Baker research group guidelines and expectations

Jack W. Baker

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This document was developed for use with my own graduate advisees, so some items are specific to my research group and university. But graduate students in other programs should generally benefit from reviewing these guidelines and being thoughtful about how to engage with their advisor and research group. I have thus posted this document publicly, in hopes that others may benefit from it.

1 Introduction

In an effort to be transparent, this document outlines what I am expecting from you as a member of our group, and more generally what I believe you can do to be successful as a graduate student and member of our research group¹.

I understand that working as a graduate researcher is a new experience to you. Additionally, we are both making a very serious commitment when we agree to work together in this relationship. For these reasons, it is important that we communicate about our mutual expectations before committing to them. These guidelines are also advice, as I find that the most successful and productive graduate students naturally tend towards the patterns outlined below.

2 Getting started

During your first months on campus, meet and talk to many professors and Ph.D. students to learn about their work. Find out what work people are doing and what things to be aware of in making the transition to the Ph.D. I (like many professors) hold a weekly research group meeting, and you can ask to attend it if you commit to coming regularly and being an active participant. Do an excellent job in your classes to demonstrate your ability to perform advanced work, and do not let other distractions impact your performance in class.

Additionally, get involved in your academic and professional community. Attend department seminars, volunteer to help at department events, and join professional organizations. Your engagement and contributions are important for your learning, productivity, and health. The most effective graduate scholars are usually also engaged citizens, and most students report missing this community after they graduate. So get started early!

In your second quarter quarter, arrange an independent study project with a potential advisor. Use that project to learn more about the research field and about how that advisor works with students. You are essentially interviewing for a job at this point, so be dedicated and professional in your commitment to your project.

¹ I have adopted some guidelines from other sources, such as the Stanford Vice Provost for Graduate Education.

3 My commitment to you

In a Ph.D. advising relationship, I commit to help you acquire the skills needed to do original research and guide you in performing work suitable for the conferral of your degree.

With this overall goal in mind, some specific commitments I make are to:

- Help you identify novel and important topics to research, identify appropriate methods to use in pursuing that research, and identify suitable outcomes from your work.
- Meet regularly with you to support advancement of your research.
- Offer feedback on your presentations, papers, and proposals, with the goals of improving the quality of your work and helping you learn to independently produce high quality work.
- Connect you with other experts, and help you acquire data and software, necessary for the successful execution of your research.
- Work to find the funding to support your tuition and stipend, as long as you are making good research progress.

Advising graduate students, and helping publish graduate-student work, is the most important and enjoyable part of my job. I hope it is always clear in my interactions with you that this is the case.

4 Your commitment to me and our research group

Some of you are paid by Research Assistantships, which means that your research is a job that you are being paid for. Others may have independent sources of funding such as fellowships. But in the interest of equity within the group, and given my finite capacity to work with students, I request the same commitments from all advisees regardless of funding source:

- Own your research and take responsibility for its progress. I will support you, but you should feel ultimately responsible for your work. Research is rarely a linear process with pre-defined outcomes. Persistence in moving your work forward despite setbacks or changes in plans will be one of the strongest indicators of your success in this endeavor.
- Stay in regular communication about your work, and any changes to previously agreed-upon plans.
- Be regularly available for individual and group meetings, and check with me if a schedule conflict prevents your participation.
- Provide research materials for presentations and papers in a timely manner if you or I need them for conferences or other events.
- Serve as a Course Assistant for me when requested. When that time comes, we can discuss and jointly confirm that the specific request is feasible.
- Maintain data and software sufficient to document your work, and share those resources with group members. Aim to also share resources publicly when feasible.

• Keep track of department and university requirements and policies related to your degree progress. Familiarize yourself with the department's graduate handbook, and read announcements from department and university administrators.

A more detailed set of expectations, and general advice, are listed in the subsections below.

4.1 Meetings

Optimally, we will meet three times every week – once for an individual meeting, once for our stand-up meeting, and once for a group seminar meeting (though some weeks we will miss meetings due to scheduling conflicts or University breaks).

For our **individual meetings**, our goal is to advance your individual research. As such, be prepared at each meeting to update me on your research progress, highlight the areas where you are having difficulty, and discuss your plans for the next stages of your work. Intermittently, we should discuss your long-term research progress and goals; for example, the planned scope of your thesis, and how you are progressing with regard to that scope. See the link above for advice on meeting agenda and process.

For our **stand-up meetings**, come prepared with notes to share with the group about what you accomplished, what you could use help with, and what you have planned for the coming week. See the link above for more notes.

For our **group meetings**, our goal is to develop a shared understanding of ideas and research relevant to our research group, and to offer each other insights and suggestions. With this in mind, you will present somewhat regularly or whenever I ask you too. When presenting you should aim to educate your colleagues and obtain feedback. This means thinking about what your colleagues would benefit from learning about and being focused and sincere in soliciting feedback. Similarly, you should be a thoughtful contributor to the discussion when others are presenting.

In between meetings, I am always available for consultation. Send me an e-mail, or drop in to see me, if an issue has arisen that is blocking your progress. I am happy to offer quick advice, or intervene to help get a third party's attention to your issue. Ultimately it is your research and you should learn to work through minor issues on your own, but I never want to hear at an individual meeting that "I got stuck on this last week and haven't made any progress" If you are truly that stuck, do not wait for a meeting to get in touch with me. Additionally, if we have a week where we are not able to meet in person, you are encouraged to e-mail me a quick summary of your progress, next steps, and any questions that have arisen.

You are expected to attend occasional group social events, as they are intended to support well-being and productivity.

If you have conflicts that prevent you from attending any of the above meetings, let me know ahead of time and provide an opportunity to discuss. Simply not showing up without communicating is not acceptable.

4.2 Communications

Please do the following to make sure we can communicate as needed.

• Check e-mail regularly, so you can see communications from me, and write the group if you see opportunities to share information or have conversations. Checking a few times a day is plenty. You do not need to constantly be on e-mail or to have push notifications of incoming messages (in fact, those practices interfere with your real work and I encourage you not to).

- Use our Google Docs for scheduling meetings.
- Familiarize yourself with our group Google Drive folder and my public Advice documents. Many of the documents address situations that frequently face grad students.

If there are any changes in your work that impact previous discussions we have had (e.g., if a delay in getting results means that you won't be submitting a draft document to me by the date we had agreed on), please let me know. An e-mail with an update and explanation is often sufficient, unless something more complicated is happening. But keep me updated so I am not surprised later. I'm happy to talk with you if a situation has changed, and I understand that this happens. Conversely, if you stay silent out of shame or fear, it amplifies rather than resolves any problems.

4.3 Time Commitment

I expect you to be self-motivated and for the number of hours worked to never be an issue with your progress. A flexible schedule is one of the perks of our profession, but you will notice that most of your most productive fellow research students have regular work patterns and work long hours. I request that you spend at least a majority of the usual workday (9am-5pm) working in your office on weekdays, and interact with colleagues for your and their benefit. I will not regularly monitor your time in the office, but please speak with me if you feel that a deviation from this expectation would be appropriate.

It is fine to take a few weeks off per year for holidays or to visit family. I understand that international trips in particular work best as extended trips. September and the Winter Closure period are often the most convenient times for extended trips, as there are fewer meetings on campus that would be impacted by your absence. Please discuss potential travel dates for extended trips with me, so I can check that no conflicts will arise (I will aim to say yes to all reasonable requests). Very frequent holidays, or trips that take you away from campus during mid-week of academic terms, are not ideal and should be discussed with me.

Occasionally there are other professional opportunities that could take you away from campus for extended trips (internships, extended time at another university, field work). Internships, if you want to try one, are best done during your first summer or before your PhD work begins. Internships during later stages of your PhD can be disruptive, and the default policy is that they are not allowed. Extended time away from campus for other reasons should be closely tied to your research activities – we should discuss options on a case-by-case basis, and you should get my approval for any such activities. I am open to discussion but want to ensure we consider all the benefits and costs of such opportunities.

4.4 Classes

Master's Degree courses are largely aimed at building general expertise in your field, and your Ph.D. Degree courses are for developing the skills needed to perform your research. Ph.D. classes will often include courses from Statistics, Computer Science, etc. As general guidance, try to identify courses where a high fraction of your time spent is productive towards advancing your scholarship. If your Ph.D. coursework is not contributing towards your scholarship, or I hear in meetings that "I didn't get much research done this week because my courses were taking a lot of time," then we will need to revise your coursework plan. Your fellow group members are excellent resources in identifying good classes for you to take, so ask them for advice and review "Classes\Ideas for courses.docx" in our Google Drive folder.

PhD students and others funded by research grants should enroll in 10 units of classes per quarter during the academic year, and 3 units during the summer². If you are not taking 10 units of classes, enroll in CEE 399 units under my direction to make up the remaining units.

We should discuss your plans for courses *prior to* each quarter, and you should keep me updated with an overall plan for courses, using the template in our Google Drive folder in "Policies and procedures\Classes\Coursework plan template.xlsx".

4.5 Professionalism

As a graduate researcher, your role has transitioned from a student sitting in a class to a junior colleague and peer with professors, professionals, and fellow researchers. As such:

- 1. Treat your colleagues with respect and courtesy.
- 2. Be willing to help others in the group, and share feedback. This is part of being in a research community, is good practice in analyzing problems, and helps build relationships and networks that will last for the rest of your career. We will all benefit from committing to help each other.
- 3. Attend local meetings and introduce yourself to others. If I am present at the meeting, you are very welcome to follow me around and I can make introductions as I talk to people.
- 4. Take your very best work when you give presentations or speak at meetings. Those present are forming their impressions of you, and a good impression can lead to professional opportunities down the road (professors and consultants are always scouting for young talent at meetings). Our internal meetings are for trying out preliminary work and draft presentations. External presentations should take advantage of learning from internal trials, and be polished and meticulously prepared.

4.6 Writing

Scientific writing is important for disseminating your work, and the process of documenting your work will reveal issues that might now initially be obvious. It is an important part of your scholarship, though it can be challenging and time-consuming. I expect that during your time in the group, you will write several peer-reviewed papers as well as your PhD thesis. We will jointly plan the scope and timing of those papers, but I expect you to be writing regularly throughout your time as a graduate student, rather than saving all of the writing until your graduation is imminent. Extensive information on writing strategies and tactics are available on my Advice page.

4.7 Travel

You will occasionally travel to conferences to present your research. A typical student will attend one large national or international conference during their time as a student, and several smaller or more local events. I will generally propose meetings I think will be effective for you, but feel free to bring ideas for participating in meetings to me if you think they are particularly good opportunities. See "Policies and procedures\Conferences" for further thoughts on meetings and travel.

 $^{^{2}}$ Three units in the summer is considered full-time, and is sufficient for international students to maintain their Student Visa. This also lowers the tuition cost to support you, allowing finite financial resources to be extended.

5 Commitment to diversity, equity, and inclusion

Our group is committed to building and sustaining an equitable and inclusive environment where diversity is celebrated and valued. This diversity is critical to our scholarship by broadening the range of ways we can understand and engage with the world, identify challenges, and discover, design and deliver solutions. In our group specifically, this means that we strive to recruit researchers having gender, race, sexual orientation, family background, and other factors that reflect the diversity of the world. It also means that our research on disaster impacts strives to better understand and to mitigate the disproportionate impacts often suffered by members of marginalized communities.

As a member of our group, you will be expected to contribute to these goals. You should participate in fostering an inclusive environment and calling out any behaviors counter to this environment. I have zero tolerance for any acts that create a hostile work environment through harassment or discrimination. Please bring any concerns to me and I will treat them seriously and take appropriate action to address them.

6 Exceptions

The Ph.D. is naturally a somewhat individualized process. The above items are general guidelines, but there are naturally exceptions. The goal of this document is not to be rigid, but rather to be transparent and fair, and to facilitate communication with each other about expectations. You should feel free to ask questions about these items and raise alternatives (e.g., if you have co-advisors, if your research topic will take you away from campus for an extended time, or if you have a unique personal circumstance).

Please also share any suggestions for additional general issues that you think should be included in this document.

7 Agreement

I have read this guideline and agree with these expectations (with the exception of deviations that we have discussed). I agree to further discussion in the future if a situation arises where a deviation of these expectations may be warranted.

Advisor name

Advisee name

Advisor signature

Advisee signature

Date

Date