexual harassment, teaching students with disabilities, academic freedom, political speech, confidentiality, Title VI, and Title IX. GSIs can register and take the course by going to the GSI Teaching and Resource Center's Web site at http://gsi.berkeley.edu.
- 3. First-time GSIs must complete a 300-level semester-long pedagogy seminar on teaching. Because Geography is a small department, it is not feasible to offer such a course in Geography. Therefore, our GSIs will enroll in a designated course in another department or take the course at the GSI Teaching and Resource Center. The GSI center also lists on their web page 300-level courses in other departments in which you may be able to enroll (http://gsi.berkeley.edu).

The complete GRADUATE COUNCIL POLICY ON APPOINTMENTS AND MENTORING OF GRADUATE STUDENT INSTRUCTORS is available on the web at http://grad.berkeley.edu/policy/appointments-policy/

Graduate Student Research Assistantships (GSR's)

Research assistantships are not available on a regular basis. Individual faculty holding research grants awards such assistantships. Occasionally GSR positions can be found with faculty and research institutions elsewhere on campus.

International Student Financial Resources

Financial resources at the University are extremely limited. Foreign students may not work outside the University except in exceptional circumstances. Contact the Berkeley International Office at International House concerning work permits.

Readerships

Students should contact the faculty member for whom they wish to read. Readers must have received a "B" or higher in the course (or equivalent) in which they are serving.

University Fellowships

Fellowships are merit-based awards that provide a stipend for living expenses, plus tuition and fees. Applications for fellowships are judged on the basis of the quality of previous academic work, evidence of ability to do research, and promise of becoming a productive scholar. Competition for University Fellowships (including FLAS) is held once a year in the Spring and will be announced via e-mail.

The Fellowships office of the Graduate Division is an excellent source of information for fellowships or dissertation research support. Lists of fellowships and research support for graduate students and postdocs are organized in binder form by broad discipline area or category of support. Current resource volumes, such as the Annual Register of Grant

Support, make up a reference shelf that is accessible to students and others using the Fellowship Section's facilities. References are non-circulating, and their use is restricted to the immediate area. Application packets for certain fellowships and other awards coordinated by the Graduate Division, such as Fulbright, are available. The Fellowships office provides handouts on University sources of financial support and a calendar of workshops on proposal preparation, which are conducted by the Graduate Assembly. The Student Academic Advisor will also post and circulate via e-mail many notices of available fellowships throughout the year. Please see our web site for more financial aid information:

https://geography.berkeley.edu/geography-studies/graduate-studies/financial-aid

Geography Department Harassment Guidance

The Department of Geography regards harassment as a serious issue in academic or work relationships involving students, scholars, staff, or faculty of the department. The department is committed to addressing reports of harassment promptly and efficiently, should the behavior of concern have occurred within the department or elsewhere.

Here are some things you should know.

The Berkeley Code of Student Conduct defines harassment as "conduct that is so severe and/or pervasive, and objectively offensive, and that so substantially impairs a person's access to University programs or activities, that the person is effectively denied equal access to the University's resources and opportunities on the basis of his or her race, color, national or ethnic origin, alienage, sex, religion, age, sexual orientation, gender identity, marital status, veteran status, physical or mental disability, or perceived membership in any of these classifications".

The UC Policy on Sexual Harassment defines sexual harassment as "unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature, when submission to or rejection of this conduct explicitly or implicitly affects a person's employment or education, unreasonably interferes with a person's work or educational performance, or creates an intimidating, hostile or offensive working or learning environment".

Some reported behavior might not, in fact, be regarded as harassment as defined by campus policies. University and campus policies governing discrimination and harassment are not intended to regulate protected speech or expression and are designed to support the principles of academic freedom.

If anyone feels that another individual has behaved inappropriately and thereby created an intimidating, hostile, or offensive work or learning environment, the offended person is encouraged to communicate that the behavior is unwelcome and should not be repeated. It is a good practice to record a written account of the incident(s) and any response to it (them), including the dates and context of any event. This is best done while the incident is fresh in the mind. These actions might prove helpful as support to a claim of harassment. Please note that if a person feels unable to confront the offender, the department or another university entity can take this role upon request.

Students and employees with concerns about behavior experienced as harassing can report their experience to the campus Title IX Compliance Officer or the Center for Student Conduct and Community Standards. Incidents can also be reported to a faculty or staff member, such as the Chair of the Geography Department, the instructor of the class where an incident occurred, the principle investigator of a lab where an incident occurred or the Geography Department Safety Coordinator. The Department will then work under the guidance of the appropriate campus office to address the matter according to campus policies. If the behavior appears threatening to personal safety, the incident should be reported immediately to the UC Police Department.

• Reference Desk

Graduate Division, http://grad.berkeley.edu/

 Degrees (318 Sproul) Fellowships (318 Sproul) Graduate Diversity Program (327 Sproul) GSI Teaching and Resource Center (301 Sproul) Petitions, Readmission (318 Sproul) Research and Teaching Appointments (318 Sproul) Dean's Office (424 Sproul) Graduate Division Financial Aid, http://grad.berkeley.edu/financial/aid/					
Cal Student Central https://studentcentral.berkeley.	edu/	120 Sproul	664-9181		
• Emergency Loans https://financialaid.berkeley.edu/short-term-emergency-loan					
Office of the Registrar, http://registrar.berkeley.edu/					
Cal Student Central https://studentcentral.berkeley.edu/		120 Sproul	664-9181		
Cal Central https://calcentral.berkeley.edu/		120 Sproul	664-9181		
Earth Sciences & Map Library http://www.lib.berkeley.edu/EART/					
• Information Desk	50 McCone Hall		642-2997		
Doe Library www.lib.berkeley.edu					
Information DeskCirculationCards and Privileges	1st Fl 1st Fl. 2nd Fl		643-9999 642-3403 642-3403		
Bancroft Library http://bancroft.berkeley.edu/					

642-6481

DEPARTMENT OF GEOGRAPHY FACULTY

For more information and publications, see http://geography.berkeley.edu/people/faculty.php.

- **JEFFREY Q. CHAMBERS.** Associate Professor. PhD. University of California, Santa Barbara, 1998. Terrestrial ecosystem ecology and biogeography, tropical forests and climate change interactions, forest disturbance and recovery processes, landscape dynamics and remote sensing.
- **SHARAD CHARI.** Associate Professor. PhD. UC Berkeley, 2000. Geography as history of the present and as Earth/world-writing, social theory, political economy, development, agrarian studies, labor and work, racial/sexual capitalism, Black radical tradition, biopolitical struggle, oceanic humanities, photography, South Asia, South Africa, Indian Ocean.
- **JOHN CHIANG.** Professor and Head Graduate Advisor. PhD. Columbia University, 2001. Tropical ocean-atmosphere dynamics, seasonal and longer-term climate variability, paleoclimate dynamics.
- **KURT M. CUFFEY.** Professor (Martin Chair in Ocean, Earth and Climate Science). PhD. University of Washington, 1999. Interpreting paleoclimate records in ice sheets, interpreting glacial landforms and deposits, physical and chemical transformations of snowpacks, drainage basin processes, river mechanics and the fluvial environment.
- **YOU-TIEN HSING.** Professor and Pamela P. Fong Family Distinguished Chair in China Studies. PhD. University of California, Berkeley, 1993. Economic restructuring and local states in post-Mao China, the work of overseas Chinese capital networks, technology development in Asia's newly industrialized economies, Asia.
- **JAKE KOSEK.** Associate Professor and Undergraduate Faculty Advisor for Human Geography. PhD. University of California, Berkeley, 2002. Cultural politics of nature and difference, science and technology studies, critical race theory, ethics and affect, biopolitics, human and the non-human, environmental politics.
- **LAUREL G. LARSEN.** Associate Professor and Undergraduate Faculty Advisor for Physical Geography. PhD. University of Colorado, 2008. Hydrology-ecology interactions, environmental complexity and feedbacks, fluvial dynamics, modeling and simulation of landscapes, environmental restoration.
- **JOVAN LEWIS.** Assistant Professor. PhD. London School of Economics. Jamaica and the USA; constructions and infrastructures of poverty, inequality, race (blackness), economy, and the market
- **ROBERT RHEW.** Associate Professor and Department Chair. PhD. University of California, San Diego (Scripps Institution of Oceanography), 2001. Terrestrial-atmosphere exchange of trace gases, atmospheric chemistry and composition, halogen biogeochemistry, stratospheric ozone depletion issues.

- **NATHAN F. SAYRE.** Professor. PhD. University of Chicago, 1999. Ranching and pastoralism, rangeland ecology and management, endangered species, Western environmental history, urbanization/land use change.
- **HARLEY SHAIKEN.** Professor (Education and Geography) and Director, Center for Latin American Studies. B.A. Wayne State University, 1977. Skill formation, training, work organization and global production
- **DAVID B. WAHL.** Assistant Adjunct Professor. PhD. University of California, Berkeley, 2005. Holocene climate reconstruction, Central America, Western U.S., Pacific Islands.

AFFILIATED FACULTY

- **TERESA CALDEIRA.** Professor. (City and Regional Planning). PhD. Anthropology UC Berkeley. Comparative urban studies, urbanization in the global south, social theory, ethnography and qualitative methodology.
- PHENG CHEAH. Professor. (Rhetoric). PhD. Cornell. 18th-20th century continental philosophy and critical theory; Postcolonial theory and anglophone postcolonial literatures; World literature; Theories of globalization and transnationalism; Cosmopolitanism and nationalism; Human rights; Social and political thought; Feminist theory; Contemporary Chinese film
- **WILLIAM DIETRICH.** Professor. (Earth & Planetary Science and Geography). PhD. University of Washington, 1982. Hillslope and fluvial geomorphology.
- **IRYNA DRONOVA.** Assistant Professor. (Landscape Architecture and Environmental Planning). PhD. UC Berkeley 2012. Landscape and ecosystem ecology, remote sensing, GIS, spatial analysis, wetland and urban ecology, urbanization, wetland restoration, invasive species
- **MAGGI KELLY.** Cooperative Extension Specialist and Professor in Residence. (Environmental Science, Policy and Management). PhD. University of Colorado, Geography 1996. GIS and remote sensing, historical ecology, drones, spatial data science
- **G. MATHIAS KONDOLF.** Professor. (Environmental Planning and Geography). PhD. The John Hopkins University, 1988. Fluvial geomorphology applied to environmental river management and restoration.
- **NANCY PELUSO.** Professor. (Environmental Science, Policy and Management). PhD. Cornell University, 1988. political ecology, Indonesia, resource policy and politics, forest and agrarian change, property and access.
- **JOHN D. RADKE.** Associate Professor. (Landscape Architecture). Ph.D. University of British Columbia, 1983. GIS, spatial systems for regional environmental planning,

metrics for landscape characterization, spatial interaction models.

- **ISHA RAY**. Associate Professor. (Energy and Resource Group) PhD. Stanford University, 1997. Water, sanitation and development; water and gender; technology and development; and common property resources. Her research projects focus on access to water and sanitation for the rural and urban poor, and on the role of technology in improving livelihoods.
- **RAKA RAY**. Professor. (Sociology). PhD. University of Wisconsin-Madison 1993. Gender, postcolonial sociology, emerging middle classes, South Asia, inequality, qualitative research methods, and social movements.
- **SALLY THOMPSON.** Associate Professor. (Environmental Engineering). PhD. Duke University 2010. Ecohydrology, surface hydrology, spatial ecology, arid and semi-arid watersheds and ecosystems, pattern formation, nonlinear dynamics, plant physiology, water resource sustainability.

EMERITI FACULTY:

Orman Granger

Paul Groth

Gillian Hart

Michael Johns

Jean Lave

Beatriz Manz

Norman Miller

Theodore M. Oberlander

Robert R. Reed

Richard Walker

Michael Watts